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### *Urban Infrastructure and Urban Growth in the Toronto Region, 1950's to the 1990's.* By Richard White. (Toronto: Neptis Foundation, 2003. 70 p., ill., maps. ISBN 9733314-0-2)

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***Urban Infrastructure and Urban Growth in the Toronto Region, 1950's to the 1990's.* By Richard White.** (Toronto: Neptis Foundation, 2003. 70 p., ill., maps. ISBN 9733314-0-2)

Modern urban life has been made possible and tolerable by countless technological advances. Among these are water filtration, sewage treatment and the various pipes used for supply and disposal. Without these mundane technologies cities would still suffer the epidemics and public health problems associated with poor sanitation that persisted everywhere until about 1900. They constitute an infrastructure that changed the quality of urban life and made possible the dramatic urban growth of the twentieth century.

In this short monograph, which he calls a “practical history,” Richard White examines the relationship between the development of the urban infrastructure of Toronto and its urban growth in the last part of the twentieth century. Conventional wisdom has it that “development follows

plumbing”—install a sewer and subdivisions will follow. White examined municipal archives, the minutes of council meetings and the chronology of development, to assess if and how this might have been the case.

Between 1950 and 2000 the urban population of the Toronto Region grew from one million to almost five million. The urban infrastructure for this not only had to keep pace, it had to catch up. In 1950 raw sewage was still being discharged directly into Lake Ontario and local rivers that flow into it, even though much of the water supply was drawn from that same lake. In spite of this, Toronto was then a city filled with confidence, and growth was unequivocally considered to be a good thing that required new houses, provided jobs and fuelled economic prosperity. The difficulty was that the built-up area of Toronto already exceeded the political boundaries of the city. A mixture of raw sewage and fragmented pockets of unserved development in adjacent municipalities was not a sound basis for healthy urban expansion. An engineering study, commissioned by the Toronto Planning Board in 1949, proposed a lake-based system of alternating water and sewage treatment plants connected to a regional network of trunk pipes reaching north into Toronto's hinterland. This proposal became the foundation for the infrastructure that has supported Toronto's rapid growth over the last fifty years.

In 1953 an innovative metropolitan form of government for Toronto was established by linking several adjacent municipalities. This allowed the coordination of development at a regional level, including the implementation of systems for sewers and water supply. Metropolitan Toronto was in some ways the realization of an engineering vision for regional government in which growth for the foreseeable future would be based on efficient public works. It was pursued enthusiastically for a decade, an exceptional time during which 75 percent of Metro's budget was allocated to the construction of sewers, roads, subways and waterworks. Only in 1965, when most of these services had been completed, was the majority of the budget redirected towards education and social programmes.

"Exceptional times," White writes, "do not last for ever" (p. 19). In the early 1970s confidence in the merits of growth suddenly eroded. A reform government opposed to growth was elected in the City of Toronto, and popular protests brought a halt to expressway construction and other proposed developments. Nonetheless, pressure for growth continued at the edges of the built-up area, outside Metro's boundaries in places dependent on wells for water supply and on upstream sewage treatment plants. Metro Toronto had no interest in financing infrastructure upgrades in other jurisdictions, but the Province of Ontario decided that further

regional growth should be encouraged and that this had to comply with modern standards for water quality. Accordingly, the Province extended Metro's earlier model by constructing several sewage and water treatment plants on the shore of Lake Ontario that were linked by high-capacity trunk pipes to areas up to 50 kilometres to the north. This infrastructure made possible the urban developments that now accommodate about three million people in the northern and western areas of the Toronto region. It also reduced the likelihood of cross contamination between septic tanks and wells in those areas, and allowed the closure of several upstream sewage plants.

Richard White's careful study is one in a series of reports published by the Neptis Foundation, a private group that supports research on the Toronto region. For someone interested in the intricacies of regional planning and with a close familiarity with Toronto, it provides a thorough description of the evolution of the sewer and water supply systems, plus some information about roads. White describes neither the actual technologies used, nor the public health benefits they have brought. As to the questions of whether urban plumbing leads to new development, and whether growth could be restricted by not providing services, he can offer no firm answers. In some cases it appears that the construction of roads and sewers preceded growth; elsewhere, services were provided in response to development proposals. What is clear is that the approaches and standards for urban services established by Metro Toronto in the 1950s have been adopted throughout the region, with a concomitant improvement in water quality.

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