incurred by various ports in the United States. These expenditures include all additions, replacements, improvements, and restorative work to existing facilities which do not result in additional new berths.

Average annual modernization and rehabilitation expenses in selected ports of the United States by coastal region

[In thousands of dollars]

Coastal region	General cargo facilities (shedded and open)	Specialized facilities (dry, liquid bulk, and container)	Total annual expenses (all facilities)
Great Lakes. Atlantic coast Gulf coast Pacific coast (including Alaska and Hawaii).  Total.	331 7, 146 1, 827 3, 035	1, 432 3, 084 1, 284 889 6, 689	1,763 10,230 3,111 3,924 19,028

Maintenance and operating: The cost of maintenance in a sampling of representative ports of the United States is estimated to be about 37.5 percent of all operating costs. Direct operating expenses make up the principal part of all operating expenses, and most of the payroll expenses relate to direct operations. Operating expenses are estimated to be about 62.5 percent of total port expense.

## 2. USER CHARGES

## (a) Port Operating Revenues

As a public agency, a port authority must depend upon its own resources and those of the State or local government unit which sponsors it. The port's own resources include its income and loans based on expected income and in some cases taxes which it may levy over an area designated as a special tax district.

Port management must seek sufficient revenues to sustain the operation of a successful port enterprise. The principal revenues obtained by a port are derived as a result of providing and performing certain normal functions such as maintenance of publicly owned marine terminal facilities, leasing of publicly owned facilities, dredging slips along publicly owned wharves, collection of port dues and charges, promotion of traffic through the port, construction and replacement of facilities, and similar functions. It is conceded that a port authority is entitled to levy charges which at least attempt to defray over a period of time the costs of performing any of these normal functions.

An earlier study which was made of the port revenues 1 of some 30 representative ports of the United States showed that the average

percentage distribution of total income was as follows:

	Percent
Wharfage, dockage, tollage, etc.	27. 7
Wharfage, dockage, tollage, etc	35. 5
Rentals and leases	24. 7
Other operating means	12. 1
$\operatorname{Total}$	100.0

<sup>&</sup>lt;sup>1</sup> In addition to these so-called port/terminal operating revenues, there are miscellaneous port dues and charges such as harbor dues, pilotage fees, towage charges, and quarantine dues which are not normally included under said operating revenues.