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THE DEVELOPMENT OF THE TORONTO CONURBATION*

TAC. SPELT**

THE SITE

BROADLY speaking, the terrain on which Toronto has grown up consists of a rather level plain, slowly rising from the lake to a steep cliff beyond which extends a somewhat more varied surface. The Humber and Don Rivers traverse the area in a general northwest southeast direction. To the south, land and water seem to interlock as part of the lake found shelter behind a westward jutting sandy peninsula.

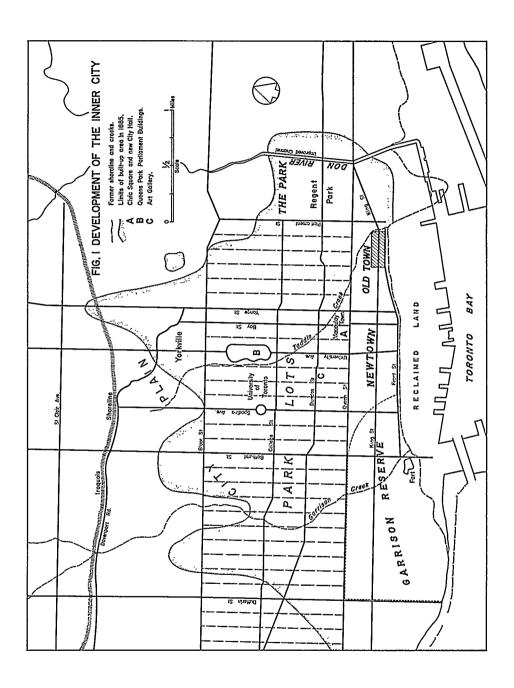
The bedrock is exposed at only a few places in the bottom of the valleys and has not significantly interfered with the building of the city. Even under the so-called City Plain it is buried under thick deposits laid down by Lake Iroquois, a post-glacial predecessor of present-day Lake Ontario. The abovementioned cliff forms its shoreline which at present rises as a 50 to 75 foot hill above the plain (Fig. 1). Many north-south streets end abruptly at its base, and although main traffic arteries have surmounted the hill through stream made notches or man made grooves, the former shoreline continues to be responsible for some serious traffic bottlenecks. Over a considerable distance a street and a railway follow closely the base of the hill and have encouraged the formation of a narrow belt of industrial complexes. In contrast, many stately homes were built on the brow of the hill, amongst which somewhat aristocratic looking Casa Loma with its turreted and crenelated walls is most prominent.

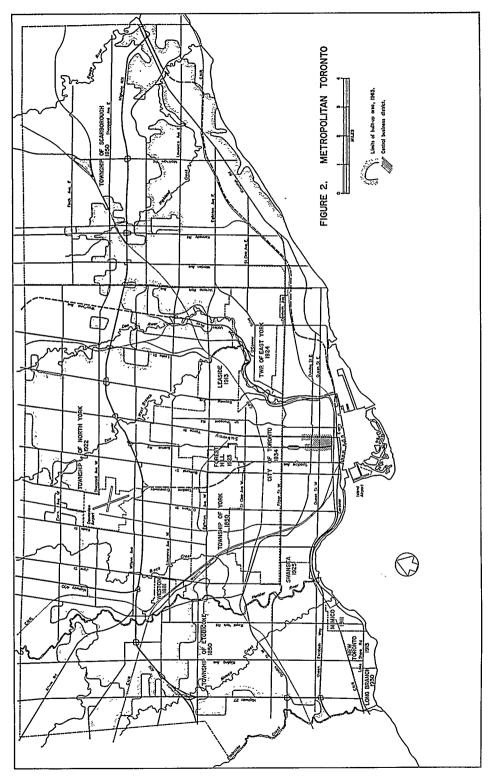
The till plain to the north of the Lake Iroquois shoreline has surface features of greater variety than further south. Undulations may rise as much as 50 feet above the general level. Within the metropolitan boundaries this till plain reaches heights of more than 400 feet above the level of Lake Ontario. The Don and Humber Rivers occupy the bottoms of deep valleys which may be as much as 100 feet below the level of the till plain. Carved out by floodwaters of the melting ice sheet, these forested valleys and their tributary ravines possess rich scenic qualities. They offer magnificent opportunities for a great variety of recreational land uses, while their edges always have been attractive sites for residential developments. Because of their low grades, the valleys were followed by the railways seeking entrance to the city. In recent years, expressways, euphemistically called parkways, have begun to encroach upon them in order to avoid cutting broad swaths through well-established residential areas.

Originally, the City, or Iroquois Plain, in addition to the main rivers was traversed by a number of creeks which had succeeded in cutting some impressive ravines in post glacial times. Together with marshy spots they influenced the

^{*} This article is based on a more extensive treatment of the topic in a monograph on the city by D. P. Kerr and Jac. Spelt to be published by the Queen's Printer, Ottawa.

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expansion of the city in its early phases. On account of them, streets ended suddenly or changed direction. As the city grew, the creeks became badly polluted and the ravines were filled in and became routes for trunk sewers. Some sections survive in the present-day park system.

Only the Don and Humber Rivers continue to require expensive engineering works in order to maintain a proper integration of the arterial road network. The Bloor Street viaduct across the Don Valley was completed in 1918 and in 1956, the western and eastern parts of Eglinton Avenue were joined across the Don Valley. Others, however, like St. Clair and Lawrence Avenues are still blocked by the Don River (Fig. 2).

On the average, the Don and Humber discharge relatively small amounts of water, at different times even almost drying up. On the other hand, occasionally the water has risen high enough to cover part or all of the flood plains. The most tragic flood occurred in October 1954, when a tropical storm caused disastrous flooding. Eighty people were drowned and many buildings and bridges were washed away. Extensive measures have been taken in order to avoid the reoccurrence of such a calamity.

At the time of the founding of the city, the City Plain ended at the water edge in a 12 to 20 foot high, grass covered clay cliff, at the foot of which a narrow strip of beach had been formed. Beyond it extended a shallow bay, protected by the peninsula against the fury of the lake, thus adding a small attractive harbour to the site.

Such was the site on which a conurbation of over one and a half-million would emerge. It offered no outstanding advantages compared with other points along the shores of Lake Ontario. Yet, except for stretches of poorly drained clay soils which in early days gave rise to the name "Muddy York," there were no serious drawbacks either.

FOUNDING AND EARLY YEARS

John Graves Simcoe, the first lieutenant-governor of the newly created province of Upper Canada was anxious to build a town on the Toronto site. He attributed to it a great deal of military and commercial significance because of its harbour at the beginning of a passage to Georgian Bay and the Upper Lakes. His superiors ordered him to establish also the capital here, a decision Simcoe strongly opposed.

The morphology of early Toronto to a very large extent was the result of government planning. It not only included the actual lay-out of the town, but also attempts toward architectural control and even reserving areas for the location of small trades. Gradually, in particular after 1820, this influence of the government diminished and the city, spreading out across the Iroquois Plain, took on a form which increasingly was determined by private development. Official planning as a significant influence would not come to the fore again until the 1940's.

The building of Toronto, or York as it was called at that time, began in the fall of 1793. The land south of a base line which had been surveyed from Scarborough Township to the Humber River, was set aside as a government reserve; its western part became the site of a fortification. To the north of the base line, present-day Queen Street, three concessions 100 chains deep were marked off. The farm lots were 20 chains wide and at every fifth lot, a side road ran through the concession between the east-west roads, creating blocks of 1½ miles square. The road allowances were one chain (66 feet) wide and eventually became the main cross-town arteries such as Queen, Bloor, St. Clair and Eglinton in east-west direction and Yonge, Bathurst, Dufferin and Keele in north-south direction. The road network did not follow the grain of the landscape with the result that the roads were forced to cross valleys, ravines, marshes and also the old shoreline at points which were not always most advantageous (Figs. 1 and 2).

The plan for the new settlement was a modified version of the model designed for the building of towns in the new territories at the end of the 18th century. In the case of York, extensive areas were kept in reserve in order to meet the expected military requirements. In addition to the land south of Queen Street, including the Island, the government also retained the land between Parliament Street and the Don River as far north as Bloor Street. At first it was probably thought of as a naval reserve, but later it was an ordinary government reserve, generally called "The Park."

Of great significance was the fact that the land to the West of Parliament Street between Queen Street and Bloor, was laid out in 32 park lots of 100 acres each. These lots were granted to selected persons who received a lot in the Town of York. They were specifically intended as douceurs for government officials to induce them to leave more readily their homes in the former capital Niagara-on-the-Lake and pioneer once more in York.

The town itself was laid out about half way between Yonge Street and the Don River, on somewhat higher ground inside the reserve. The plan comprised ten four-acre blocks. The lots in the front range of blocks facing the harbour, were larger than those farther back and their occupants were expected to erect substantial two story houses with a frontage of at least 46 feet. The buildings had to be set back from the street and have uniformity in architectural style. For a time they were even envisaged to have a colonnade in front. Along the bank of the bay, a path connected the town with the garrison near the entrance of the bay and is preserved at present in the somewhat winding trend of Front Street.

A few years later, York had to be expanded, and since all the land was government owned, the entire expansion could be carefully planned as a single unit and properly integrated with the existing town. The so-called New Town was laid out in 1797 to the south of Queen Street between the line of Yonge Street and the perimeter of the garrison reserve. Between the Old and New Town, land was earmarked for a church, a courthouse, school, hospital, jail

and market. Thus the public buildings would be situated conveniently between the two parts. From 1844 to 1899, the City Hall stood in this area on the southeast corner of the market. The adjacent section of King Street became the first leading concentration of shops.

The New Town was laid out on a more ambitious scale than the rather compact Old Town. It included some large squares, and the 850-foot-long blocks inherited from this plan were to constitute a serious obstacle in any program to reorganize the 20th century downtown part of the city. Several substantial residences were built in the new extension, including Government House which stood here until 1912. The Parliament Buildings stood on one of the squares from 1826 to 1903.

Along the shore of the bay, an attractive strip of land was kept open endowing the buildings and residences along the front of the town with a beautiful setting. The Crown granted a strip of 38 acres of land along the edge of the bay in trust as a public walk or mall. Other space north of Queen Street, although in private hands, was readily accessible. Thus the inhabitants of early York living in a town elongated in shape, could reach open space quite easily. It was not felt necessary to appropriate park land within the confines of the town and this means that we must look to the attractive setting of early York in order to account for the obvious lack of open space in the present downtown part of the city.

FURTHER EXPANSION IN THE 19TH CENTURY

With the building of the New Town, the first phase in the morphological expansion of the city came to an end. It was a period characterized by a great deal of official planning, facilitated by the fact that the government owned the land. On the other hand, the authorities had not always been consistent in the implementation of their decisions. Especially in the New Town, many exceptions had been made and the sale of land in the blocks containing the public buildings is still reflected in the present somewhat irregular street pattern in that area. From now on, the role of government as a factor in town expansion diminishes rapidly. The advance of settlement on the remainder of the reserved land and on the park lots to the north of Queen Street, the changes along the water front, including the building of the railways, all took place with an almost complete absence of government control. It marks the second phase in the territorial expansion of the city.

At one time, official plans were made for the development of both The Park and the Garrison Reserve. Unfortunately, they were never implemented. In 1819, a large tract of The Park was granted as a hospital reserve, while other sections were set aside for cemeteries and a park. The development of the remaining parts proceeded in a rather piecemeal fashion, first to the south of Queen Street and later in the 1840's and 50's farther north. Many small houses were crowded on the blocks, especially on some of the land belonging to the hospital grant. After the Second World War, the area became the site of a

large scale redevelopment and public housing project, called Regent Park. Also sections of the Garrison Reserve were filled in with crowded housing, but substantial parts were used for non-residential purposes, including new barracks, a cattle market, a hospital, a reformatory, exhibition grounds, and most significant, railway rights of way and terminal facilities.

The owners of the park lots to the north of Queen Street enjoyed almost complete freedom in the subdivision of their holdings. At first they built farms, summer residences or even fully fledged country estates. Some became Toronto's first gentlemen farmers. However, by 1840 the population of the city had increased to such an extent that residential expansion north of Queen Street became necessary. The first suburb to the north of Queen Street was Macaulay Town to the northwest of the intersection with Yonge Street. The maps of those years show a large number of subdivisions planned on park lots, some extending already as far north as Bloor Street. The land adjacent to Yonge Street was developed first, a tendency which became even more pronounced in the second half of the 19th century, giving the built-up area its traditional shape of an inverted T.

The plan for the subdivision of a park lot was for the most part a product of the owner's imagination. However, nearly all developments had one aspect in common, namely the orientation of the streets. These were projected in a north-south direction along the length of the 100-acre lots, while east-west connections remained poorly integrated. Dundas and College Streets are interconnected sections of east-west streets in different subdivisions to provide additional cross-town arteries between Bloor and Queen. Bay Street is such a link in north-south direction, integrating subdivisions which were oriented towards Yonge Street. Occasionally the plans showed interesting features. Thus Spadina was laid out as a wide avenue, even circling a carefully planned garden-filled crescent just to the north of College Street. However, University Avenue obtained its unusual width of 180 feet quite by chance; it is the result of joining two parallel roads which had been laid out on each side of a park lot boundary.

Other park lot owners placed their imprint on this part of the city by granting land for public buildings, or by disposing of their residences for specific purposes. Osgoode Hall, the Toronto Art Gallery, Allan Gardens, Wellesley Hospital, Trinity Church and Square, St. Basil's Church, and many others, are direct reminders of park lot owners. It should not be a surprise that the names of the original owners together with the names of members of their families or estates frequently are found in the nomenclature of the area.

To the north of Bloor Street, the land had been surveyed in regular farm lots, the subdivision of which began in the second half of the 19th century. Just as was true for the park lots, each farm was subdivided as an individual unit. Here also, the grain of the street pattern reflects closely the orientation of the original farm lots: the predominant direction of the streets parallels the longitudinal axis, while the streets in transverse direction are short and often do not link directly with their counterparts on adjacent farms. This street

pattern is typical for the farm by farm expansion which has characterized Toronto's growth from the early part of the 19th century to the present. Air photos of Scarborough or North York which were largely built up during the post war period make it quite easy to determine the limits of the original farm lots. In a few cases, developers concerned with the promotion of better class residential districts, departed radically from the customary pattern. They assembled two or more farms and endowed such districts as Rosedale, Lawrence Park, and post war Don Mills with winding and crescent shaped avenues.

An interesting feature in the expansion of the city was the absorption of villages which had developed as small rural services centres. Several of these became the nuclei of flourishing shopping concentrations in the present landuse mosaic of the city.

Yorkville near the intersection of Yonge and Bloor Streets is an interesting example of a pattern which would be repeated many times (Fig. 1). The owners of the land originally had built the village as a speculative suburban development just outside the city boundaries. The first street railway was built to take the Yorkville commuter to the core of the city (1861). However, in the course of time, the independence of the village became increasingly more precarious mainly because of the difficulty of providing adequate services. To the annoyance of the city, Yorkville was guilty of polluting the water of a southward flowing creek. The end came, when new waterworks were established on the hill to the north of the village to supply the city but not the village although the mains passed through it. This was the immediate cause for its annexation by the city in 1883.

Toronto at the turn of the century was a city which had been built under a system of minimum government interference and in the process, much had become irretrievably spoiled. The pollution of the bay and lake water and the provision of an adequate supply of drinking water had become problems of such proportions, that even the possibility of drawing water from Lake Simcoe, some 40 miles to the north of the city, was seriously considered. The inner city, devoid of open spaces, had become cut off from the waterfront. The park land envisaged by the founders of the city had fallen victim to the building of railway facilities and more specifically to the reclamation of land in the bay for port development; the bay withdrew farther and farther from the city (Fig. 1). In the city itself, the street pattern though rich in trees, offered a monotonous and uninspiring landscape. Only University Avenue and perhaps also Spadina seemed to offer some promise for the future. In short, the city at the end of the 19th century illustrates that no truly beautiful city arises as a result of piecemeal, individually conceived subdivisions, even when planned with the best of intentions. In the 20th century, official planning once more would emerge as an instrument of government policy and become a significant factor in the morphological growth of the city, characterizing its third phase.

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20TH CENTURY GROWTH

Until the late 1940's, the shape of the Toronto conurbation could be compared to that of half a star, the centre being near the harbour from which prongs radiated to the east, the north, northwest and west. As noted before, Yonge Street, Toronto's leading thoroughfare, quite early began to steer expansion northward, a trend which culminated in the annexation of the Town of North Toronto in 1912. The influence of this important traffic route continues to encourage a rather closely built-up strip within approximately a mile to the east and west as far north as Thornhill. The density gradually diminishes northwards to Richmond Hill, but can be identified as far as Aurora and Newmarket some 30 miles from Lake Ontario.

Another important tentacle extends to the west and southwest along the lakeshore towards Hamilton. At an early date pre-empted by highways and railways, this transportation route has increased greatly in importance. In fact, Toronto's recent growth has embraced Port Credit and Oakville and is rapidly establishing a firm link with the Hamilton conurbation. The Queen Elizabeth Way, Ontario's first modern highway, is the axis of this belt and was a major contributing factor in its development. Also the prongs to the northwest and east follow highways and railways.

Since 1950, there has been a substantial filling in of the interstices between the prongs of the star. Thus Scarborough Township, after the Second World War, added large complexes of residential and industrial subdivisions to the north of the eastern prong. However, between the Scarborough developments and the Yonge Street belt, a wedge of open land extended close to the heart of the city until the early fifties. Both inaccessibility and political factors prevented it from being subdivided. It was not until the fifties that Eglinton Avenue was extended eastward as a major highway, making the wedge readily accessible. At the same time, North York had confined the provision of public services to land adjacent to Yonge Street, while on the other hand, Scarborough permitted extensive buildings on its side of the border which for a time clearly defined the northward extension of the eastern prong. Soon after 1950, however, the community of Don Mills was developed in the heart of the wedge. The Metropolitan Plan envisages the wedge to become completely built-up with the retention of park belts along the valleys.

For about 100 years, the city steadily expanded its territory by means of numerous annexations, each time incorporating newly built-up areas. This trend came to an end with the annexation of North Toronto. The City changed its policy and the further expansion of the built-up area took place within the framework of newly created separate municipalities which were carved out of York Township which surrounded the city. They are shown on Fig. 2 with their dates of incorporation.

Of a total land area of 241 square miles in Metropolitan Toronto, 92 square miles are classified as developed urban land. The city proper has only

a few hundred acres of vacant land left. The Metropolitan Planning Board estimates that by 1980 almost nine-tenths of Metropolitan Toronto will be fully developed.

Now official planning has become a dominant factor in the further expansion of the conurbation. In the Official Plan of 1959, the possibility of establishing satellite towns was rejected. Instead, the metropolitan planning authorities foresee by 1980 a broad urban ribbon along the shore of Lake Ontario, extending far beyond the limits of the Planning Area to include Hamilton to the west and Oshawa to the east. The width of the ribbon is to be determined by the distance over which Lake Ontario economically can serve both as a supplier of water and a recipient of sanitary storm and sewage drainage. The plan therefore expects a filling in of the wedges between the tentacles jutting out from the old city and also a more solidly built-up extension northward to Richmond Hill.

TOWARDS A NEW MUNICIPALITY

The 19th century development had created some serious problems making a further efficient functioning of the urban complex exceedingly uncertain. Thus the citizens and their government were forced to make a critical re-appraisal of their environment, a process which led to the gradual emergence of planning as a branch of government administration and this in turn helped to bring about the creation of a new administrative framework.

The first attempts at improvement, with the exception of the reconstruction of the water supply and sewage system, were almost entirely aimed at beautification of the city, in order to discard some of the more ugly aspects of the 19th century legacy. It was a phase which more or less would last until the end of the 1920's and which culminated in the University Avenue project. There were also attempts to find a solution for the traffic problems and the deficiencies of the street pattern. Suggestions for improvement included the building of an impressive system of boulevards, also the construction of a large viaduct in Bloor Street across the Don Valley, and the northward extension of Bay Street from Queen to beyond Bloor. To enhance the beauty of the city and to give personality to its heart, it was proposed in the years before the First World War to create a civic centre between the City Hall of 1899 and Osgoode Hall. It even was suggested to open a new, wide avenue through the middle of the long blocks between York and Bay Streets to connect the proposed centre with a new Union Station. The square was eventually acquired by 1947 and became the site for the new city hall at present under construction.

The problems of street lay-out and traffic conditions remained major concerns until the 1930's, when attention also began to be focused on the deteriorating housing conditions. A subsequent report noted the inadequacies of city planning and recommended among others the immediate establishment of a city planning commission. This together with a concern about post war reconstruction and planning led to the appointment of the Toronto City Planning Board

in 1942. Although this board was only an advisory body, its work had farreaching effects in the late fourties and fifties. Its report, rather gingerly received by the City Council, was the first comprehensive plan for the city in that it dealt with all aspects of land use, from greenbelts to a civic square, from substandard housing to a flight of industries to the suburbs. In dealing with the greenbelt plans and policies for industrial land use the Board became increasingly aware of the need for co-ordination between the municipalities of the conurbation and the creation of a planning authority more regional in scope. The result was the formation in 1947 of the Toronto and York Planning Board, York being the county which contains the Toronto conurbation.

In 1947, of the 13 municipalities which later would enter into a federation, only three, North York, Etobicoke and the City had appointed planning boards. Three of the remaining municipalities had only planning committees and the remaining seven nothing. This illustrates clearly to what extent the Toronto built-up area, which contained a total population of more than 1.1 million in 1951, had grown under a system allowing a minimum of official planning. It is not surprising, therefore, that problems had arisen of such magnitude that they no longer could be solved within the existing administrative framework.

Through lack of funds, several municipalities were unable to make the necessary investment in public services. A 1947 planning report stated that the taxes obtainable from a six-room house could not hope to meet the financing of public services, including education, unless additional revenue could be obtained from commerce and industry. This was especially true for East York, North York and Scarborough. The suburban municipalities therefore attempted to promote industrial development by laying out properly serviced industrial areas, but not all municipalities succeeded in balancing their assessment in this manner.

Most serious were the problems in connection with water supply and sewerage facilities. The city acted as a barrier between Lake Ontario and some of the inland municipalities, a condition reminiscent of Yorkville, many decades earlier. The lack of proper sewage facilities had become a menace to public health. Dwellings had been crowded on small lots with soils entirely unsuitable for septic tank disposal systems. To the extent that local municipalities did build sewage treatment plants, they tended to locate them on the Don and Humber Rivers so that the discharge of these soon overloaded installations created other problems farther down-stream.

By the late forties, serious water shortages had developed and enforced curtailment of the use of water became a normal feature of suburban living. Especially in the Township of North York the situation became critical. However, through lack of foresight, Etobicoke Township although fronting on Lake Ontario suffered almost as badly.

The highway network and public transportation in the conurbation were poorly integrated. In 1949, fully 30 per cent of the population found itself outside the limits of the universal fare system; co-ordination of transportation

services was most urgently needed. A plan for the preservation of open space could not be implemented, because of lack of co-operation among the municipalities concerned, each viewing the problem from a purely local point of view. Thus chaos was rapidly developing and in its 1949 report, the Toronto and York Planning Board was quite outspoken in pointing out the underlying causes: "... constructive progress is in every case barred by the difficulties of securing municipal co-operation in the development and extension of public services. . . ." One of the solutions suggested by the Board was a unification of groups of municipalities. The recommendations of the report were endorsed by the City Council and an application was made for amalgamation. Eventually this resulted in 1953 in the creation of a new municipality in the form of a federation of the city and the 12 suburbs; it was called Metropolitan Toronto. Soon the morphology of the area began to reveal the effects of the new administrative organization. Some of these, such as expressways, housing developments, park improvements, better water supply and sewage disposal facilities profoundly influenced the further development of the built-up area.

THE PRESENT-DAY LAND USE PATTERN

The most important factor in the area differentation within cities undoubtedly is the transportation system. After Los Angeles and Detroit, Metropolitan Toronto has the highest motor vehicle ratio on the continent in terms of registrations per 1,000 of population. Gradually it became impossible to handle the volume of traffic, especially in the downtown part of the city where the great majority of streets originally were 66 feet or less in width. Until quite recently, the only through highway in Toronto was the Lakeshore Boulevard which had emerged from a partial reorganization of the waterfront. It linked the Queen Elizabeth Way with Highway 2 on the east side of the city. Even so, access to the road was not controlled and its traverse of an amusement park in the west and the harbour zone in the downtown area reduced its capacity to handle through traffic.

At present, an extensive plan for expressways, proposed in broad outline as early as 1943, is being implemented. The broad scheme is to enclose Metropolitan Toronto within a triangle of expressways. Two of these, Highway 27 to the west and Highway 401 to the north are provincial roads, while the third side of the triangle, the F. G. Gardiner Expressway, mainly an elevated structure, is at present being built by Metropolitan Toronto. The Province is engaged in widening Highway 401 over a distance of 17 miles to a minimum of 12 lanes.

Within this triangle, the crosstown arteries will be supplemented by a system of widened streets and expressways, giving access to the centre of the city. The construction of one of these, the Don Valley Parkway, is well advanced, and a beginning has been made with the building of the Spadina Expressway which will run in a northwesterly direction. These two highways combined with the Gardiner Expressway and possibly another east-west ex-

pressway south of the Iroquois shoreline may eventually form a ring around the inner city. Nevertheless, the system of expressways, extensive though it may be, is not expected-to be able to meet all transportation needs; in the field of public transportation it is being supplemented with a network of subways.

The traditional importance of Yonge Street to the central business district is reflected in the building of the first subway. Completed in 1954, the Yonge Street subway contributed greatly towards improving the connections between the centre of the city and the areas to the north. It reinforced certain functions of the central district, but paradoxically it also stimulated some decentralization from downtown and favoured the expansion of office buildings near the stations. This together with new apartment complexes, accounts in part for the new traffic generated by the Yonge subway. At present the line, which runs over a distance of 4.6 miles from Union Station to Eglinton Avenue, operates at capacity during rush hours. A 14 mile extension of the network along the Bloor-Danforth line is under construction, while a two-mile line under University Avenue, linking it with the Yonge line at Union Station has been completed.

The railway pattern in the metropolitan area was established in the 19th century and is focused for the most part on the downtown area, not far from the waterfront. Access from the city to the waterfront was improved with the completion of a new viaduct in 1930. Seven new underpasses between the Don River and Spadina Avenue replaced the time-consuming crossing of myriads of tracks. At the same time all the railway stations were eliminated by the new Union Station, opened in 1927.

The extensive marshalling yards and associated facilities in the downtown part of the city will be replaced by new establishments now under construction by the two railway companies outside the metropolitan area. Indeed, this may provide the city with a new opportunity to re-appraise its links with the waterfront, since the downtown yards no longer will be needed. It may be possible to fulfill the aspirations of the founders of the city and to create an organic link with the lake, giving new dimensions to a confined and crowded city core. Attempts along these lines are also made in the area of the central waterfront. The reduction of freight trains moving through the Union Station area may make the latter more accessible to commuter trains. At present only a few trains provide commuter service to such centres as Oakville, Agincourt, and Weston, although the physical facilities in the form of tracks and stations already may be available for a more intensive service.

The pattern of residential districts in Metropolitan Toronto is similar to that of other large North American cities. Around an inner core with only a small number of permanent residents, extends a zone of housing largely built in the 19th century with densities varying from 101 to over 150 persons per net residential acre. Beyond this, the net residential densities decrease to 16 persons per acre along the fringes of the built-up area. About 60 per cent of the developed area of Metropolitan Toronto is in residential uses. The Metropolitan Toronto Plan aims at an increase in population densities by encouraging

a mixture of varying house types, including apartment buildings in the low density districts. It is expected that the gross residential population density will be increased to between 20 and 29 persons per acre in most of Etobicoke, North York and Scarborough. A main advantage of increased densities would be the possibility of providing adequate public services, in particular public transportation.

In the last decade, suburban development occurs with more imagination and serious attempts are made to create attractive communities. This trend began with the building of Don Mills, a community with a variety of house types, including multiple dwelling structures; it is built on an irregular street pattern, protected against the inflow of outside traffic, and arranged around a modern mall-type shopping and service centre. It stands in sharp contrast with the earlier amorphous subdivision plans devoid of any personality or identity. Swedish concepts are being incorporated in other projects.

One of the most striking changes in the landscape of Metropolitan Toronto over the last decade has been the great increase in the number of apartment buildings. Until the late 1940's, Toronto was predominantly a city of detached and semi-detached homes. Even as late as 1953, there were fewer than 30,000 apartment units in Metropolitan Toronto, or about ten per cent of the total number of housing units. At present the number of units has risen to more than 100,000. Between 1958 and 1961, the ratio of apartments per 1000 population changed from 39 units to 51, the number of units increasing faster than the population. The greatest proportion of apartment living is found in a zone between five to eight miles from the centre of the city, where 14.8 per cent of the total population lives in this type of accomodation. Almost half of all apartment dwellers live beyond the five mile radius from the centre at Queen and Yonge streets. The widely assumed identification of apartment living with residence close to the centre of the city is not valid for Metropolitan Toronto, an interesting problem requiring further study.

A second significant change has taken place within the residential population itself. Throughout the 19th century and well into the 20th, Toronto was almost entirely a city with Anglo-Saxon population. The city was not only Anglo-Saxon in composition, but perhaps even more so in outlook—plus royaliste que le roi. Even as late as 1951, the British element accounted still for about 70 per cent of the population. Ten years later, however, 46 per cent of the city's population came from countries other than the British Isles. The largest non-British elements are the Italian, German, French (largely French Canadian), Polish and Ukranian groups. The newcomers are almost entirely concentrated in the city proper, especially in its 19th century parts. Here some districts have experienced tremendous changes in the ethnic composition of their population. Once solidly British in character, now the language spoken in the streets, the style of clothing, the stores with their signs, and their displays of strange merchandise, remind one of cities and towns in Europe. It

is to the credit of the city, that these profound changes in the make-up of its population have taken place without ethnic strife.

As noted previously, the site was endowed with a rich potential for the development of park land. Yet over one-third of the inhabitants of Metropolitan Toronto live in areas which are deficient in parks. Since the early fifties, vigorous programs initiated by the city and after 1954 augmented by the Metropolitan Parks Commission have resurrected old parks and developed several new ones. The Island, just opposite the city's most crowded residential areas, is being transformed into a multifunctional park. It involves the removal of some 650 residential and commercial structures and eventually some 575 acres will become available for recreational purposes.

Approximately 10,000 acres, or 11.7 per cent of the developed land in Metropolitan Toronto has been appropriated for manufacturing, wholesale and warehouse complexes. The first industries and warehousing arose on the waterfront. There were no water power sites which could have attracted major industrial concentrations. Instead, manufacturing tended to move to open land just outside the built-up area at points of good access. The heavy dependence of manufacturers on railway transportation before World War II is reflected in most pre-war industrial districts—long tentacles of industry extending out from the centre of the city, mainly to the west and northwest, along the lines of the C.P.R. and the C.N.R. In recent years, the rise of the trucking industry has reduced the dependence of manufacturing on the railways and many of the industries in new suburban developments have no access to rail sidings. Nor are there any rail facilities in large parts of the inner city where industry also is based entirely on truck transport.

The modern metropolitan area therefore, contains several areas of conflux in the pattern of the daily journey to work. The city proper has some seven major concentrations of manufacturing and warehousing within its limits giving employment to a total of over 120,000 workers in 1960. Outside the city, ten additional concentrations are well distributed throughout the old and new suburbs, with a total employment of more than 85,000.

By 1950, industrial employment in the city had reached a peak of 160,000, after which time it has declined steadily mainly due to the migration of firms from old and overcrowded quarters to the suburbs. The newer suburbs showed remarkable increases in manufacturing employment. Etobicoke, North York, Scarborough, East York and York saw their industrial employment rise from 6,000 in 1950 to 66,700 in 1960. This has led to the formation of a much more solid assessment base and consequently a desire for greater influence in metropolitan matters. The city contributes at present just over 45 per cent of the total taxable assessments in Metropolitan Toronto.

Toronto's central business district offers employment to some 145,000 people, or about a fifth of the total employment in Metropolitan Toronto. Within its confines, it reveals a great deal of diversity both in form and activity. According to the 1951 census of retailing, 27 per cent of all sales in Metropolitan

Toronto were concentrated in downtown. The return for the 1961 census, when released, undoubtedly will reveal a decline, especially when viewd against the background of population increase in the total metropolitan area. Nevertheless, downtown is still by far the leading retail concentration between Montreal to the east and Winnipeg to the northwest.

The retail centre migrated from its early location on the market along King Street westward to the intersection of King and Yonge Streets which by the end of the 1870's had become the city's leading shopping area. Eventually, however, Yonge Street was to assume the part played by King Street. This re-orientation of the retail trade began with the establishment of the department stores at the intersection of Yonge and Queen Streets around 1870. The success of these companies stimulated an expansion of retailing along Yonge Street which accelerated in the 20th century and at present by far the bulk of downtown retailing is concentrated in a strip along Yonge Street, to the north of King Street. The confinement of downtown retailing to a single street is a unique feature among the large North American cities, where retailing of this type generally encompasses several blocks.

The department stores hold complete sway over downtown retailing, leaving little room for competitors. A significant concentration of high-class stores which effectively could compete with them does not exist in downtown Toronto, but is located farther north, on Bloor Street between Yonge and Avenue Road. In spite of the improvements in transportation and the very substantial growth of the population in Metropolitan Toronto and surrounding areas, the downtown stores have not been able to expand accordingly. It is quite obvious that competition from other business centres, such as the Bloor area and the large suburban plazas, have contributed to the relative decline of downtown retailing. The department stores and other downtown shops have responded by opening branches in the major suburban plazas.

In the late 1920's, the low buildings along Bay Street were demolished and tall office buildings arose in their place. By that time, the connotation of Bay Street as a leading financial street had been established. The building of the Toronto Stock Exchange gave it further definition. In recent years a remarkable expansion of office buildings has made University Avenue an integral part of the downtown office core. In contrast to retailing, the financial and general office concentration appears to be the expanding cell of the downtown business core.

Of the 25½ million square feet of office space in Metropolitan Toronto, about 16½ million square feet, or some 64 per cent is found in the central business district. It is true that significant decentralization has occurred in the last decade, nevertheless approximately half of all new office space in the period from 1954–1962 has been built in the central business district. The trend seems to continue unabated. Construction has begun on a gigantic office and shopping complex near the intersection of King and Bay Streets.

A distinct part of the general office zone is the complex of municipal and other administrative buildings such as the city hall, the city registry office and Osgoode Hall, the seat for the administration of justice in the province. The completion of the new city hall and civic square will bring about the realization of plans formulated many years ago. The commanding style of the new structure seems a fitting symbol for the throbbing metropolis which has arisen since the Second World War and has at present a population of more than 1.6 million.