dling and terminal services. Each year hundreds of units, particularly freight cars, are converted and modified to make them suitable for specific types of traffic or are replaced by special-purpose equipment designed for distinctive hauling jobs. The average capacity of all freight cars was 59.9 tons in 1972 compared with 51.4 tons in 1960. Also, although the number of diesel-electric locomotives in service has remained fairly constant over this period, an extensive program of power upgrading has been followed by the railway companies.

Revenue freight. Total tonnage of freight carried by all common carrier railways (including national loadings and receipts from US connections) in 1971 and 1972 is shown in Table 15.4 under the commodity structure adopted in 1970 based on Statistics Canada's Standard Commodity Classification. Although there is some loss of continuity with previous data, this new commodity breakdown permits improved comparisons with other series on water transport, imports, exports, etc., which are already based on the Standard Commodity Classification.

Capital structure and finance. Tables 15.5 - 15.8 give information on capital investment in road and equipment, and on operating revenues, expenses and net income of all common carrier railways operating in Canada, except that of the Cartier Railway which is not available. In transportation statistics a distinction is made between expenditures and expenses. In the following data, the term "expenses" refers to the expenses of furnishing rail transportation service and of operations incident thereto, including maintenance and depreciation of the plant used in such service.

The capital structure of the Canadian National Railway System is presented in Table 15.6 and financial details of operations in both Canada and the United States in Table 15.7. Revenues and expenses include those of express and commercial communications and highway transport (rail) operations. Tax accruals and rents are charged to operating expenses.

Total operating revenues and expenses of common carrier railways operating in Canada (except the Cartier Railway) continued to rise, both reaching peak levels in 1972; increases over 1971 amounted to 7.5% and 8.5%, respectively (as calculated from Table 15.8). However, net operating revenues showed a decrease of 8.8% to \$98.0 million.

15.3 Road transport

The federal government establishes motor vehicle safety standards, while registration of motor vehicles and regulation of motor vehicle traffic lie with the legislative jurisdiction of the provincial and territorial governments. An outline of legislation, as well as summaries of motor vehicle and traffic regulations common to all provinces and territories are presented in the following Sections.

15.3.1 Federal safety regulations

The general objective of the Motor Vehicle Safety Act (RSC 1970, c.26, 1st Supp.) is to establish mandatory safety standards for new motor vehicles to protect people from injuries or death and from the hazardous effects of exhaust and noise emissions. The legislation applies to all new motor vehicles and components manufactured in or imported into Canada, and requires manufacturers to issue notices of safety defects in a prescribed manner. The safety of vehicles in use continues to be a provincial responsibility discharged under existing provincial legislation.

The safety regulations currently include 38 standards relating to the design and performance of passenger cars, trucks, buses, motorcycles, competition motorcycles, minibikes and trailers; six standards limiting motor vehicle exhaust, evaporative and noise emissions; and 11 standards applying to snowmobiles. These standards will be reviewed regularly and additions or revisions incorporated to keep pace with engineering or technical advances. The regulations require all Canadian motor vehicle manufacturers or distributors to apply the national safety mark, accompanied by a label certifying compliance with all applicable federal motor vehicle safety standards, to every classified vehicle produced after January 1, 1971. Vehicles imported for commercial or individual use must comply with the Act and Regulations.

## 15.3.2 Motor vehicle and traffic regulations

Operators licences. The operator of a motor vehicle must be over a specified age, usually 16 years (17 in Newfoundland and generally 16 in Alberta and New Brunswick but 18 for certain classes of motor vehicle), and must carry a licence, obtainable in most provinces only after