The Comparative Evolution of Suburbanization

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Introduction

Since the end of the 19th century, the world has experienced a dynamic shift from traditional living arrangements to a more modern approach, regional habitation – the rise of suburbanization. Suburbanization allowed, for the first time in history, the general population to comfortably relocate their families and lifestyles to the threshold of developed areas (cities, metropolitan areas) while maintaining moderate accessibility to local amenities and a sense of personal space (suburbanization). Prior to this phenomenon, the majority of people lived outside of the city cores, typically in rural areas with farming and agriculture as a means of income and survival (Harris, R., 2004). This lifestyle was demanding and tedious, but an integral part of development. Though there is no specific “start point”, suburban development was an inevitable outcome of the influx of population and industrial technologies. This new concept does have many points of origin, ranging from the North American expansion during the industrial revolution, to the European exodus due to famine or governmental regimes. The summation of these conditions brought Canada, the United States, and other developed countries to a pivotal point in history that would continue to today.

The purpose of this report is to provide a detailed understanding about the timeline of the suburbanization movement and accurately depict the relevant events. The common misperception is that the suburban lifestyle is typically viewed as the 1950’s answer to a modern lifestyle, catering to automobile ownership and independence. However, this perception, while partially correct, is actually the aftermath of century long regional development, immigration, and industry’s effect on the social and economic environments.

The objective then is to document, depict, and compare the various aspects that influenced the suburbanization movement, and define the specific events that shaped the course of both countries positively and negatively. When taking into account the amount of historical documentation, there are
many aspects to consider when trying to define the suburbanization movement: What it is? How did it come to be so prevalent? What where the significant moments? Why was it so important to national development? To understand the movement and in the interest of relatability, there are two countries in particular that share mutual backgrounds and historical commonality: Canada and the United States.

These two countries shared similar views and developed concurrently during the late 1800's through to post World War II. Key political and social aspects surrounding suburbanization will be reviewed in a common time period mutual to both nations. Thus, this report shall examine the period from the middle of the 19th century through to the post war 'baby boom' era during the early 1950's where each country demonstrated substantial regional development, hardships, and unintentional outcomes arising from the concept of suburbanization.

To ensure that each country is properly represented, thorough historical documentation will need to be established. Case studies showcasing the most prominent suburban development for each country between the late 1800's until after World War II will help bring context to the historical backgrounds. The aspects of suburbanization will be detailed in a comparative analysis, demonstrating the uniquely varying typologies and deviations between the respective suburban developments. This will ultimately help establish a greater understanding and summation of the political and social impacts that influenced the direction of suburbanization as a whole.

The dynamic of suburban development goes beyond the physical construction of fringe towns and neighbourhoods. It is a collection of many historical conditions that aligned perfectly to create a system that, in its infancy, held many necessary - from a historical perspective - positive and negative components needed to ensure national prosperity.
1.0 Canada

1.1 A Historical Overview

Canadian suburbanization has evolved greatly over the last 150 years - from the notion of individualized land parcels for average income earners into primary population density nodes located around the country, typically on the fringe of major urban centres. During the 1800's, the typical Canadian city was heavily dependent on trade practices for economic growth (Harris, R., 2004). This particular arrangement allowed cities, towns, and villages to develop as unified systems since there was no need for segregation and distinct economic areas. This all began to change after the industrial revolution (1760-1840) ripped through the country and was established as a means for increased prosperity and fiscal partition. Up until this point there were limited financial divides among the populous, at least none that were significant or widespread. Professionals, labourers, and merchants were living side-by-side, often within the same city block as there was no reason to think or do otherwise (Harris, R., 2004). See (photo_1) below depicting a typical city in the mid 1800's.

Photo_1: Toronto, 1850s w/ Mix-used Urbanism. History of the Toronto Police. (n.d.)
These pre-suburbanization cities were, in today's terms, accurately described as 'urban', where there was no distinct physical difference in building typology (History of Cities in Canada, 2015). These cities consisted of standard construction with structures having minimal floors, no sanitary systems with physical waste strewn about, and animals roaming free, with horse power as the dominant method of transportation. Along with increased labour, as mentioned above, new technologies began to debut that could make buildings taller, larger, and stronger. This helped create the modern cityscape, which further helped the rise of suburbanization through quicker expansion and construction. The notion of industrial manufacturing was seen as the option for the future and as a requirement for a developing country to succeed in the marketplace; urban industrial development was increasing within the city cores. By the early 1900’s, about half of Canadians were living in cities, whether urban or suburban, as opposed to rural farming communities (J.J.'s Complete Guide to Canada, 2015). The expanse of natural resources was the trigger needed to compete in this new era of manufacturing with jobs in the lumber industry, mining, textiles, etc. attracting record droves of workers.

With this influx, neighbourhoods began to reshape into areas of similar occupations and trade which was prevalent in larger cities such as Toronto and Montreal - the push to expand was obvious and needed (Harris, R., 2004). Having distinct areas inadvertently sparked the initial introduction of suburbanization through physical land requirements needed for expansion. This attraction of suburban (residential, commercial, and industrial) neighbourhoods allowed business owners of all types to acquire space to set up shop and families to buy homes (Harris, R., 2004). Despite the tremendous

### Historical Facts

- Population doubled every 40 years until 1991.
- Percentage of rural vs. urban switched between 1900 & 1950 indicating popularity of suburban lifestyles.
- Increased industry drew labourers into city centres.
- Building technologies changed the methods of construction and expansion.

(Harris, R., 2004)
opportunity, this powerful idea was a double edged sword and began to show signs of weakness almost as soon as it began, with social implications that would carry into modern suburbanization.

1.2 The Social Experience

The birth of the suburb was a fantastic idea that sparked an influx of workers, both nationalized and foreign, to seek steady work and provide a comfortable way of life for their families (Fiedler & Addie, 2008). During this movement, the immigrant population was intended to settle in rural areas throughout western Canada, but was ultimately needed as a source of labour within the developing cities. European and Asian settlers came by the multitudes over an approximate ten year period, adding about two million people to Canada’s population (J.J.’s Complete Guide to Canada, 2015). Following this 'boom' in the early 1900's, the notion of class segregation, where the wealthy could choose to live away from the working class, was an unintended side effect of the suburbanization concept (Harris, R., 2004). This was further fueled by the introduction of private automotive and public transportation, allowing the respective populous to live further away from their companies (Fiedler & Addie, 2008); those who could afford the various forms of transportation benefited greatly. The immigrants could not afford such luxuries and were ultimately required to live close to their place of employment.

The people directly involved in the land separation, the local government, typically were separate from the people who developed the neighbourhoods (Harris, R., 2004) which added unnecessary complications. This separation of lawmakers and developers carried through to present day, most notably in the 1950's where class separation and ethnic segregation were prominent. Being able to choose where industrial, commercial, and residential installations are located, one can inadvertently (or advertently) begin to dictate which areas contain what - shops, factories, etc. and dynamically shape the cityscape, such as Toronto's Goodyear factory (Harris, R., 2004). Here, the managers lived away, while the general workers had no choice but to live in close proximity due to
physical limitations. This style of separation began to dilute the city's cores since populations were beginning to shift dramatically to the outskirts, away from traditional arrangements.

Despite the impact of class separation, this was not the only case of segregation. Class separation was equaled by the ethic segregation movement that took place in parallel. Early data was obtained from property assessments as census data was not published prior to 1951 (Harris, R., 2004). The notion of ethic segregation was in part influenced by the affordable land available to each class as well as personal choices within each group. This is not to say that the aforementioned separation was entirely unintentional (Harris, R., 2004); the pull of different ethnic groups to certain areas was seen as an attraction (for example, the development of immigrant neighbourhoods). This transition can be seen in Toronto, 1931, where ethnic segregation outweighed class separation by a 3:2 ratio, indicating that ethnic groups typically went into like neighbourhoods (Harris, R., 2004) as opposed to where they were usually needed. Other cities showed similar trends, such as Montreal, Winnipeg, and Hamilton. In Montreal, segregation peaked with 80% of the Jewish immigrant population being voluntarily or forcefully isolated into said communities during the early 1900's. Likewise, Winnipeg saw an identical development of ethnic segregation between 1901 - 1921. These social implications continued with signs of slowdown at the beginning of the Great Depression in 1929.

The aftermath of this demographic transition created what is known today as 'slums' or 'ghettos', a term used to describe an inner city area of poor living conditions inhabited by low income earners (Harris, R., 2004), as described by Thomas Adams. As the town planning advisor to the federal

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**Social Facts**

- **Immigrant influx; 138000 Jews enter Canada.**
- **Chinese Exclusion Act of 1885 designed to tax Chinese immigrants.**
- **1 in 33 white collar jobs are non-white.**
- **Emancipated blacks from America entering Canada were giving false promises of land and employment; racial discrimination is common.**

(Harris, R., 2004)
government during the 1910's, Adams was an experienced planner from Britain with vast ideas and design philosophies. His most notable work was Letchworth, a 'Garden City' where the focus was on green space (Saarinen, O.W., 2008), earned him the ability to participate in the British 1909 planning Act. As the lead Canadian planner, he led a research study about the specific conditions present within these areas, ushering this famous quote:

"I do not think that the effect of good environment, of fine buildings, of pleasant homes, upon the character, temperament, will, disposition, and energy of the people sufficiently dawns upon the average citizen."  Thomas Adams (Inspirational, 2015)

Suburbs, described as safe and good places to raise families, expanded beyond the city limits and drew the necessary resources away from neglected city cores (Harris, R., 2004). Due to the inexpensive living conditions, city cores typically became home to immigrants and poor families.

Following the Second World War the suburban dynamic shifted greatly from the previous iteration into a very different methodology. With the magnitude of suburbanization happening all around Canada; it came as no surprise that legislation would inevitably be introduced, which will be explored later, but needs to be addressed as a key factor in the evolving social fabric. After the initial suburban 'boom' came to a crawl during the Great Depression, the federal government introduced the Dominion Housing Act (The Free Library, 1935), which was the first major development initiative designed to target and help low income Canadians by reviving the building industry with financing on (new) housing. Although the intention was good, the Act resulted in even more suburban development because there was land typically clear of existing structures outside of the city limits. Thus, the dilapidated neighbourhoods that were forming were ultimately overlooked which only perpetuated the problem.
The Dominion Housing Act (The Free Library, 1935) carried the previous separation and segregation issues that would continue to grow into racial and ethnic divides greater than previously experienced. With the neglect of the inner city showcased by Thomas Adams (Harris, R., 2004) decades before, no significant progress was being made to rectify the social disruption. Despite the negative connotation, this helped the provincial and federal governments understand that solid legislation was needed in order to organize and direct the development in a positive manner.

1.3 Pathway to Reformation

By the early 1900's, the suburban trend was gaining steam all over Canada - particularly in; what are now known as major cities such as Toronto and Calgary - by attracting industry to these ever growing population centres. As with all cities throughout history, the larger the population, the greater sway they used towards economic stability and prosperity (Harris, R., 2004). To expedite this process, cities began to annex neighbouring land and towns to add to their population mass. This process was entirely at the whim of the larger city and was commonplace all over Canada, where cities such as Toronto were annexing at an alarming rate.

In 1919, famed planner Thomas Adams helped direct the planning profession as a whole by writing the journal 'Town Planning and Conservation of Life' (Commission of Conservation, 1919), along with establishing needed criteria, he also helped pioneer the 'Town Planning Institute of Canada' in 1919 (Stein, D.L., 2004). Being employed by the federal government, Adams had the opportunity to refine the direction of suburban development as a whole (Stein, D.L., 2004). With his extensive experience the federal government utilized his knowledge and encouraged local municipalities to use his ideas on subdivision

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**Legislation and Planning Facts**

- Annexation of suburbs.
- Town Planning Institute of Canada is formed in 1919; Thomas Adams is first elected president. (Harris, R., 2004)
planning, which was referenced from his earlier Garden City designs. Unfortunately by this time, larger cities such as Toronto had already divided land into neighbourhoods with determined lots and patterns, making Adams philosophy uninfluential to developing Canada (Stein, D.L., 2004).

By the beginning of the 1920's, on a federal level, Canada's interest in planning was dwindling, coming out of a decade of planning influx, newly elected political figures decided that planning in general was less important to the overall picture. Unfortunately, Adams decided to relocate to New York where America was still in an upswing and became the director of regional planning (Stein, D.L., 2004). Despite the federal government loosing perspective, the provincial governments took the reins and began to enact various pieces of legislation that would forever solidify laws and regulations which created some territorial issues in the varying suburb developments.

Leading up to the early 1910's the provincial governments began to pass various pieces of legislation but they were typically ignored and were overlooked in favour of local laws and practices. Prior to the Dominion Housing Act of 1935 (The Free Library, 1935) being implemented, there was no significant provincial or federal legislation in place (Harris, R., 2004). As mentioned above, the provincial governments needed reform that would aid in controlling the extensive aspects of land use planning. Due to the initial lax oversight from a top-down mandate, local governments sought to implement methods they deemed relevant to each situation when determining land allotment. This caused land usage fragmentation, typically in the newly founded suburbs from the remainder of the city and within each neighbourhood (Harris, R., 2004). To enact new legislation brought several challenges that needed to be addressed. The complexity of local regulations was a derivative from the suburban typologies that were established in Canada in the early 1900's pre and post war. There were four major types that existed: exclusive, unplanned, industrial, and middle-income residential as depicted in (Diagram_1).
1.4 Suburbanization Defined

First, the exclusive suburb, which better reflected the 'Garden City' styles than any other method was seen as a high-end lifestyle opportunity. In an exclusive suburb, also known as an 'affluent enclave', the style helped establish wealthier communities such as Mount Royal in Montreal and South Mount Royal in Calgary (Harris, R., 2004).

This methodology was driven by the developers and local governments where large properties, curved streets, and substantial green space comprised the majority of the suburb. Concurrently, municipal services were established during the construction phase as to minimize the financial impact at a later date. Due to the prestige that accompanied this system, tighter control over the design characteristics was enforced, which typically required architects to approve plans and drawings (Harris, R., 2004). As an extreme, even racial restrictions were unofficially supported defining the social demographics.

The second style was known as the unplanned suburb. In comparison to the aforementioned exclusive suburb, the unplanned suburb typically was comprised of the opposite design distinctiveness, with narrow lots, grid-like layout of streets, and minimal services (Harris, R., 1996). Lack of regulation ultimately influenced the quality of buildings that populated these neighbourhoods, and poor families could not afford a professional designer to direct the communal concept. Because of the lack of

![Diagram 1: Typical Suburb Proximity Early 1900's](pelosi.png)
professional input, amateurs typically designed large sums of properties designed uniquely to personal preference. The sum of all these conditions established droves of poor neighbourhoods that usually remained closer to the city core.

As a middle ground to the previous polarizing typologies, the industrial suburb offered a moderate style community designed for affordable living conditions while not displacing the working class great distances. This particular form offered a balanced ideology taking modest queues from other suburban designs (Harris, R., 1996) and producing, what is typically considered a suburb of today, average homes for average people. This style was ideal for builders and developers as it offered a better "bang for the buck" as tenants and home owners could afford the modest amenities. Federal assistance programs were one downside to this form of mass producing. As an example, the Hydrostone district in Halifax was in need of rebuilding due to an explosion from the local naval yard in 1917 (Harris, R., 2004). The name Hydrostone was a direct reflection of the building components

used throughout the project. In order to grant assistance for the area, the federal government required hydrostone concrete blocking for all buildings in the area. The outcome was an uninteresting, low-rise rental neighbourhood as seen in (photo_2), depicting the sharp design contrast between new and old areas. This specific design was not favoured by developers as it was deemed unattractive and uninspiring.

The final suburban typology is known as middle-income residential. Similar to the previous suburban form, this design caters to developers interested in the middle-class earners. Though the designs were slightly elevated beyond repetitious styles, the issue of proximity was still a major concern for the inhabitants (Harris, R., 1996), who commuted by public transit or more commonly by foot. To accommodate this aspect, developers, prior to the First World War, typically subdivided the land into monotonous grid-like patterns; after the war the general consensus was people wanted variation. At this time, this design philosophy took on the current trends of the time such as brick facades, low pitched roofs, and two-story construction (Harris, R., 2004). This style varied around the country from the Queen Anne influences in Ontario to the California bungalow in western Canada.

With the rise of suburban developments flying mostly under the radar, the legislation needed to control these developments was largely specific to the type of suburb. As such, the exclusive suburb was dependant on strict zoning and design control to direct the land division and structure type designated by the local government (Harris, R., 2004). Consequently, unplanned suburbs suffered the opposite fate where all levels of government intervention were minimal. Typical demographics showed that farmers and immigrants usually occupied these suburbs as they were unwilling to finance infrastructure costs (Harris, R., 1996) associated with development. The industrial suburbs were more moderately controlled with average government involvement. Typically, taxes were lower and zoning and building restrictions were less defined than other suburb types which attracted the working class.
The offset is that local governments needed to tread carefully and not upset the public through poor zoning practices that would, for example, negatively attract industry that would otherwise be located at a distance. The middle-income residential suburbs usually followed a balanced approach, not unlike today’s suburban developments (Harris, R., 1996).

The summation of all these conditions formed an unstable and unreliable concoction of legislation that persisted through the 1920's (Harris, R., 2004), up until the Great Depression in 1929. Looking at the specific circumstances, problems began to arise in the suburb typologies, particularly in the unplanned suburb where high population densities and lack of infrastructure escalated into rapid social deterioration. Even if infrastructure was constructed, the average family could not afford the increased taxes that followed (Harris, R., 2004). When the Great Depression struck, several, if not all suburbs around the country went into financial collapse; some of the exclusive, industrial, and middle-income suburbs survived, however none of the unplanned suburbs avoided bankruptcy. This was seen in York and East York where they unsuccessfully tried to be annexed into Toronto and then could not survive financially (Harris, R., 2004). Though disastrous, many of the problems that arose could have been prevented if solid and justified legislation was in place from the beginning at all levels of government, down to land division and infrastructure compliance. In hindsight this would have been an obvious solution, but unfortunately nothing concrete would be enacted until the mid 1930's with the Dominion Housing Act (The Free Library, 1935).

1.5 Enacted Legislation

Despite piecemeal legislation, the successful ‘boom’ of the 1910's to the end of the 1920's showed that Canada was headed in the right direction for recalibrating the planning system after observing the failings attributed to suburban development. The impact of the Great Depression caused disarray within all aspects of the government which resulted in little or no changes in the legislation.
The hardest hit neighbourhoods, surprisingly, were the industrial, middle-income, and more prominently the exclusive. This was due to the structure of ownership; the wealthy business owners lost substantial sums of money where the poor were typically unaffected financially (Harris, R., 2004). Likewise, the tenants in these areas realized they could skip payments and taxes with little to no penalization; this helped expedite the land owners' demise.

The Dominion Housing Act (The Free Library, 1935) was a critical turning point in Canadian history. The Act was designed with certain criteria in mind that was designed to provide access to housing for all Canadians. The key players at the time, the Deputy Minister of Finance, W.C. Clark, and T. D'Arcy Leonard, solicitor of the mortgage companies understood the necessity of solid legislation to ensure that Canada recovered from the depression. The structure of the bill was simple: the first part consisted of a proposal to further investigate the housing crisis, both before and during the depression, with the formation of the Economic Council of Canada; the second part was a government and private lenders joint venture to administer mortgages for new home builders, thus creating jobs (The Free Library, 1935). Other aspects of the Act included longer amortization periods that further alleviated the stress on home owners. Should this Act have failed to pass, the alternative would have been social housing, which is government owned and operated. The fallout from this would have been the dependence on assistance over the entire time of occupancy, where as the joint lending initiative puts control back into the hands of the citizen.

Despite the good intentions that arose from the Dominion Housing Act (The Free Library, 1935), the reality of the situation was poorly handled and administered. Between the years of 1935-
1938, the loan disproportion was clearly evident between the exclusive neighbourhoods and the unplanned. In cities like Toronto, where the majority of workers were blue-collar, almost half of the lending went to professionals and managers where certain suburbs benefited from this unintentional (intentional) lapse of judgment. North Toronto, Forest Hill, and Kingsway Park were the primary recipients of DHA funding (Harris, R., 2004). This trend was happening all over Canada; although the impacts were less in other major cities, exclusive lending was widespread.

Concurrent to the Dominion Housing Act was a second, lesser known bill named the Home Improvements Loan Guarantee Act of 1937 (Miron, J.R., 1988). The purpose of this Act, as its name implies, along with the Dominion Housing Act, was to grant loans to people who were looking either to renovate or purchase a new home. The intent was to help "jump start" the economy through job creation and, as a result, in 1938 the Dominion Housing Act was replaced with the updated National Housing Act of 1938 (Miron, J.R., 1988) as the economy was in a steady upswing. The notion of a unified planning system was the catalyst for a national standard that could be implemented and administered. To avoid lengthy deliberation over an entirely new bill, the Act brought enhancements to the over-arching theme of the previous bill. The most notable addition was the federal role in social housing projects that were previously avoided during the procurement of the Dominion Housing Act due to the immediate focus on job creation rather than long-term functionality (Miron, J.R., 1988). Amendments to the Act continued during the Second World War that included clearing of now dilapidated slums with the intention of creating urban areas and green space. The political justification of this change was based on the deemed unacceptable conditions of the low-income households. The National Housing Act of 1938 (Miron, J.R., 1988) included an official building code and was adopted by over 200 communities throughout the country. This Act would later be continuously updated through the decades to come and is still a relevant piece of legislation to this day.
1.6 The Critical Boom

After the Second World War, the modern idea of a suburb was conceived, shedding the older methodologies of the previous generations. This was possible due to the time lapse between pre-Great Depression and the post war expansion which covered about 17 years (1929-1946). Many people that were born just prior to the Great Depression were either too young to afford a home or entered the workforce at the wrong time to ever get steady employment. Either way, these young people were eager to get a home of their own and start a family; development of new houses doubled in the first year following the war.

With the rise of the automobile, workers were no longer limited by proximity when determining where to live (Harris, R., 2004). This technological anomaly, when compared to other points in history, defined the suburban design methodologies that would be used for the next several decades. When looking back to pre-World War I, the housing 'boom' shares many similarities. However, with the common use of vehicular transport, the affected area was substantially larger than in previous movements (Harris, R., 2004). Due to this readily affordable transportation option that allowed families to move to the edge of urban centres, sometimes in new villages and towns - that were no longer fearful of annexation - there was substantially more land available. Thus, the typical lot size more or less doubled in size over previous suburban developments seen decades before, with further increases in exclusive neighbourhoods (Harris, R., 2004).

**Post War Facts**
- New housing increased from 50000 to 90000 in 3 years.
- Registered automobiles in 1945 compared to 1961 increased from 1.1 to 4.3 million.
- Lot sizes increased from 25feet in the early 1900's to 40-50 feet post WWII.
- Suburban continued to increase from 55% to 76%.
- Population growth peaked in mid 50's and has slowed since. (Harris, R., 2004)
The downside to this rapid cultural change was the space requirements, not for the houses, but the infrastructure needed to sustain these vehicles; following the war, roads began to widen to accommodate street parking. By the 1950's the physical design styles were changing radically from street parking to fully-fledged parking lots, with the end result being "seas of parking" seen typically at malls and large shopping centres (Harris, R., 2004). This combination of design focused around the automobile has largely been perceived as 'suburbia' when trying to understand the movement as a whole. Despite the relatively new term focusing on large-scale developments on the outskirts of the city core, the suburban demographics continued as they were prior to the Great Depression. Once the war ended and immigration was once again available, ethnic groups tended to gravitate towards existing similar groups (Harris, R., 2004). However, the class separation was on a decline, meaning that even though the ethnic groups sought like people, the financial differences between groups were closing. Contributing to this movement was the ability to travel to work relatively easily with personal transportation that was unavailable in pre-war suburban developments.

The rise of the 'corporate suburb' was taking the Canadian landscape by storm. To best describe this term is to relate it to the suburban expansion where large scale developments would create massive, calculated, typically monotonous stretches of houses, businesses, and streets (photo_3). The federal government was eager to promote these types of communities as it was a major driving force behind the economic 'boom' and was catering to the rapid population influx (Harris, R., 2004). With all the positive work going towards these suburbs, it is hard to imagine negative
associations to the movement. The Dominion Housing Act 1935 (The Free Library, 1935) and the National Housing Act of 1938 (Miron, J.R., 1988) mandated that funding be made available to new, not existing housing projects. Since new houses were almost never built in existing neighbourhoods there was a correlating lack of funding. Federal policy encouraged such behavior; corporate suburbs flourished in the years following the war (Harris, R., 2004).

Prior to the Second World War, municipalities that wanted to expand were forced to borrow from the Canada Mortgage and Housing Corporation to supply the infrastructure costs related to suburban development (Harris, R., 2004). As previously mentioned, the annexation into large cities was increasingly rare as opposed to decades before due to financial constraints; it was difficult for municipalities to justify funding for the development costs needed to expand. This was a critical point where developers, who wanted to make money, took on the task of fronting the associated expenditures, alleviating the burden from the municipalities. Developers then rolled the costs of services into the lot and housing prices (Harris, R., 2004). A prime example of this is the Don Mills suburb (photo_4) where the land owner, E. P. Taylor, had free control on all design aspects as it was a private endeavor located within the North York area. Despite the stringent design controls, such as the curved streets and shopping centres, the infrastructure costs were more than North York could afford. In turn, Taylor supplied the financial requirements for the area which included standard amenities as well as a new sewage treatment plant (Harris, R., 2004). From this, Taylor effectively created one of the first developer-owned subdivisions in Canada, setting into motion sweeping reform.

**Corporate Suburb Facts**

- Housing doubled after WWII from 50000/yr to 100000/yr in the mid 1950's.
- Development companies took on infrastructure responsibilities from municipalities.

(Harris, R., 2004)
With the polarizing change of development execution, new obstacles arose in the efforts to plan and develop suburbs. Municipalities began offloading financial requirements onto developers to alleviate the pressure. This resulted in developers moving towards larger and larger scale projects; small neighbourhoods were unprofitable when considering the massive investments (Harris, R., 2004). This contrasted the early century idea that a single wealthy investor could become a developer. The financial burden was much more practical from a corporate vantage point which also helped protect the individuals within the company. Should a project fail or enter litigation, the effects would be deflected onto the corporation. This trend was being seen all over Canada in all major city areas. One example of the impact was seen in the Ottawa area starting the in the early 1950's. At this point there were 98 land developers, half accounting for less than 25 lots (Harris, R., 2004). Within ten years the total number dropped to 37 developers with only about 25 percent remaining at a small scale when compared to the top firms. This trend continued into the 1970's where four companies shared over half of the total land development in the area (Harris, R., 2004). This was the epitome of the 'corporate suburb'.
In the thirty years encompassing the Great Depression and World War II, land development, specifically suburbs, went through radical changes from the turn of the century methodologies (Fahmi & Rutherford, 2008). Early adoption of suburbs was separated into four unique forms, each with unique designs and unofficial requirements, such as wealth separation or high-density housing units. Though popular, this style was virtually non-existent by the 1950's. Attributing to this was the implementation of strict zoning laws, national building code requirements, and homeowner preference to live away from industry (Harris, R., 2004). However the steadily rising standards were often opposed by early builders and developers as it forced stricter compliance which was always more expensive to implement. The bright side was the guarantee of amenities to all new houses in the 'corporate suburbs'. Existing unserviced suburbs often resisted annexation into larger cities as it meant that code compliance would need to be incorporated, thus raising taxes and property costs (Harris, R., 2004). Ultimately, mortgages were becoming increasingly available to families seeking the suburban refuge and incomes were on the rise which expedited the urban exodus. By the 1950's, suburbanization was a typical way of life.

2.0 United States of America

2.1 A Historical Overview

The suburbanization movement in America has been gargantuan in scale when compared to other developing countries, most notably their northern neighbour. The sheer size of inhabitable space is almost impossible to comprehend, especially for the citizens during the 1800's, where soon the suburban expansion would dominate the fringe lands around major cities. Like most nations during this time period, the industrial revolution (1760-1840) played a major role in defining the future of community designs and layouts, and sparked a development movement that still carries forward to present day.

The most significant factor that attributed to this influx of suburbanization was the introduction of railroad transportation, which unlike in Canada at the time, offered connections to numerous major cities in multiple directions (Wikipedia, Timeline, 2015). Prior to the mid 1800's, trains were relatively new in the minds of the people, giving them the freedom of being able to travel long distances, was a supreme selling point (DOT, History of Suburbanization). Accessibility to new regions prompted people to purchase rural farmland at expedited rates not seen in any other point in history. Unlike other developing nations during this initial time period, technology, rather than labour, had the most profound influence on the shaping of the suburbs with affordable transportation methods.

However this idea of living well beyond the reach of the cities was slowly beginning to fade as a demand for labour finally began to outpace agriculture and farming (DOT, History of Suburbanization). The increased labour was taking the country by storm; goods and services were being transported across the country on trains and being delivered into populated urban centres. Although this was the economic trend at the time, the idea of living off the land was still engrained into many peoples' lives. Thus, relocating to the fringes of cities allowed a combination of proximity to
amenities and separation from city life. This development was becoming particularly popular amongst business owners and the elite (DOT, History of Suburbanization) which, unbeknownst at the time, would start a landslide of social and ethical disparities that would continue into the next century. Land prices were rising as city life was rapidly increasing in activity and factories were being built at alarmingly fast rates - these factors helped shape the American suburban definition.

2.2 The Suburban Independence

The American suburb was defined by the practical application that it solved: to act as a commonality between rural living and the city sprawl. Unlike the specific suburban typologies seen in Canada where all economic and ethnic statuses were defined and allocated accordingly (as ethically possible), the American suburb was more of a mish-mash of people trying for independence. On the other hand, not unlike the Canadian examples there were still distinct class separations depending on personal wealth (DOT, History of Suburbanization). However there were still four identifying factors that helped contribute to the rapid developments of suburbs: growth of urban populations from increased commerce; obnoxious factories and facilities; mass transit systems; and the growing popularity of the suburb itself (DOT, History of Suburbanization).

The American suburb was shaped through action, rather than as a design consideration, which lead to the rapid adoption. Towards the end of the 1800's, some urban populations were increasing at a rate of about 50 percent decade over decade, or an average of approximately four to five percent per year (Pagebreaker.com, 2015). A perfect example of this was seen in New York City where the population increased from 2,977,000 in 1890 to 4,266,000 in 1900. This influx was occurring all over
the country, some cities quicker, some slower, but the overall consensus was that cities needed to expand to accommodate this radical change. The formula was simple: as increase in commerce and production requires an increase in labour; this labour force would need to live in close proximity, but not necessarily within walking distance. Thus, the suburb was a perfect solution to this phenomenon. However, these suburbs did not essentially sit on the fringe of the cities like the more affluent neighbourhoods and municipalities. Typically, the suburbs that the labourers occupied were still within the city boundaries, simultaneously away from the core and edges, and often occupying the same acreage as factories and other manufacturing facilities (DOT, History of Suburbanization). The introduction of the electric street car in the 1890's gave new light to the cumbersome train system (which was not practical intercity) (Wikipedia, Streetcar, 2015) (photo_6). Now, workers could quickly travel across town for an affordable rate. Likewise, the inexpensive expansion of electric streetcars opened new areas for suburban development that was otherwise impractical. The allure to relocate away from an area typically unfavourable to one that better accommodated comfortable living was a reactionary outcome to people refusing to settle for the status quo.

The idea to disassociate one's self from the population dense urban centres was not limited to workers and business owners, but also included the businesses themselves (DOT, History of Suburbanization). Some companies decided that relocating to the now accessible fringes could benefit workers by removing them from the aforementioned urban cores where living conditions were sub-par in comparison. Sometimes, companies would even develop communities of their own to house their workers. An example of this system was seen in Pullman, Illinois where the industry centre was located outside of Chicago building railcars (DOT, History of Suburbanization). This idea was less then common but provided integral information that would later be used in planning legislation and city designs.

2.3 Cultural Dynamic

By the end of the 19th century, suburban America was a commonality for many people of all socioeconomic classes, particularly the upper-middle class. The tie to proximity was removed through the electric streetcar (Wikipedia, Streetcar, 2015) and neighbourhoods were adopting more spacious designs with wide roadways and plots of land. At the turn of the century approximately one third of all city dwellers owned their own property (The USA Online, 2015), typically located in a suburban setting. Despite the favouritism towards suburban life, there was a negative aspect to the mass-exodus: as people left for fringe neighbourhoods, a void was created that attracted the poor and immigrant demographics.

As immigrants and poor families ventured into spawning vacancies, landlords and property owners saw an opportunity to exploit the new people and benefit from their situations, often unknowingly (The USA Online, 2015). It was not uncommon for landlords to divide houses into multifamily apartments, taking no responsibility for upkeep or sanitation; some city blocks could house upwards of 4000 residents (The Growth of Cities and American Culture). The allure of work was the
driving force making this a tolerable condition, and to some, the conditions were as good or better then where they came from - famine, disease, and tyrannical governments gave people little reason to stay.

Despite the physical and often voluntary segregation of people entering into the growing inner-city sectors, the stir of ethnic divides was not any more apparent in comparison to the new founded suburbs. The country was a few decades out of the civil war, the race issue was still prominent, but subtle; because of this, there was no increased tension between nationalities and immigrants. In fact, prior to the turn of the century, African Americans were generally dispersed amongst the white population, mostly in northern cities (Seitles, 1996).

The racial divide in America was in part perpetuated by the development of suburbs, as explained above. However, unlike the Canadian suburb methodologies that clearly defined specific circumstances, originally designed to reduce ethnic divides, the American racial divide existed prior to suburban developments. The race issue would grow, leading up to the 1950's tipping point where civil rights amendments were on the forefront of American legislation. Although this aspect is related to suburban development, a more accurate description would be that it primarily paralleled the direction of zoning laws and planning policy reform (Silver, 1997). The idea of zoning was becoming more mainstream in the development community and government regulations were starting to take root in the concept of suburbia.

2.4 Planning Legislation

With professional planning becoming a mainstay around the country, issue of 'racial zoning' was becoming more popular between 1900 and 1917, usually instigated by southern states (Silver, 1997). Over the years, several cities, both in the north and south, began to experiment with racial zoning as a method to control and direct the African American population and other groups deemed
"undesirable" (Silver, 1997). Although this form of thinking is seen as extremely hate filled in retrospect, there was a positive outcome: it demonstrated the first zoning ordinance fully supported by the Supreme Court (Silver, 1997). Cities such as Chicago were havens for people seeking racial zoning districts. The profound impact that this method of thinking brought was unprecedented, but necessary (in hindsight) for the advancement of zoning legislation. Although this style of segregation was nationally recognized, southern states were early adaptors of this zoning practice, that is until the black populations began relocating north in an attempt to avoid such conditions. The experience as a whole demonstrated the power of zoning, land use regulation, and formal planning and why a system was needed to control the ever expanding suburban landscape (Silver, 1997).

At the end of the 1800's, planning was a relatively new concept that few knew existed, and fewer yet understood. Since industrial America was a relatively new factor, some professionals sought an opportunity to demonstrate their planning experience. Ebenezer Howard and Patrick Geddes, two planners from Britain showcased a radical new city design dubbed the 'Garden Cities of Tomorrow' (DOT, History of Suburbanization) (photo_7). This was one of many radical designs to be examined as a possible alternative to the current city trend; however it did not offer substantial differences.
At the beginning of the 1900's, the suburban dynamic was in need of a defined structure, not unlike the Canadian typologies mentioned previously. To add to the identity issues, suburbs were suffering from financial limitations for amenities and infrastructure services (DOT, History of Suburbanization). As such, suburbs were facing annexation with the thought that a unified city would be financially stronger, and more viable to investors and industry. Residents of the fringe suburbs were uneasy with the notion of joining cities - some felt that amalgamation would result in the loss of community identity (DOT, History of Suburbanization). Urban dwellers saw benefit in a larger unified population centre for economic security. The unofficial policy of annexation ended almost as quickly as it began, only spanning a handful of years. In 1910, the federal government took notice of this movement and designed the concept of the 'metropolitan areas' that included all the towns in the vicinity of the dominant urban centre (DOT, History of Suburbanization).

The expanding metropolitan areas eventually outgrew the old definition of the city: industry, commercial, and residential coexisting within close proximity (DOT, History of Suburbanization). Business and industry were already heading to the outer suburbs for employee convenience and security. This pattern, similar to the exodus experienced with upper-middle class workers, allowed a switch of purpose for the city centres. By the early 1920's, the city cores saw an influx of white-collar businesses, typically financial institutions to fill in the vacancy (DOT, History of Suburbanization). The outcome was a closeness of the inner-city poor and wealthy business class, typically with the businesses located as close to the core as possible with the "slums" located usually around or adjacent.

**Planning Facts**

- American City Planning Institute is established in 1917.
- Increased white-collar job increases promoted suburbs farther from city cores.
- Annexation of satellite suburbs was common.
(DOT, History of Suburbanization)
All these isolated instances put into motion a unified planning system that would direct and control the expansion of suburbia. In the 1920's, the US Department of Commerce was working on legislation that could be adopted throughout the country, effectively overwriting any local ordinances and development standards (American Planning Association, 2015). There were two specific Acts: A Standard State Zoning Enabling Act and A Standard City Planning Enabling Act, both instituting reform to the planning system. The Standard State Zoning Enabling Act was originally introduced in 1924 by the U.S. Department of Commerce, setting specific guidelines by regulating the zoning process as a whole (American Planning Association, 2015). In total, nine categories were developed (TNLanduse, Standard State Zoning Enabling Act):

**Grant of Power** - The permission for local municipalities and cities to regulate aspects such as building height, health, safety, spaces, population densities, building size, etc., giving freedom to develop as seen fit.

**Districts** - The land allocation and what permissions were given to these sites, such as new construction and renovation. Each district can be unique, but the guidelines established encompass the district as a whole.

**Purposes in View** - The general safety and living conditions such as fire route access and accessibility to schools. Reasonable consideration is to be used when making a determination.

**Method of Procedure** - The physical regulation of boundaries and property lines. The process is designed to encourage public debate, allowing concerned citizens a chance to voice their opinion.

**Changes** - is understanding that certain conditions will need to be adjusted, such as proximity to adjacent properties where owners might seek amendments.

**Zoning Commission** - The process of establishing a group designed to research boundaries of existing districts while enforcing the legality. Public feedback is used as a primary source of influence.

**Board of Adjustments** - A group that is established with the authority to alter provisions to the Standard State Zoning Enabling Act guidelines and provide hearings, testimonies, and appeals regarding issues of change.

**Enforcement and Remedies** - The enforcement of the Act regulations and provisions. This is usually carried out by an existing governing body that understands the Act thoroughly and is given authority to issue penalties for violations.

**Conflict with other Laws** - The separation and definition of the Act when compared to other local zoning laws. The Act will override regulations that are below the minimum requirements, even if the other law was established prior to the Act.
The Standard State Zoning Enabling Act was widely accepted as a governing entity that could be easily adopted into exiting municipalities and cities. Prior to this Act, in the scarcity of zoning laws, the primary case study used as an example was the New York General City Enabling Act of 1917 (TNLanduse, Standard State Zoning Enabling Act), which was ill-fitted in many municipalities, but provided a level of structure. Once this Act was accepted into the American planning culture, precedence was established that would direct all future planning and zoning legislation.

Around the same time period, a second Act was introduced named the Standard City Planning Enabling Act (Halbert, 2015). Debuted in 1928 as a mandated planning reform policy, the Act was designed to direct the local planning commission into producing a master plan in their respective regions. These duties include zoning, public spaces, etc., all of which would be coordinated with local professionals - architects, engineers, and external consultants. The structure of the planning commission itself was designed to reduce political involvement by requiring that six of the nine members on the council to be local residents with no municipal connections (Halbert, 2015). The described duties of the Act are as follows:

- **Planning Commission** - The formation of a commission to oversee all planning related practices for the respective local area and to develop and incorporate an official master plan.
- **Territory Design** - Designing the purpose of master plan by taking regional development into account.
- **Master Street Plan Adoption** - Approving and incorporating the master street plan into the master plan design.
- **Public Improvement Authority** - Total control of the public planning process. The commission has the ability to approve or reject any public works projects.
- **Subdivision Land Control** - The commission has the ability to divide the private subdivision of land into sections that best fit the master plan concept.
- **Regional Planning Provisions** - The Act describes a commission is to be established to oversee all the aforementioned designated tasks. This is to consist of three municipal members interested in planning, as well as six with no municipal ties (Halbert, 2015).
There was a massive suburban expansion that took place between 1918, after the First World War, and until 1929, right up until the Great Depression (DOT, History of Suburbanization). This was the era marked by the increasingly available automobile which allowed suburbs to stretch to the regional limits of proximity. Single family homes were gaining popularity, to the point that companies saw a market and started designing "mail-order" house plans, cookie-cutters of the suburban landscape, which only helped expedite the process. However due to the surging market, and with planning and zoning policies left for the municipalities with no overarching structure, the outcome was a mishmash of suburban typologies. Both of these Acts had a profound influence on the American suburban dynamic by enacting legislation to control and direct the progress of expansion.

Just as everything was beginning to align with the recent Acts implemented and the planning and zoning processes structured for sustainability, the Great Depression struck the suburban-bound middle-classes of America. Similar to the Canadian perspective, the housing market was one of the most affected sectors in the economy, but was also one of the largest sectors prior to the collapse. The momentum of housing projects continued, though at a slower pace than before, with the majority still focused in suburban neighbourhoods (DOT, History of Suburbanization).

Great Depression Facts

- The market lost the equivalent of $377 trillion with inflation.
- Large scale construction projects such as the Empire State Building were initiated to jumpstart the economy.
- Unemployment rate of 25%.
- Racial tensions grew. (History.com Staff, 2015)
Like the Canadian government at the time, through the Dominion Housing Act (The Free Library, 1935), the American government was eager to get people working again and redirect the economic downturn. In 1934, the federal government introduced the Federal Housing Administration Act of 1934 (Wikipedia, FHA, 2015) with the intention of providing affordable mortgages and encourage renewed housing development. And it worked. By the end of the 1930's prior to World War II, the housing market was in an upswing, like the rest of the country. This was happening in part from the readily available and inexpensive building materials stockpiled during the Great Depression (DOT, History of Suburbanization), (Diagram 2). Diagram 2 shows a correlation between the partial economic upturn and the relaxed requirements for personal mortgages, which prompted

![Diagram 2](image)


new house construction efforts around the country. The onset of the Second World War put a hold on most of the progress enjoyed in the latter half of the 1930's as the war effort took priority. All of the suburban developments dating back to the turn of the century will pale in comparison to the 'boom' that will take place in the 1950's.
2.5 The Post War Era

The Second World War was a virtual economic stopping point for anything outside of the war that stalled the growth of regular consumer goods (DOT, History of Suburbanization). With an influx of returning troops, people were once again able to start families or continue on as it was prior to the war; the only difference in this case was good timing as the economy was entering a 'boom' period. One trend that survived the 16 years of the Great Depression and the war was the suburban movement. As such, there was a demand for housing and construction to accommodate this surge of families looking for a new and more comfortable place to live. This idea of suburban homeownership as a continuation from previous times is significantly different than the efforts seen in Canada after the war. There, the previous methodologies of suburban design - exclusive, unplanned, industrial, and middle-income - were cast aside in favour of the automobile accessible suburbs.

In response to the housing predicament, the federal government decided that over a ten-year period, it was necessary to invest in the housing sector as an insurance policy (DOT, History of Suburbanization). This was administered using the Federal Housing Administration Act (Wikipedia, FHA, 2015) established more than a decade before. With the system in place, the government invested billions of dollars for mortgage insurance in order to further fuel the 'boom'. In addition to this insurance injection, the federal government also introduced the Servicemen’s Readjustment Act of 1944 (IIP Digital, GI Bill of

Post War Facts

- Birth rate reached record levels following the end of the war.
- 20% population increase in the decade following the war, adding 23 million.
- Suburbs were being built at large scales.
- The automobile culture was full swing with 25 million registered in 1950.
- Federal Aid Highway Act of 1956 created the interstate perpetuating the suburban expansion. (Digital History, 2015)
Rights, 2008), also known as the GI Bill, which was designed to assist veterans and service men in acquiring mortgages and other funding for tuition and unemployment expenses. During the lifespan of this Act, billions were used by said veterans in order to establish a stable lifestyle after the hardship of the war. The underlying purpose of this Act was to educate veterans and to incorporate them into society as white-collared workers. By using their experience as engineers and technicians gained during the war, the assumption was that they can be utilized in the industrial labour force, such as automobile manufacturing to help increase production while reducing labour redundancies (DOT, History of Suburbanization). As an added incentive to partake in the GI Bill's offerings, the typical wage was usually higher than the average blue-collar worker.

The combination of job growth, increased salaries, a need to rapidly build houses, material possessions, and the government funded mortgage insurance program, suburban America was entering a period of seemingly unlimited growth potential, unparalleled in any other country in the world (DOT, History of Suburbanization). Even the Canadian equivalent was miniscule in comparison; not for the need of affordable housing, but in the sheer scale and magnitude of the task. At this point America outpopulated Canada by about 12:1 (Wendell Cox Consultancy, 2001). The unprecedented scale of single family homes being built was extraordinary. Between 1944 and 1946, an increase in new house construction rose by over 800 percent and would continue into the 1950 where approximately 1,692,000 new houses were being started (DOT, History of Suburbanization). Eventually this trend would slow down, but after six years of rapid development it was inevitable.

Prior to the Great Depression, the average contractor was responsible for, on average, five houses per year. By the late 50's it was not uncommon for contractors to be building over 20 houses per year (DOT, History of Suburbanization). Likewise, about 70 percent of the new construction was supplied by only 10 percent of the contracting companies. The idea of large construction and design
companies was a movement that would continue up until today. A prime example of this is the famed 1947 Levittown, New York, built by Abraham Levitt and Sons (Galyean, 2015). Levitt designed a massive community to accommodate the housing shortage seen across the country by turning approximately 7 square miles of farmland into a development property consisting of about 17,000 identical single family homes (Galyean, 2015). Thousands of residents flocked quickly to live in Levittown, despite the lackluster, monotonous, flat, curvilinear grid-like landscape (photo_8). During the design phase, Levitt came to a conclusion that would forever change the construction industry. He developed a concept of building in stages rather than completing each structure prior to starting the next, which would increase the construction rate and minimize redundant costs. This process involved keeping virtually identical house styles, which reduced any form of design delays, and most importantly, he came up with a 27 step building process from excavation to turnover (Galyean, 2015). This is how Levitt was able to build the estimated 17,000 houses (approximately 30 per day) between project commencement in 1947 through completion in 1951 (Wikipedia, Levittown, 2015).

There were numerous examples of the progress seen in the development of suburban America, such as the above Levittown, where projects of all scales were appearing on the fringe lines of cities. The favour of the suburbs was a decades-long process of positive and negative aspects that helped curtail the "final" design to what is understood as modern suburbia. Major conditions, such as the social movements of the late 1800's, the fragmented zoning and planning processes in the early 1900's, and the rise of the automobile and electric streetcar were all significant points in history that prompted policy reform and government intervention. The world wars and the Great Depression acted as generational stopping points for the planning industry which allowed a clear overview of the current trends and conditions seen across the country. The first half of the 1900's showcased the want for comfortable living conditions and the family dynamic; the very definition of suburbanization.

3.0 Case Studies

3.1 Levittown, New York, United States of America - 1947 through 1951

Levittown was perhaps the most notable example of mass post-war planning that was implemented in America. Described below is a historical summary of the project as a whole.

The concept behind Levittown was one that would produce massive amounts of affordable housing, catering to the housing shortage seen after the Second World War. Developer Abraham Levitt’s idea was simple: acquire a large piece of flat, clear cut land, usually farmland, and produce unfathomable numbers of cookie-cutter houses geared towards new families and veterans (Galyean, 2015).

Upon completion, Levittown was seen as the pinnacle of corporate suburban planning (Harris, R., 2004), a term coined from large Canadian suburban developments. As such, large scale development companies saw financial opportunities by mimicking the Levittown concept and applying it elsewhere around the country. Keeping in line with the suburbanization of America, Levittown demonstrated the core belief of the traditional family dynamic by designing the subdivisions to accommodate the ever-growing automobile culture while maintaining affordability (Galyean, 2015).

The Levittown timeline is nothing short of astonishing when compared to other suburbs of the time, such as the Don Mills suburb that required fourteen years to complete. This was accomplished in part by the development principal that mass produced cookie-cutter homes, which then required buyers or renters after the house was finished, instead of being built for specific people and families.

Levittown Facts

- Twenty-seven steps construction process from start to finish for rapid building and timeliness
- Building 30 houses per day
- 70,000 residents @ peak
- 6000ft² lots with two bedroom, one bath ranch
- 17,447 houses built in total
- Large, grid-like streets with moderate curves, and a prominent outer-ring route to direct traffic
- 7 miles² of farmland converted into properties
- Racially isolated; by 1970, no "non-white's" were allowed

(Wikipedia, Levittown, 2015)
The sheer scale of Levittown required a modern approach to the construction system by introducing innovative construction methodologies that are still used today (Galyean, 2015). The 'Twenty-seven steps' construction procedure, designed by Levitt, describes the specific stages in which a building is constructed from planning and excavation to finish and ownership turnover. This was one of the precursors to the modern building divisions seen in the construction industry. By setting specific tasks for each stage in construction, redundancy was eliminated as each sub-contracting company could continuously focus on the job at hand, rather than restarting at every house (Galyean, 2015). It was this reason that houses were so quickly constructed unlike at any other point in history.

Despite the positive acceptance of middle-income families, there were deep racial and social exclusions associated with Levittown. At the beginning, Levitt specifically denied all but 'white' races to purchase homes in his development, through clauses in the housing contracts; by the beginning of the 1970's Levittown was exclusively white (Galyean, 2015). The racial isolation did not go unnoticed, however as several groups protested this violation of civil rights and threatened litigation against Levitt. To counter this, Levitt started to physically refuse minorities as a means of getting around the legal boundaries. Over time the rules were relaxed, and homeowners looking to relocate could sell to whomever the wished.
3.2 Don Mills, Toronto, Ontario, Canada - 1952 through 1965

The Don Mills project was a staple to the development of the Canadian suburb. Described below is a historical summary of the project as a whole.

Starting in 1952, the Don Mills Development Company initiated a project, a 2000 acre plot of land, planned as a post war housing development designed with strict requirements on land uses, construction typology, and architectural designs (Parkbench Blog, 2015). This was the brainchild of the private land owner E.P. Taylor, industrialist, who determined that strict structure is the key to proper design. His focus was on creating a comfortable, people orientated community rather then succumbing to the automobile wave that was taking Canada by storm. Taylor understood the importance of coherent design and sought examples from famed planners such as Clarence Stein and Henry Wright who designed iterations of the popular garden city concept from previous generations (Parkbench Blog, 2015). Innovating on ways that would set Don Mills apart from other developments, five points were established that would revolutionize the Canadian suburb (Parkbench Blog, 2015).

The neighborhood principle - The division of the land into four equal parts, all designed to be self contained with a school, church, and a park. At the centre was a unified shopping centre.

Separate vehicular and pedestrian traffic - There was a distinct separation of pedestrian and vehicular traffic with the use of paths that connected all parts of the community. Likewise, the streets were designed with cul-de-sacs, curved streets, and intersections.

Modernist aesthetic and architecture - Very specific design requirements were enforced for all construction in the area. This included materials, colours, and the design concepts. Only approved architects with "Bauhaus principles of design" (Gropius, W) were able to submit plans. This ensured coherence in all aspects of design.

Greenbelts - The connection of all parks with a natural greenway, intentionally disrupting the landscape with contrasting vegetation.

Community-Industry integration - The idea of varying build typologies such as single family homes next to apartment buildings. The overarching purpose was to create a self-sustaining community with industry, shopping, and recreation in one area.
The use of square lots rather than the narrow rectangular lots typically found in other suburban designs was an idea that proved to be instrumental in the physical design gaining acceptance and adoption in other areas of the country (Parkbench Blog, 2015). The use of a wider lot reduced the rear yard depths, but it allowed for greater home designs and frontages, which increased curb appeal, all with marginally more space required. To this day, the typical suburb shares similar components to that design: parks, numerous road intersections, cul-de-sacs, and curved streets, wide lots with greater frontage. Perhaps one of the greatest differences with the Don Mills concept over traditional suburbs was the idea of building to suit the customer, within the restrictions, rather than mass-producing cookie-cutter homes and then seeking buyers. Below is a map of the Don Mills (map_1) neighbourhood at its completion in 1965, showing the relation of each component as described by E.P. Taylor (Parkbench Blog, 2015).

**Don Mills Facts**

- 2000 acres (8.1km²) land allocation
- $200 million development costs, privately funded
- Mixture of single family homes and apartment buildings to attract all family types
- Canada’s first planned community
- Greenbelt connections to all districts (see Map_1)
- Square lots for maximum frontage vs. narrow rectangular, deep lots
- Strict architectural styling all based on the ‘Bauhaus principles of design’
- Homes built on a per family basis, not mass produced
- Numerous intersections, cul-de-sacs, and curved streets to slow traffic and promote safety

(Wikipedia, Don Mills, 2015)
4.0 Comparative Summary of Suburban Methodologies

The concept of the ideal suburb has many aspects to consider beyond the physical orientation and layout, as shown in the history leading up to today's modern suburb design. The history prior the first suburban movements, the social culture of the time and what groups would be affected, and the conditions at the time, like the Great Depression or war, all influenced how suburbs developed. It is when these factors are brought to the forefront that we can begin to isolate and compare the data between Canada and the United States of America. The design comparison is a summary of the different challenges that existed during the suburban movements starting in the late 1800's.

4.1 Social Conditions

The first aspect to look at is the cultural and social conditions. In Canada, the social tensions were mild at best as the average citizen was either a new immigrant or the child of an immigrant (Harris, R., 2004). Contrary to this example is the American social tension between ethnic groups and how they functioned in society. Below is a comparison between respective social and cultural conditions, discussed in detail in previous sections.

<table>
<thead>
<tr>
<th>Canada</th>
<th>United States of America</th>
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<tbody>
<tr>
<td>• The industrial revolution created labour markets in the cities which attracted workers of all ethnic backgrounds.</td>
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<tr>
<td>• Class separation was instigated through development of new communities outside of the traditional city core.</td>
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<tr>
<td>• The influx of workers spurred land prices to escalate, typically beyond the financial means of the average worker.</td>
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<tr>
<td>• Acceptance of the suburb typologies: exclusive, unplanned, industrial, middle-income as a way of life.</td>
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<tr>
<td>• Poor legislation and oversight - lack of unified planning systems.</td>
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<tr>
<td>• Neglect of &quot;slum/poor&quot; neighbourhoods</td>
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</tr>
<tr>
<td>• The industrial revolution created labour markets in the cities which attracted workers, typically farmers.</td>
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<tr>
<td>• Current racial tensions from pre-Civil War / suburbianization era was largely accepted across the country.</td>
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<tr>
<td>• Immigrants were settling in the inner-city vacancies as upper-middle class workers sought suburban lifestyles.</td>
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<tr>
<td>• The development of the streetcar further caused the affluent class to maintain their distance from the city core.</td>
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<tr>
<td>• Poor zoning policies; no federal control on land use.</td>
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The class separation and ethnic segregation that was prominent in Canada was a result of the social constructs that persisted from the various land use divisions. When the influx of workers began to enter into the labour force in the cities, the by-product was a class separation due to living arrangements and accommodations. Since the existing citizens typically had better odds of securing better paying jobs, the incoming immigrants would be forced to pick up the remaining opportunities (Harris, R., 2004). Likewise, the immigrants would likely gravitate to people and neighbourhoods of similar decent. With the onset of specific zoning control and regulations based on each suburban typology, the unplanned areas - typically where the immigrants resided - suffered from lack of control and regulation, perpetuating the neglect. The result was a separation of class and ethnic segregation.

In contrast, the American social deficiencies that existed during the rise of the suburb were largely the result of lasting racial hatreds. When the industrial revolution was in full swing and the railroad industry winding down, people started flocking towards the cities for employment (DOT, History of Suburbanization). When the suburbs were gaining popularity, there was an overarching racial divide that encompassed the suburban movement as a whole, but was not derived from poor planning. The "white" population typically preferred the city fringes over the inner-city areas as they wanted to be separated from people they deemed below them (DOT, History of Suburbanization). Adding to the racial segregation, the invention of the streetcar allowed affluent communities to further expand beyond traditional limitations. Since the poor could not afford such transportation on a regular basis, the class separation was becoming more prominent.

4.2 Legislative and Development Policies

At the end of the industrial revolution, both Canada and the United States entered a period of great manufacturing unlike any other point in history. Both countries were relatively new when compared to their European counterparts, but the scale of industrial development and expansion was
well beyond anything they were experiencing (Palmer, Frank, McCallum, & Rouillard). Similarly, the labour force was comparable between the two countries on a per citizen basis. Despite the concurrent timing, each country developed in different ways by enacting legislation for unlike reasons. To start, the Canadian perspective was derived from class inequality and ethnic separation while in America the existing racial tensions contributed to new legislation and zoning control.

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<tr>
<th><strong>Canada</strong></th>
<th><strong>United States of America</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• The suburban typologies dictated the zoning and development process, custom to each neighbourhood.</td>
<td>• Segregation and isolation of African Americans was popular in southern states at the end of the 1800's.</td>
</tr>
<tr>
<td>• Suburb annexation was a popular means to rapidly grow a city's population for tax purposes.</td>
<td>• Cities across the country began adopting racial zoning as a means to control the black citizens, which lead to the need for proper zoning control.</td>
</tr>
<tr>
<td>• The Dominion Housing Act of 1935 (DHA) was the first official policy implemented that encompassed the country as a whole, followed by the National Housing Act of 1938 (NHA).</td>
<td>• The federal government defined the metropolitan area to help control the rampant annexation of smaller suburbs.</td>
</tr>
<tr>
<td>• Loose mortgage laws from the DHA/NHA helped Canada recover during the depression through new construction.</td>
<td>• The New York General City Enabling Act of 1917 was the general zoning guidelines used until the mid 1920's, though it was ill-fitted to the majority of suburbs.</td>
</tr>
<tr>
<td>• Initial mortgages following the DHA inadvertently perpetuated the ethnic segregation and class separation seen earlier; loans were being denied to people with ethnic backgrounds.</td>
<td>• The Federal Housing Administration Act of 1934 allowed inexpensive mortgages to entice people to build new homes for economic benefit, loans were being denied to African Americans.</td>
</tr>
<tr>
<td>• National building code was developed in 1941 to ensure public wellbeing and safety.</td>
<td>• The Servicemen’s Readjustment Act of 1944 provided veterans with financial assistance for education and housing.</td>
</tr>
<tr>
<td>• The corporate suburb allowed large companies to build giant suburbs with simple and affordable homes.</td>
<td>• The rise of the corporate suburb with companies building massive housing developments.</td>
</tr>
</tbody>
</table>
Both countries shared similar development and legislative challenges, often with the best intentions in mind. The Canadian suburb was divided into four categories, designed to accommodate different lifestyles and industry expansion. With the rapidly increasing population, the conditions in said suburbs worsened over time and caused several communities to default financially, which lead to annexation (Harris, R., 2004). This process was often held in a negative light as people did not want to give up their particular lifestyle and usually deliberate separation from city life. However the suburb zoning and development control that spawned from the rapid annexation proved to be more cumbersome than anyone had anticipated. The result was an incoherent collection of independently run communities all seeking their preference for development and design. The provincial governments attempted to intervene with legislation, but people did not take notice and the municipalities rarely enforced the laws. Because of this, the class separation and ethnic segregation only continued until the Great Depression in 1929. During the depression, the federal government designed two mandated and national acts that gave people a real opportunity to purchase homes. Following the Second World War, Canada stood as a unified country with control over the housing 'boom' through the 1950's.

The American story varies from the Canadian perspective in the sense that due to the racial divides that were present prior to suburbanization, suburbs continued this social trend, rather than inventing it. With the industrial revolution reshaping the working class of the country, America was in need of housing to accommodate the influx of labourers from the rural countryside. Initially, the workers typically flocked to the city centres where industry was prominent; races were forced to live in proximity. However with the invention of the electric streetcar (Wikipedia, Timeline, 2015), the wealthy professionals and business owners sought refuge towards the city limits, rather than towards industry. This trend would continue, and as more and more "whites" could afford the commuting costs, the "blacks" were left to the inner-city, where governments would neglect upkeep in favour of affluent
taxpayers in the suburbs. At one point the racial segregation was so prominent that the concept of 'racial zoning' was beginning to be accepted as a way of life (Silver, 1997). The fortunate outcome of this atrocity was that the country began to see a need for strong zoning and planning policies. Unfortunately the federal government would not react to this concept until the mid 1920's where powerful legislation would be enacted that would direct and focus the process of zoning and development. With the onset of the Great Depression, America created a policy similar to the Canadian's Dominion Housing Act, named the Federal Housing Administration (Wikipedia, FHA, 2015) which was tasked with supplying affordable mortgages to new homeowners. And, like the Canadian Act, America saw an upswing against the failing economy through new construction. After the war, there was a shortage of housing to accommodate the rapid population growth which spawned the modern suburbia that we know today. Corporations would develop massive amounts of land and build thousands of houses, often in remote areas where land was cheap; with automotive popularity, commuting times were irrelevant.

4.3 Summary of Conditions

The Canadian and American perspectives started off similar - entering a high manufacturing era - but each had different motives on how to handle the growth. The Canadians accepted all ethnic backgrounds, but inadvertently created segregation with lack of control and poor planning. The Americans had long-lasting racial dislikes and developed suburbs with the intention of segregation and isolation; the onset of racial zoning was rampant. During the last part of the 19th century and the beginning of the 20th, each country still held different views on how to handle the population growth, which, over the four decades tripled (Wendell Cox Consultancy, 2001). The Canadian provinces attempted to enforce planning legislation, but failed to influence communities and cities; while the Americans, in the 20s issued two powerful acts that would help steer the development of suburbs on the
right path. Both countries designed separate affordable housing Acts that allowed inexpensive mortgages and spurred the lackluster economy. Though both different, the concept was virtually identical. The need was identical as both countries were devastated by the Great Depression and both saw opportunities to intervene. After the Second World War, both countries experienced a population boom and required massive amounts of affordable housing for new families, and the suburbs were the place of choice when looking for affordability and a relaxed lifestyle. Canada and the United States would be influenced by the corporate suburb (Harris, R., 2004) as a machine that could accommodate the shortage and provide families with comfortable housing. The outcome would almost be identical....

**Photo_12:** Urban Sprawl in Markham. Bock, T., Toronto Star File Photo (2004).

**Photo_13:** 1950’s Inspired American Dream. Fehrenbacher, J. (n.d.).
5.0 Conclusion

With thorough review of the Canadian and America historical, political, and social perspectives, we can now see that despite the geographical separation and political differences, both countries saw a need to adapt to the changing times. The industrial revolution played a major role in the suburban infancy through factory work and a needed labour force. As the increasing population sought opportunity in the cities, the need to house them became a top priority for both countries to increase the economic output. The concept of the suburb fit perfectly with this way of thinking. The suburb is a place created in the available space, ever farther from the city centres, accessible through public and private transportation. This accurately defines the suburb in great detail.

The formation of the modern suburb was crafted through decades of poor decisions, technological innovations, such as the streetcar and automobile, and the need to obtain independence through hard work and perseverance. Despite two world wars and a lengthy depression combining to 33 of the 50 years in the first half of the 20th century, both countries came out ahead; the mid 40's 'baby boom' was the result. With the exponential rise of the modern suburb, appreciation towards the often drab and monotonous designs can be extracted. Not for the physical appearance but the notion that after all this time people are still seeking a little piece of independence.

Despite understanding the physical and social aspects of a suburb, in the end it is difficult to accurately define suburbanization as a movement, not the physical aspect of the suburb. The end result between both countries have been similar, but the methods used to get to these points in history came from different locations and through different actions and reactions to the suburban demand. Thus, suburbanization must be observed and understood as a process of accommodating and adapting to the current social, economic, and political trends.
References


Harris, R. (1996). *Unplanned Suburbs: Toronto's American Tragedy, 1900 to 1950*. Retrieved from https://books.google.ca/books?id=EF2uN3v0i9gC&pg=PA322&lpg=PA322&dq=canadian+suburbs+1900s&source=bl&ots=OvuBUid-bSB&sig=JBAatB-YNaN2pawgcsfUyR0gaVtk&hl=en&sa=X&ved=0CDYQ6AEwBDgUahUKEwjR5sDvnf_IAhWFXD4KHfZPD4A#v=onepage&q=canadian%20suburbs%201900s&f=false

Harris, R. (2004). *Creeping Conformity*. Location: Toronto, ON


