The sources of revenue of English Local Authorities are shown in the following table.

Revenues of Local Authorities in England and Wales in 1934-35. (Excluding Trading Undertakings).

<table>
<thead>
<tr>
<th>£</th>
<th>Per cent of total.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Rates</td>
<td>154,782,080</td>
</tr>
<tr>
<td>Government Grants</td>
<td>127,144,966</td>
</tr>
<tr>
<td>Rents, Fees, etc.,</td>
<td>55,954,720</td>
</tr>
<tr>
<td></td>
<td><strong>£337,881,766</strong></td>
</tr>
</tbody>
</table>

The table excludes income from loans which in 1934-35 amounted to £44 million and was spent on works of a capital nature, housing schemes accounted for £24 million or over half of this figure. This large figure of capital expenditure on building houses accounts for the increasing amount of money received from rents. Local authorities now own about one million houses most of which have been built since 1919. House rents cannot, however, be regarded as a source of income in the same sense as local rates can, for the money so received is already earmarked for interest and repayment of debt and the repair and maintenance of the houses and in fact these rents are not sufficient to meet these charges and the deficit is made good from rates and grants. Trading services have been missed from the table though they form a large part of local authorities enterprise in England. Many of these provide some relief to the rates but water supply is often run at a loss. The present tendency is for local authorities to provide their transport, gas, electricity and water services as near to cost price as possible and without trying to make a profit.

Local rates as the table shows are still the main source of local revenues, notwithstanding the large amount received from Government Grants. The significance of this sources is increased by the fact that it is subject to little or no central control. There are no general statutory limits on the amount of rates that can be levied so that the only effective limitation is the unwillingness of ratepayers to bear further increases. There are limitations in respect of what local authorities may spend on one or two small services e.g. they cannot spend more than the produce of a rate of 1½d. in the £ on advertising the amenities of their area.

The English local rating system like most English institutions is of comparatively ancient origin. It is the Act of 1601 of Elizabeth’s reign which really laid down the basis of the present system. For some time previous to this attempts had been made to maintain the poor by means of voluntary almsgiving but the voluntary principle broke down and several Acts were passed towards the end of the sixteenth century finally leading to the great Act of 1601 which not only dealt with poor law but attempted to settle the problem of how the cost of maintaining the poor should be met. The Act gave no directions for the guidance of the overseers as to the method or system by which assessments were to be made or rates collected. It merely directed that occupiers of certain specified properties in the parish and every inhabitant of the parish were to be taxed in aid of the poor. The basic principle of Christian almsgiving is each to give according to his ability and so as the poor rate was to be a kind of compulsory almsgiving the same general principle could be applied. Generally speaking, therefore, the poor rate in its early years at least was to be a kind of local
income tax. In 1635, for example, are
found references that the principle of
measuring ability should not only be
by the amount of income but also be
by taking into account family circum­
cstances and expenses connected with
them. If this had been generally carried
out it would have resulted in a form of
taxation very much like the modern
income tax but partly by court decision
and partly by reason of administrative
ease the principle of ability to pay
deteriorated into the levying of rates
on the basis of the annual rental value
of occupied property.

With that slight historical introduction
we may now turn to a description of
the present day basis of the tax or rate
which constitutes the English local author­
ity's main source of income. There
are two keys to the English system—
occupation and annual rental value.
In all except a few cases it is the occupier
and not the owner who is legally liable
for the rates levied during his period of
occupation of the property. Though the
actual basis of the tax is the annual
value of the property, the tax is not
payable when the premises are empty but
only when they are occupied; in other
words the tax attaches itself to the
occupier and not to the property. In
many cases particularly where the proper­
try is working class houses let at a small
weekly rental, the rate is paid by the
owner. This is an easy method of collec­
tion for the tenant pays the rates in his
weekly rent instead of having to find a
lump sum annually; the municipality is
saved the trouble of collecting money
individually from hundreds of small
ratepayers, and in return for his trouble
the landlord receives a special rebate or
discount. This method of collection is
called compounding and in Manchester
about 90,000 of the 229,000 assessments
are collected by this method. It must
be noticed, however, that even in these
cases the occupier is still legally liable
for the rates. The legal liability of the
occupier can always be enforced by the
issuing, first of a summons to appear
before the magistrates to show why he
has not paid, secondly, of a distress
warrant which allows the municipality
to take and sell sufficient of the rate­
payer's personal furniture etc., to cover
the debt and finally, if all this fails, the
ratepayer in arrears may be committed
to prison. Actually even in the most
depressed towns the percentage of bad
debts is very low being usually less than
1%.

Certain classes of occupiers are either
exempt or enjoy reduced rates. These
may be divided into two main groups.
The first group is composed of bodies
such as religious scientific and charitable
institutions which are exempt largely
on the grounds that they are not profit
making organisations and also that their
aims should be supported. Incidentally,
though Crown property is exempt from
rating but does make a payment in lieu
of rates, most municipal property is
rateable. For example, municipal schools
have to pay local rates but voluntary
(i.e. church etc.) schools do not pay.

The second group is composed of certain
types of private enterprise which Parlia­
ment has thought fit to relieve of some of
its rate burdens. Since 1929 mills, factor­
ies and other industrial premises, railways
and canals all receive a rebate of 75% so
that their assessments are reduced
or derated by this percentage. Agri­
cultural land and buildings (except farm
houses) have since 1929 been wholly
exempt from local rates.

The basis on which property is assessed
is the annual rental value. The assessor
first ascertains the gross value of the
property. In simple language gross value
is the rent at which a premises might
reasonably be expected to let from year
to year if the tenant undertook to pay
all the usual tenants charges and the
landlord undertook to bear the cost of
repairs, insurance and other expenses.
The rateable value, which is the figure
on which the rate is actually levied, is
usually obtained by deducting a stated
percentage from this gross value to allow
for the cost of the repairs etc. Even
though the majority of property in Eng­
land is occupied by tenants, only a small
proportion of tenanted property is let
on a yearly rent, weekly and monthly
tenancies predominate in dwelling-houses, whilst 5, 7 and 14 year leases are quite common for commercial and industrial premises. Thus, even in respect of property for which figures of rents are available, adjustments must often be made so as to arrive at the annual rental value. The difficulty of valuation has increased in recent years because of the growth of house ownership so that for thousands of new houses no rental figures are available and the rental value must be estimated. Greatest difficulty is in respect of such peculiar properties as mines, cinemas, railways and tramways, and public utility undertakings generally. Various methods are used by valuers to estimate the value of these properties, sometimes a percentage of the capital value of the land and buildings is taken, sometimes the receipts and expenditure of the concern have to be examined.

There are two consequences of this English basis of local taxation which have been the subject of a deal of criticism. The first is that empty property and vacant land pay no rates, there being no occupier to rate. It has been urged that empty property still has the advantage of fire and police protection services and that in fact the value of the property would fall if the streets were not repaired and kept clean. Furthermore it has been suggested that the landlord being under no pressure to pay rates on the property is encouraged to hold out for higher rents. Sometimes this empty property may result in quite a loss of revenue to the local authority, the Manchester City Council lost £310,000 or nearly 6% of the total rates it levied in 1937. In the City of London and in Scotland a portion of the rates levied are charged on the owners of empty properties and in recent years the London County Council has tried to get special powers to do likewise but so far Parliament has not approved.

The second criticism is that the rental value basis does not take into account the potential value of the land. For example, a small house near the centre of the city may have only a small rental value even though the land it is built on has a high capital value. The assessment of the property will only be raised if the rental value of the house increases or, as is more likely in this case, the land is turned to the commercial use indicated by its high value. Critics of the system say that this puts no pressure on the landowner to develop his property and that as part of this increased land value has been due to the community it should be taxable by the local authority.

Both of these criticisms have in recent years gained strength from the fact that most local authorities have been hard pressed for money. Local rate income has not increased at the same pace as expenditure on social services and though the Government have come forward with increased grants most local authorities have had their eyes open for new sources of revenue independent of Government control. Rating of empty property and vacant land and the rating of land value have their strong supporters. In addition a local income tax has been suggested. So far, however, no new important sources of local revenue have been made available for English local authorities and the main burden of local expenditure is still levied on the basis of the annual rental value of occupied property. Grants in aid given by Parliament have become increasingly important but raise so many important administrative and political points as to deserve an article in themselves.
Three kinds, or classes of safeguards are required to make property located in rural areas reasonably safe from fire.

The first of these is the exercise of care and forethought in the construction, maintenance and use of the property, with a view to eliminating, so far as possible, all needless fire danger.

The second is individual or home preparedness in the form of simple equipment for use in extinguishing fires before they reach serious proportions.

The third is community preparedness, consisting of a fire fighting organization equipped to check larger fires or to prevent their spread to buildings other than those in which the fires originated.

Such an organization, with more effective equipment than the individual can maintain, is needed to hold the loss to a minimum in those cases in which the first two classes of safeguards have failed or threatened to fail.

In the first class of safeguards or measures for the elimination of fire danger, the questions and problems involve consideration of safe construction, proper maintenance, and due caution to the proper use of heating, lighting, and other equipment and materials that involve danger to life and property.

The second class of safeguards is covered by the heading "Home firefighting Equipment".

To be of real value, home fire fighting equipment must be kept in a handy place, and in condition for instant use. The successful use depends upon early discovery of the fire.

Ladders—Numerous roof fires are caused by sparks from the chimney. A ready means of reaching the top of a roof has saved many a building. The appearance of buildings is sometimes marred by attaching fire ladders, but in many instances the ground ladder can be located inconspicuously, and the roof ladder may be merely a narrow board having a few small cleats.

Instead of attached ladders, it is well to have two light portable ladders, one of which has a large hook for hooking over the ridge pole. Householders should be sure that ladders are in good repair.

Fire pails and barrels—Many small fires may be extinguished with the use of a few pails of water. The water should be thrown so as to drench the burning material. If directed toward the top of the flame, most of the water will be wasted.

Fire pails are usually of wood, fibre or galvanized steel and hold about 12 quarts. The outside should be painted red, and the words "FOR FIRE ONLY" stencilled in black. One pail to each 400 to 500 square feet of area served is generally sufficient. The pails should be hung from hooks or brackets, or set on shelves 2 to 4 feet from the floor.

The main shortcomings of the pail protection is the tendency to use them for other purposes, failure to keep them filled, limiting the water reserve to the relatively few pails that can be kept on hand, and the difficulty or impossibility of reaching fire within flues, partitions or walls or on high ceilings or roofs. Minor disadvantages relate to evaporation, freezing or stagnation of the water—Covers or lids will lessen evaporation, 3 to 6 lbs. of common salt or calcium chloride dissolved in each pail will prevent freezing.

Storage of water in casks, barrels or tanks adds much to the value of the pails for fire fighting.

Water under pressure—To fight a well ignited fire successfully requires more water, and higher pressure than is ordinarily obtained with farm water systems.

Fire extinguishers—Putting out a fire with the least damage depends upon early
discovery and rapid action. Portable extinguishers that contain a small quantity of water or other extinguishing agent are highly useful for this purpose. But, they are intended only for the control of fires in their early stages.

For convenience, fires have been classified according to the way in which they can best be extinguished in their early stages; Class A, fires in ordinary combustibles, like wood, paper, textiles and rubbish; Class B, fires in small quantities of flammable liquids, oils and greases; and Class C, fires in electrical equipment.

Fires are commonly put out in two ways; (1) by cooling the burning material below the burning temperature, and (2) by smothering the fire, and depriving it of air necessary to support combustion.

Class A fires are best put out by cooling with water or water solutions. Class B by smothering with a gas or foam, Class C fires introduce a third condition, that the stream applied be a non-conductor of electricity, so as not to cause electric shock or injury to the user.

Water is ordinarily not effective in fighting fires in flammable liquids. In fact, it may cause the spread of the burning liquid over a larger area, and make the fire more difficult.

There are several types of effective extinguishers as—the Pump Tank Type—Principal size 2½ and 5 gallons—Plain water or a non-freezing solution of calcium chloride—Soda Acid 2½ gallons, commonly used, Larger S. A. Extinguishers common sizes 20 and 40 gallons on wheels.

Carbon Tetrachloride—Vaporizing liquid pump—gun type common sizes 1 quart and 1½ quart. Vapor is heavy and non-inflammable and smothers the fire. Foam Type—most common sizes 2½ gallons. The foam smothers the fire by clinging to the burning materials and excluding air.

Community Fire Protection

To bring out more clearly the relation of the third and final fire safeguard, community fire protection, to the other two it should be assumed that reasonable attention has been given to the elimination of fire hazards in the construction and maintenance of buildings, and that each house is supplied with certain simple fire fighting equipment readily at hand. In such a community although the average annual fire loss will be small, yet the need for organized rural fire protection will exist. How much more pronounced then is the need for such protection in the more typical community in which fire prevention and home fire fighting equipment are given only meager attention.

A rural fire department may not be able in many cases to save the building in which fire breaks out, particularly if this building happens to be the barn. But in most cases it will prevent the fire from spreading and destroying other buildings, and thereby substantially lessen the loss that otherwise would occur.

Assuming that the fire fighting apparatus provided, is efficient and the fire fighters properly organized and maintained, its effectiveness in reducing losses will depend upon a number of factors, among which are promptness in giving the alarm, condition of roads, distance to be travelled, water supply available for fire department use, and location of buildings with respect to one another. Although a department's efficiency may be limited, in some or perhaps all of these respects, they have a good record in communities where these facilities are available. The purchase, maintenance and operation of rural fire equipment is financed in a number of ways. In many cases, the money is raised through public subscription by farmers and townspeople. Economy in providing fire-protection service in a rural community may often be brought about through co-operation with nearby villages.

A description of what appears to be suitable fire apparatus maintenance and service given by a volunteer department in the Province follows:—

Waterville—Cambridge, Kings Co., Nova Scotia

Volunteer Fire Department

Area Covered is about 4 Square Miles. Equipment Stationed at Waterville.
Equipment—1 Model "T" Ford, chassis fitted with body carrying the following equipment:

- 2 x 40 Gallon Tanks of Soda Acid—150 feet x 1” Hose.
- 3 x 5 Gallon Hand Water Pumps.
- 2 x 1½ Gallon, Soda Acid Fire Extinguishers.
- Carbo Oxide—Chimney Extinguishers.
- 1 “Gar” Gun—(Chemical Powder Extinguisher).
- 8 Water Pails.
- Spare Bi-Carbonate of Soda.
- Spare Sulphuric Acid.
- 1 Iron Bar and 50 ft. of Chain for obstinate Creosote or soot chimney fires.
- 1 Extension Ladder.
- 4 Other Ladders.
- 8 Coats and Hats for Firemen.

Whole cost was $2,500.

This equipment is housed in a Frame Building 25 ft. by 15 ft. Concrete Floor, Electric Light, Work Bench, Stove for Heat in winter electric heater for engine. Keys are kept with Chief, Assistant Chief, Driver and the Secretary Treasurer and Commissioners.

Whole cost of house was $1,500.

Initial cost and annual maintenance costs are raised by tax on residents in the two districts—rate amounts to not more than 1½ mills annually, any balances left over are kept in the Fire Protection Fund.

The equipment can reach any point in the 4 square miles covered within 15—20 minutes and has frequently been of service further afield—This equipment has undoubtedly saved a great deal of property—Inspection shows the engine and supplies are well kept and ready for instant service.

Transportation in the Economic Life of the Maritimes

By Rand H. Matheson

THE nineteenth century witnessed in North America and Western Europe a procession of economic changes commonly called “The Industrial Revolution”. This revolution resulted in the concentration of production in large plants, particularly in large centres of population. The larger scale of production required large supplies of materials and also larger outlets for the finished products. Fortunately, at the same time, the application of steam power to carriage furnished the means for large scale distribution at relatively lower costs.

About the middle of the nineteenth century the Maritime Provinces were enjoying a certain amount of prosperity, principally along the seaboard. The commercial cities of Saint John and Halifax were rated highly among the principal seaport cities of the world. A movement towards the construction of a railroad to connect New Brunswick, Nova Scotia and Prince Edward Island with what was then known as Canada had received a temporary setback because surveys and investigations had determined its commercial infeasibility. On the other hand, the movement towards confederating the Provinces was gaining momentum.

It was generally considered, by the statesmen of the time, that an intercolonial railway was essential for the successful confederating of the Provinces. Indeed, the promise of an intercolonial railway soon became the most important inducement to the Maritime Provinces to enter the confederation project.

At the London Conference in 1866 resolutions were adopted providing for the construction of the Intercolonial Railway. The Imperial Government also