

overlap each other. It therefore becomes necessary to make allowances in these cases. The smaller city is favored in that the amount of overlapping, when taken from the larger area, makes but a slight difference in its total, whereas the same amount taken from the smaller area would make a very appreciable difference. Furthermore, the areas where overlapping takes place lie, with one exception, closer to the smaller than to the larger urban centre.

Name of City	Population	Total sup- porting area. (Sq. miles.)	Radius of circle or part of circle of total sup- porting area. (Miles.)	Radius of area of immediate support. (Miles.)
Toronto, city only (Cen- sus 1911) .....	376,538	1676.8	....	32.7
City, 1913 (Assess- ment figures) ....	445,575	2591.9	....	35.3
With country (census)	458,432	2225.4	37.6	....
With country, 1913 (Assessment) ....	533,411	2591.9	40.6	....
With country and towns, 1913 (As- sessment) .....	573,728	2905.9	43.0	....
Ottawa .....	87,062	621.25	19.8	16.8
Hamilton .....	81,969	730.84	15.9	11.8
London .....	46,300	326.18	10.1	8.3
Brantford .....	21,132	161.82	7.2	5.5
Kingston .....	18,874	126.77	8.9	7.8
Peterborough .....	18,360	148.49	6.9	5.6
Windsor .....	17,829	119.98	9.6	7.7
Berlin .....	15,196	104.28	5.8	4.8
Guelph .....	15,175	97.95	5.6	4.8
St. Thomas .....	14,054	79.98	5.1	4.4
Stratford .....	12,946	75.71	4.9	4.3
Owen Sound .....	12,558	99.67	5.9	5.1
St. Catharines .....	12,484	101.76	8.0	6.4
Chatham .....	10,770	60.35	4.4	3.8
Galt .....	10,299	68.04	4.6	4.0
Sarnia .....	9,947	80.21	7.8	6.7
Belleville .....	9,876	63.88	6.3	5.4
Brockville .....	9,374	73.21	6.8	5.8
Woodstock .....	9,320	53.69	4.2	3.7
Niagara Falls .....	9,248	69.56	6.6	5.1

**Road Classification.**—It has been pointed out that while municipal responsibility should be encouraged, there is a point at which, in order to obtain results, the influence of a central authority must bear directly upon road administration. A consideration of the classification of roads will assist in determining the point at which the forces of a central administration should be applied.

Roads should be built to meet the needs of traffic. For example, there are roads which, lightly traveled, by an initial expenditure of \$1,000 a mile, will remain in good condition for ten years; on the other hand, there are other roads which, because of heavy traffic, demand an outlay of \$1,000 per mile annually for maintenance alone. For this reason, roads admit of classification according to traffic for purposes of construction and maintenance, revenue and administration. They must be constructed and maintained adequately; revenue must, in equity, be derived from those who are benefited and organization must be commensurate with the work.

**Cities and Suburban Roads.**—The opinion is frequently advanced in the cities that the provision and support of good roads should fall upon the farmer, inasmuch as he must use them to market his products. The farmer, however, is fully justified in maintaining that the cities

are equally interested in the roads over which their food supplies reach them. In point of fact, the city and country are necessary to each other, with the advantage somewhat on the farmer's side; for, while he could manage without the city, the city could not exist without him.

About each city there exists, as stated, a belt of rural territory which is knit to it in the closest fashion. Much of the city's food is grown in this belt; more would be if the means of communication were better. Sundry industries, due to the presence of the city, are prosecuted in this area. The residents for some miles out are valuable customers of the city's shops. In every way the city stands to gain by the equipping of this belt with a system of roads able to carry a heavy traffic with speed and economy. The speed of the motor bus and motor truck would extend the city's influence—that is, the area from which it could draw food and direct trade. Opportunities would be afforded for a specially beneficial development, the rapid moving of workers out into the countryside after their daily task is over. It is understood that in Belgium one-third of the industrial workers live outside of the towns, cultivating small holdings of land, under conditions of health which surpass those of residents in the crowded streets. From the standpoint of the city's food supply alone, the improvement of the roads is of great importance to the town dwellers.

Economically speaking, distances are measured by time, and if men trespass too much on the early morning hours in order to reach distant markets, nature makes her claim on them later on. If the constant, regular supply to city markets is limited to points, say, two hours therefrom, it would mean leaving the farm at 6 a.m. in order to be on the market stand at 8 a.m. It is easy to realize, therefore, that by cheap motors and good roads the supply area can be greatly enlarged, as compared with the present districts surrounding most cities, in which supplies are sent into town by horse-drawn vehicles on indifferent roads. Further, the widening of the belt means enhancing the profits per acre, to the advantage of the farmer.

Again, the countryside has suffered for several decades from certain inevitable developments. Forty years ago a considerable amount of industrial work was carried on in nearly every small town, in nearly every village, and, indeed, in many rural communities too small to aspire to the name and style of village. This caused a wholesome diversity of industry, increased the interest of country life, and was in most respects a beneficial social influence. The march of progress has swept that state of things away. The tendency of the age is toward centralization. Those small industries, which meant much to the small towns, have been absorbed into those operating in larger centres. The countryside must specialize in farming. Why, then, should cities—to a certain extent built up by rural districts, which have lost taxable property to those cities—not be prepared to contribute to the road system by which both benefit?

**Interurban Roads.**—In dealing with interurban roads it is necessary to glance at one aspect of the problem created by the motor. The greatest asset of some European countries is their scenery; it attracts tourists, and the money they spend is of great importance to the community. Bearing in mind that the tendency to reach summer resorts by motor is increasing, it is not difficult to realize that, with a system of main arteries penetrating country regions in the United States and Canada, a more important tourist traffic would be developed. This traffic is of little benefit to the people of the intervening districts traversed; it throngs the roads, and there is a tendency