

Weaving a Modern Plan for Canada's Capital: Jacques Gréber and the 1950 Plan for the National Capital Region

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Résumé de l'article

Le *Plan pour la capitale nationale* de 1950 est un des documents les plus importants de l'histoire de l'urbanisme canadien. Il allait guider la rapide transformation d'Ottawa et de Hull, villes industrielles plutôt sordides qui devinrent la capitale moderne et agréable que nous connaissons. Ce fut Jacques Gréber, architecte, urbaniste et paysagiste français, qui dirigea les travaux. Il avait été personnellement invité par le Premier ministre Mackenzie King à réaliser le rêve d'une capitale qui rendrait fiers les Canadiens. Gréber, qui avait réalisé les plans du Fairmont Parkway à Philadelphie, ainsi que ceux de Lille, Marseille et Rouen, était alors considéré comme un des plus importants urbanistes de France. Ironie de l'histoire, Gréber est presque oublié aujourd'hui dans son pays, alors que l'Amérique du Nord célèbre son héritage avec enthousiasme.

Weaving a Modern Plan for Canada's Capital: Jacques Gréber and the 1950 Plan for the National Capital Region

David Gordon

Abstract

The 1950 Plan for the National Capital is one of the most significant documents in Canadian planning history. The plan was the guide for the rapid transformation of Ottawa and Hull from rather dreary industrial towns into an attractive modern capital. Jacques Gréber, a French architect, planner and landscape architect, headed the planning team. He was personally recruited by Prime Minister Mackenzie King to realize his dream of a capital that inspired pride among Canadians. Gréber was considered France's leading planner in mid-century, having completed plans for the Fairmount Parkway in Philadelphia, Lille, Marseilles and Rouen. Ironically, Gréber is almost forgotten in his native land, while his legacy is fondly remembered in North America.

Résumé

Le Plan pour la capitale nationale de 1950 est un des documents les plus importants de l'histoire de l'urbanisme canadien. Il allait guider la rapide transformation d'Ottawa et de Hull, villes industrielles plutôt sordides qui devinrent la capitale moderne et agréable que nous connaissons. Ce fut Jacques Gréber, architecte, urbaniste et paysagiste français, qui dirigea les travaux. Il avait été personnellement invité par le Premier ministre Mackenzie King à réaliser le rêve d'une capitale qui rendrait fiers les Canadiens. Gréber, qui avait réalisé les plans du Fairmont Parkway à Philadelphie, ainsi que ceux de Lille, Marseille et Rouen, était alors considéré comme un des plus importants urbanistes de France. Ironie de l'histoire, Gréber est presque oublié aujourd'hui dans son pays, alors que l'Amérique du Nord célèbre son héritage avec enthousiasme.

Canadian Prime Minister Louis St. Laurent and French Ambassador Hubert Guérin unveiled an Aubusson tapestry of the *Plan for the National Capital* in the lobby of the House of Commons on December 5, 1950.¹ The tapestry was based on a watercolour rendering of the regional plan (figure 1) executed by Jacques Gréber, France's leading urban planner, and consultant to Canada's National Capital Planning Service.² The tapestry was woven in 250 colours of silk and wool thread, based upon leaves gathered by Gréber in the Gatineau wilderness park. It was a gesture of friendship and thanks from France, and was consistent with Gréber's artistic background and approach to representing urbanism.

Ottawa and Hull certainly needed aesthetic improvement after the Second World War. The two industrial towns straddling the Ottawa River had somehow eluded a half-century of effort by the Canadian government to improve the national capital. By 1945, Ottawa was crowded with "temporary" wooden office buildings and civil servants from the war effort. Four previous plans remained on the shelf, to the chagrin of Prime Ministers and planners. In contrast, the plan prepared by Jacques Gréber and his Canadian associates was largely implemented in only two decades. It transformed Ottawa and Hull into an attractive, functional and modern capital that was a source of pride to the young country.

The year 2000 marked the 50th anniversary of the *National Capital Plan*, so it is perhaps appropriate to re-examine its legacy. The narrative begins with the plan's champion: a Prime Minister who pursued an improved capital for over a quarter century. Mackenzie King brought Gréber to Ottawa, where he is still remembered for his contribution to Canada's capital. Finally, the paper considers Gréber's methods and evaluates the plan's content, implementation, and results.

Mackenzie King and Canada's Capital

Between 1903 and 1950, four plans were prepared for Canada's capital. For various reasons, all floundered despite the best intentions of Prime Ministers Wilfrid Laurier and Robert Borden. When William Lyon Mackenzie King (1874–1950) was elected Prime Minister of Canada in 1921, he was determined to transform Ottawa into a proper capital city for a sovereign country. King was Canada's longest serving Prime Minister, holding that office for most of the period from 1921 to 1948. Ottawa dismayed him when he first arrived as a civil servant in 1900 because, only weeks before he arrived, much of the city had burned in a spectacular fire, which consumed the sawmills adjacent to Parliament Hill.³

King was recruited into politics by Sir Wilfrid Laurier, the Prime Minister who established the Ottawa Improvement Commission (OIC) in 1899. The OIC commissioned Montreal landscape architect Frederick Todd to prepare a plan for the capital's parks in 1903. Todd, who trained in the office of Frederick Law Olmsted, recommended that the Commission build a system of parks on both sides of the Ottawa River, connected by



Figure 1: The Aubusson tapestry of the 1950 National Capital Plan, designed by Jacques Gréber
(Source: Gréber 1950, plate 29)

parkways.⁴ Although the OIC had improved a few parks and built a parkway along the Rideau Canal, visiting planners such as Thomas Mawson and Raymond Unwin attacked the rustic design quality of their work.⁵

Robert Borden defeated Laurier in 1911 and appointed his own commission to prepare a plan for Ottawa and Hull in 1913. Herbert Holt, a Montreal banker and railroad owner, chaired the Federal Plan Commission. It retained the Chicago architect Edward Bennett and Toronto engineer, E. L. Cousins as consultants to prepare the plan. Bennett was a former associate of Daniel Burnham and co-author of the influential plans for Chicago and San Francisco.⁶ He prepared a comprehensive plan in the City Beautiful style, with extensive railroad and utility studies by Cousins. Unfortunately, when the plan was completed in 1916 the Great War was going badly for Canada, and the Centre Block of the Parliament Buildings had burned only weeks before. Bennett's plan was put on the shelf.⁷

Mackenzie King's interest in planning went beyond dreams of completing his mentor Laurier's vision of Ottawa as the "Washington of the North."⁸ King was a social reformer in the best traditions of the late 19th century. He interned at Jane Addams' Hull House while a graduate student at the University of Chicago. King also spent a post-doctoral year in England in 1899, when Ebenezer Howard's Garden City ideals were promoted in the social reform circles he frequented.⁹ King's 1918 textbook, *Industry and Humanity*, contained several references to town planning as a crucial element of social reform.¹⁰

When Mackenzie King took office as Prime Minister in 1921, the Centre Block of the Parliament Buildings was almost rebuilt and its campanile, the Peace Tower, was under construction. After several years of little activity by the OIC, King appointed Ottawa utilities tycoon Thomas Ahern as its chairman in 1927. He re-constituted the agency as the Federal District Commission, with expanded powers, a mandate to plan in Ontario and Quebec, and an increased budget.¹¹

Mackenzie King and Ahern made an immediate start on a scheme to create a major public plaza, southeast of Parliament Hill, between Elgin Street, the Rideau Canal and Wellington Street. This site was the most congested intersection in Ottawa and chaos regularly greeted visitors arriving at the adjacent railway station. Ottawa City Hall, the main Post Office and a large hotel, the Russell House, added to the congestion on the narrow streets and bridges. Bennett had recommended a major civic plaza for the site in 1915 (figure 2), and Ottawa Town Planning Commission chairman Noulan Cauchon had also published numerous designs for the area (figure 3).¹²

Mackenzie King's hand was forced in April 1928, when the Russell House was destroyed by fire. He quickly pushed a \$3 million appropriation through Parliament and expropriated the block, to prevent the owners from re-building.¹³ However, negotiations with the City of Ottawa were slow and the Depression intervened. King lost the 1930 election and the project stalled, even though City Hall burned in 1931.¹⁴

When King returned to power in 1935, he gave some impetus to Confederation Square by proposing it as the site for the national memorial to those who gave their lives in the Great War. The memorial had been commissioned from an English sculptor and was on temporary display in a London park, awaiting a suitable site in Ottawa. Despite the Prime Minister's advocacy, the designers were not able to unravel the jumble of streets, bridges, streetcars and a canal into an elegant square.¹⁵ Canada did not have much native talent in urban design in the late 1930s.

The Prime Minister found the planner he needed during a 1936 visit to Paris. Mackenzie King requested a tour of the site for the upcoming World's Fair. The director was not available on short notice, so the chief architect, Jacques Gréber, escorted the Prime Minister. The two men connected immediately on a personal level. King re-arranged his schedule to interview Gréber the next day and invited him to come to Canada to prepare plans for Ottawa's core.¹⁶

Gréber added a visit to Ottawa to his 1937 trip to advise the New York World's Fair committee. He quickly grasped the complexity of the infrastructure problems at Confederation Square, and produced a series of designs that resolved them. Gréber combined Bennett's formal composition and diagonal view of Parliament Hill, with the basic elements of Cauchon's circulation plan. After a dispute with King about the location of the memorial—Gréber preferred an adjacent park—he designed an elegant triangular plaza (figure 4). The National War Memorial and plaza was unveiled during a Royal visit in May 1939.

King was pleased:

The moment I saw the Monument at the head of Elgin St. . . . facing down the grand avenue, I at once saw that I had my Champs Elysées, Arc de Triomphe and Place de la Concorde all at a single stroke.¹⁷

He encouraged Gréber to expand his study to include most of downtown Ottawa.¹⁸ The outbreak of the Second World War put the plans on hold, but the Prime Minister held onto his dream of a better national capital.

During the War, Gréber was the planner responsible for reconstruction of the region Nord-Normandie.¹⁹ Ironically, the First Canadian Army damaged several of these towns during their liberation as it advanced along the coast of France. Prime Minister Mackenzie King requested the French government to release Gréber from his duties after the war was over. On August 22, 1945, just days after Japan's surrender, the Canadian Minister of Public Works cabled Gréber:

In lieu of any other memorial of the war just ended the government has approved of further development of Canada's National Capital and its environment on both sides of the Ottawa River. We are desirous that basic plan as laid by you and partially carried out should be further expanded to incorporate newly defined and considerably enlarged limits...²⁰

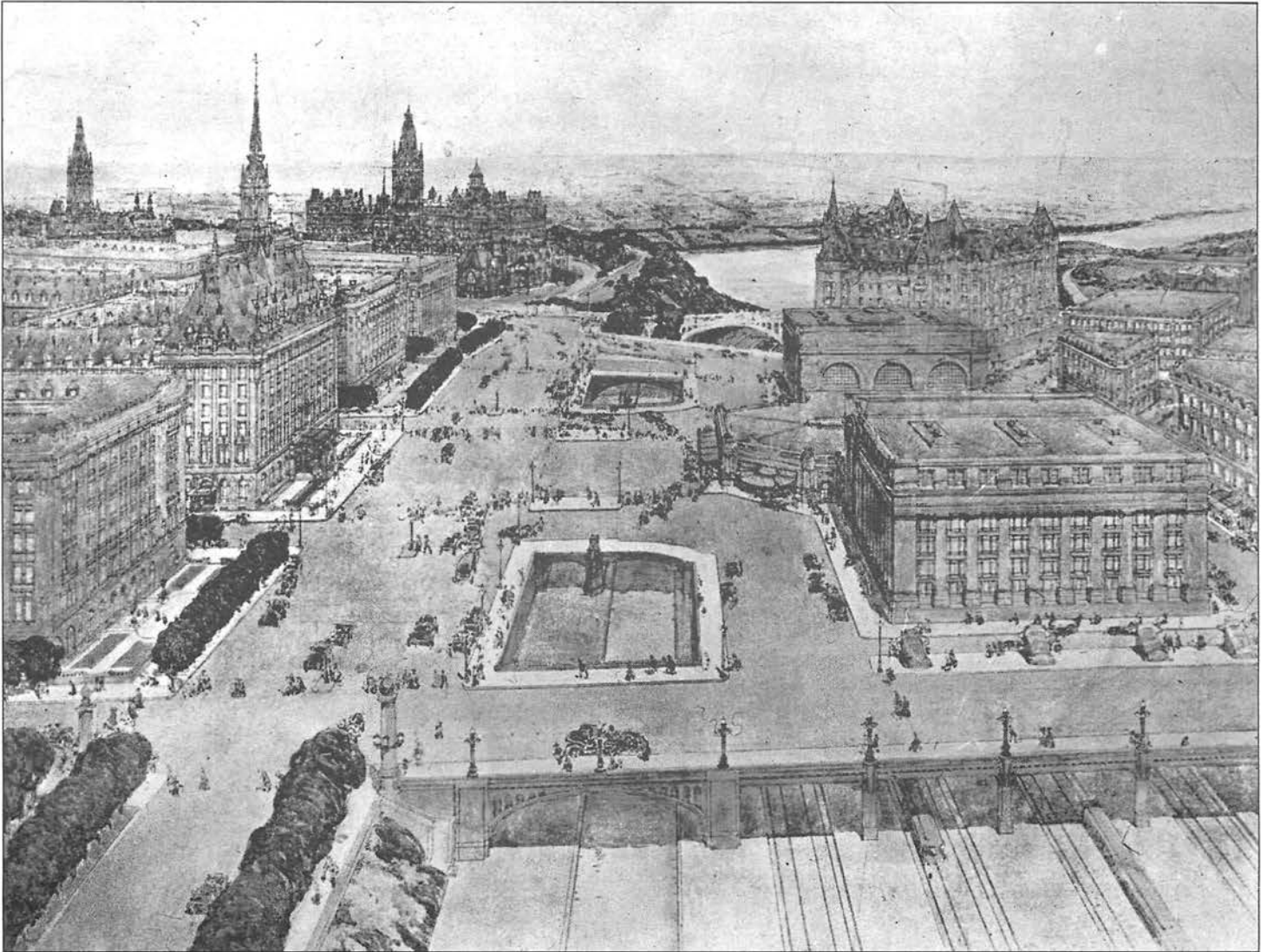


Figure 2: Edward Bennett's 1915 plan for an Ottawa municipal plaza
Source: Holt 1916, drawing 5, rendering by Jules Guérin

How the 1950 Plan Was Prepared

Prime Minister Mackenzie King was determined that the new plan should make the breakthrough that had eluded his predecessors for the previous half century. He established a National Capital Planning Committee (NCPC), independent of the FDC, with representatives appointed from across the country and also from the architectural and engineering professions.²¹ He himself chaired some early meetings of the committee, and frequent references in his personal diary show that he followed its every move.

Gréber was installed as consultant to the National Capital Planning Service (NCPS), with an ample budget, numerous staff and a wide mandate. For associates, he recruited John Kitchen,

Noulan Cauchon's aide from the Ottawa Town Planning Commission, and Édouard Fiset, a Quebec architect and his former student from Paris. Landscape architects, engineers, technicians and an information officer rounded out the NCPS staff, which was perhaps the only full-time professional planning organisation in Canada in 1945. In conjunction with the newly formed Community Planning Association of Canada, the NCPS embarked on a public-relations programme to promote both the idea of urban planning and the plan for the national capital.²²

Gréber's scope of work was widened from the 1937–38 downtown design to encompass an expanded National Capital Region of over 900 square miles.²³ In effect, the NCPC's task was to simultaneously prepare a regional land use plan for both

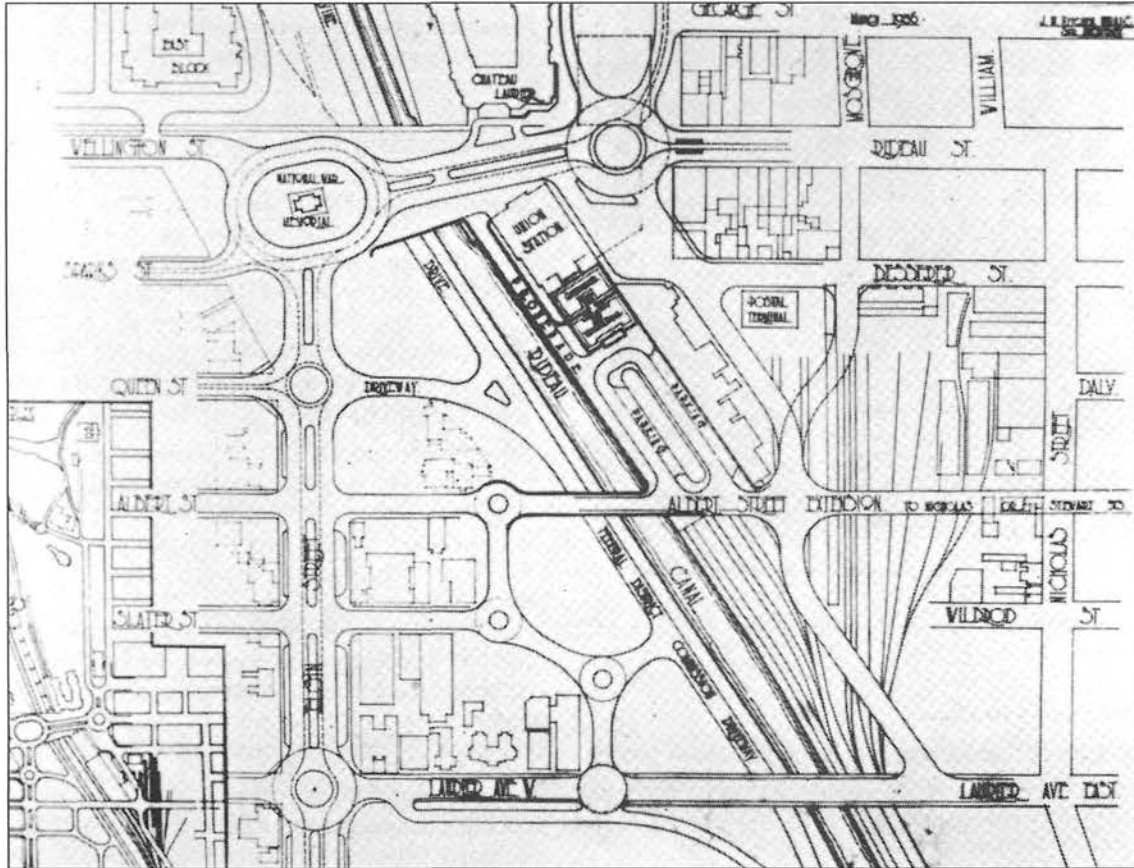


Figure 3: Noulan Cauchon's plan for an Ottawa municipal plaza
Source: Gréber 1950, 185

Ottawa and Quebec sides of the river, urban plans for Ottawa and Hull, a regional infrastructure plan and an urban design for the downtown area. Gréber's first important act was to brief the Senate and the House of Commons on the scope of work and precedents from other major plans. He asked the parliamentarians to set their sights high, and warned them that it would take several years to produce a comprehensive plan.²⁴

The NCPS staff spent two years preparing background studies for the region, assisted by senior officials from other federal departments. This task was a civic survey of the kind advocated by Patrick Geddes,²⁵ examining natural systems, history, demography, land use, housing conditions, infrastructure, and open space. The railway system was strangling the capital, with over 250 level crossings and blocked streets in the built-up area,²⁶ so the NCPC retained a leading railway consultant for assistance.²⁷ Since the entire region emptied raw sewage into the Ottawa River, the NCPC shared the cost of a civil engineering study with the City of Ottawa.

The NCPS staff frequently consulted with Ottawa and Hull municipal officials, and provided planning advice to some of the

adjacent municipalities, who had no professional staff. Gréber gave speeches to service clubs, professional organisations and municipal councils and gave numerous press conferences and radio interviews in both English and French. A 300-page draft report was completed in 1948 and circulated to numerous agencies for comment.²⁸ The NCPS information service also prepared a summary report in both official languages, brochures and press kits that resulted in scores of newspaper articles across the country. The National Film Board produced three newsreels and a large-scale model that went on tours across the country (figure 5).²⁹ The public relations campaign and the project's status as a war memorial helped the country view the national capital plan in a positive light, even though other cities were also starved for investment.³⁰

Mackenzie King's health was failing in 1948, but he hung on as Prime Minister until the draft plan was released. His last act in Cabinet was to stack an expanded FDC with supporters of the plan and push an appropriation of \$25 million into the government's financial plans.³¹ King retired in 1948 and died in 1950, just before the National Capital Plan was released, but he had written the foreword to the plan before he passed away.

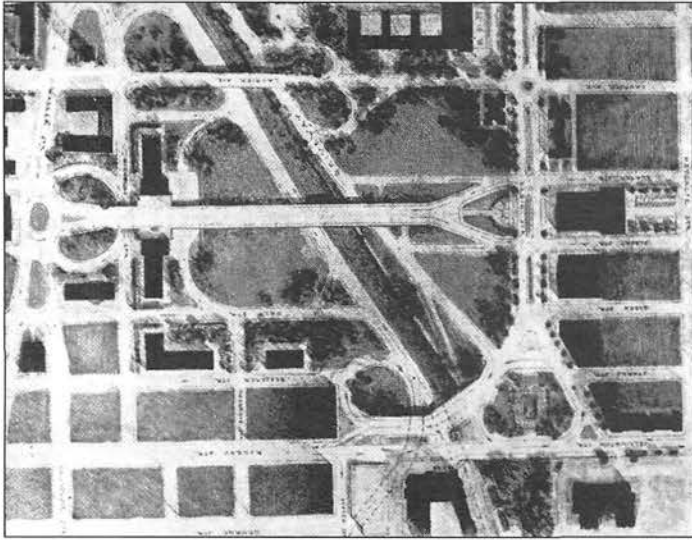


Figure 4: Jacques Gréber's plan for an Ottawa municipal plaza

Source: Gréber 1950, 185

Components of the 1950 Plan

The *Plan for the National Capital* was published in 1950 in two volumes: the extensively illustrated 300-page *General Report*, and an *Atlas* of 20 colour plates in large format. Both volumes contained watercolour renderings and charcoal sketches prepared by Gréber and Fiset in the best Beaux Arts manner (figure 6).³²

The first half of the *Report* contained the background studies that surveyed the region. The proposals that followed built upon previous plans by Todd, Bennett, Cousins, Cauchon and Gréber's 1938 scheme, and included the following components:

- relocation of the railway system and industries from the inner city to the suburbs
- construction of new cross-town boulevards and bridges
- decentralize government offices to the suburbs
- slum clearance urban renewal of the LeBreton Flats district
- expansion of the urban area from 250,000 to 500,000 in neighbourhood units
- surround the future built-up area with a Greenbelt
- a wilderness park in the Gatineau hills and a parks system along the canal and rivers

The railway relocation was the key element that unlocked the rest of the plan. Removing the east-west Canadian National line and its adjacent industry in the centre of Ottawa re-connected the road grid, separated noxious industries from residential areas and provided rights of way for cross-town boulevards.

Relocating the two railway stations to the suburbs permitted construction of a union station and freed up 22 acres of former yards in the heart of Ottawa for a convention centre, shopping and a hotel. The tracks leading to the station were replaced by a parkway along the east bank of the Rideau Canal. These proposals were an elaboration of the previous plans by Cauchon and Cousins, except for the station relocation, which had not been contemplated as late as the 1938 Gréber plan. The CNR right-of-way was proposed as the main east-west limited-access boulevard. The north-south Canadian Pacific Line was proposed as a new truck bypass of the downtown. These two radial routes were to be complemented by a ring road just inside the Greenbelt with two new bridges across the Ottawa River (figure 7).

Government departments and national institutions that were essential for diplomatic or parliamentary purposes were to be located in high-quality masonry buildings close to Parliament Hill. Research laboratories, back office functions and administrative departments were to be decentralized to four suburban office parks in Ottawa, and the King's Printer was to move to Hull. This decentralization would allow the many "temporary" war-time buildings to be removed from the central city and free up sites for national institutions like a library, theatre and art gallery. It would also allow many civil servants to purchase inexpensive suburban houses within a short drive to work.³³

The planning staff was concerned about overcrowding throughout the city and poor housing conditions in the LeBreton Flats district of Ottawa. Many families were doubled up in houses after the war and the planners proposed to take advantage of the federal government's new housing programme to facilitate suburban houses with long-term mortgages. Slum clearance and urban renewal were proposed for LeBreton Flats.³⁴ The new residential population of the capital was to be accommodated in suburban neighbourhood units, using the model proposed by Clarence Perry and implemented in Radburn, New Jersey before the war.³⁵ Gréber's team did not design these residential areas. Instead, they employed land-use planning to estimate locations for approximately 50 neighbourhood units of 5000–7000 people.³⁶ It was intended that local governments prepare their own secondary plans for these neighbourhoods.³⁷

A Greenbelt approximately four kilometres wide was planned to surround the suburban areas, to control the outer limits of urbanization. Growth beyond the 500,000 to 600,000 anticipated within the Greenbelt was to take place in satellite towns in the rural area, although these towns were not designated. This proposal was clearly based upon Ebenezer Howard's 1898 *Social Cities* scheme.³⁸ It also drew upon Patrick Abercrombie's *Greater London Plan*, especially in the proposals for the Greenbelt to be implemented by development regulations.³⁹

The open space proposals of the 1950 plan were first put forward by Frederick Todd in 1903. The Ottawa Improvement Commission built the first parkways in the 1910s, and the Federal District Commission began to acquire Gatineau Park in



Figure 5: Technicians working on the 1950 National Capital Model, 1949

Source: National Archives of Canada, Malak Collection PA 145870

the 1930s. Gréber recommended that the parkway system be expanded to the limits of the Greenbelt and that Gatineau Park be extended as a green wedge almost to the downtown core (figure 8). The riverside open spaces and parkways in Hull would require clearance of that city's primary industries—sawmills, a match factory and paper mill. These industries had long been targeted for removal by federal parliamentarians, not only because of the undignified backdrop they provided to Parliament Hill, but also because they polluted the river and air and were a great fire hazard. A large portion of Ottawa and most of Hull had burned in 1900 and much of Hull burned again in 1904. To underscore the continuing danger, the north shore of the river went up in flames in 1946 during preparation of the plan, severely damaging the main bridge to Ottawa.⁴⁰

Despite the Beaux Arts renderings, the proposals of the Plan for the National Capital conformed almost precisely to the "Town Planning Chart" of the 1933 Congrès Internationaux d'Architecture Moderne (CIAM) in Athens.⁴¹ Gréber incorporated many modern planning elements: land use segregation, expressways, decentralization, reduced densities, urban

renewal, open space and the neighbourhood unit (Table 1). The Chart was a rather general list of the best techniques from the 1930s, but it is still surprising how closely Gréber's methods fit those recommended by the Modern movement.

Implementation of the Plan

During the period 1945–48, Prime Minister Mackenzie King took several important steps to ensure that the new plan would be implemented. The fate of the 1915 plan prepared by Edward Bennett's team demonstrated that talented planners were necessary, but not sufficient, for success. Rapid implementation of a plan required that an agency do a good job of managing politics, finance and planning simultaneously.

Mackenzie King took the next steps to implement the plan by widening the mandate and representation of the Federal District Commission. Prominent citizens from each province were appointed to the FDC, which was chaired by Frederic Bronson, a leading Ottawa businessman. The National Capital Planning Committee (NCPC) and its staff were transferred to the FDC in 1946.⁴² The FDC maintained its federal political support with the

Table 1: 1950 National Capital Plan and the CIAM Athens Town-Planning Chart

CIAM Chart Functions	1950 Plan (page)	Conformity	
		Plan	Impl.
Dwelling			
Residential districts to occupy best sites	Decentralized suburbs	⦿	⦿
	Government in good sites	⦿	⦿
Exposure to sun	Minor issue	⦿	⦿
Different density limits	Reduced density (183)	●	●
	Zoning density (194)	●	●
Highrise apartments for high density	Some proposals	⦿	●
No residential or traffic thoroughfares	None visible	●	●
Recreation			
Slum clearance to parks	LeBreton Flats: housing/beach	⦿	○
Neighbourhood parks	Neighbourhood unit and park (227)	●	●
	Gatineau Park	●	●
Weekend recreation in natural areas	River parkways	●	●
Work			
Industries in separate zones	Suburban industrial parks	●	●
	Government office parks	●	●
Minimum distance between dwellings and work	Industry and office decentralized	●	⦿
	Suburban commuting	●	⦿
Industries separated from residential districts	Strict functional zoning	●	●
	Office/industrial parks	●	●
	Railway relocation	●	●
Industry connected to rail, highway	Highway	●	●
Business districts with good communications	Radial road and transit system	⦿	⦿
	Train station removed from CBD	⦿	⦿
Transportation			
Street system designed for cars	Some monumental streets (unbuilt)	⦿	●
Hierarchy of streets	Yes	●	●
Separate pedestrian routes	Limited vertical separation	○	⦿
	Sparks Mall, cycle routes built	○	⦿
Green Buffers for heavy traffic	Parkways	●	⦿
	NCC landscape expressways	●	⦿
Traffic concentrated in great arteries	Expressway/arterial network	●	●

Source: Sert 1942, Gréber 1950

Legend: Conformity with Athens Chart Principles: ● strong ● moderate ○ weak



Figure 6: Jacques Gréber's watercolour rendering of the 1950 National Capital Plan
Source: Gréber 1950, plate 9

regional appointments and constant public relations. Newsreels about the national capital plan played in cinemas across Canada; Gréber and Fiset made programmes for CBC Radio, and a model of the national capital plan toured the country with a display. School children from across Canada were encouraged to submit essays about their vision of a national capital and the winning students were brought to Parliament Hill.⁴³ The press coverage from across Canada was largely favourable, and political support for the plan continued even after Mackenzie King retired in 1948, and the Liberal party was defeated in 1957.⁴⁴

Political relations at the local level were not always so smooth. Ottawa and Hull were given strong links to the plan by the appointment of both Mayors to the FDC, and councillors and senior staff to the NCPC. Ottawa's major complaint, the fiscal impact of tax-exempt federal property was addressed (if not satisfied) by adjustments to the grants-in-lieu formula in 1944 and 1950.⁴⁵ The major political issue on the Quebec side was the spectre of a federal district similar to Washington or Canberra that would detach Ottawa, Hull and environs from their

municipal and provincial governments. This idea was popular in Ottawa, among federal staff and with academic observers. It was the first recommendation of the 1915 Holt Commission.⁴⁶ However, a federal district was completely unacceptable to Quebec politicians at all levels. Francophones in Hull observed how French-Canadians in Ottawa had been assimilated in the largely English-speaking city and civil service. Quebec politicians were simply unwilling to give up the protection of their language and culture afforded by their local and provincial governments, so the "federal district" issue poisoned all attempts at regional planning.⁴⁷

Mackenzie King originally favoured the federal district idea, perhaps because of his academic training and reform background. He renamed the Ottawa Improvement Commission as the Federal District Commission in 1927 and raised the issue again in Parliament in 1944.⁴⁸ After a 1946 front-page editorial challenge by a Hull newspaper, the Prime Minister finally reversed his position to oppose a federal district.⁴⁹ Gréber and the NCPC staff constantly stated that a federal district was not

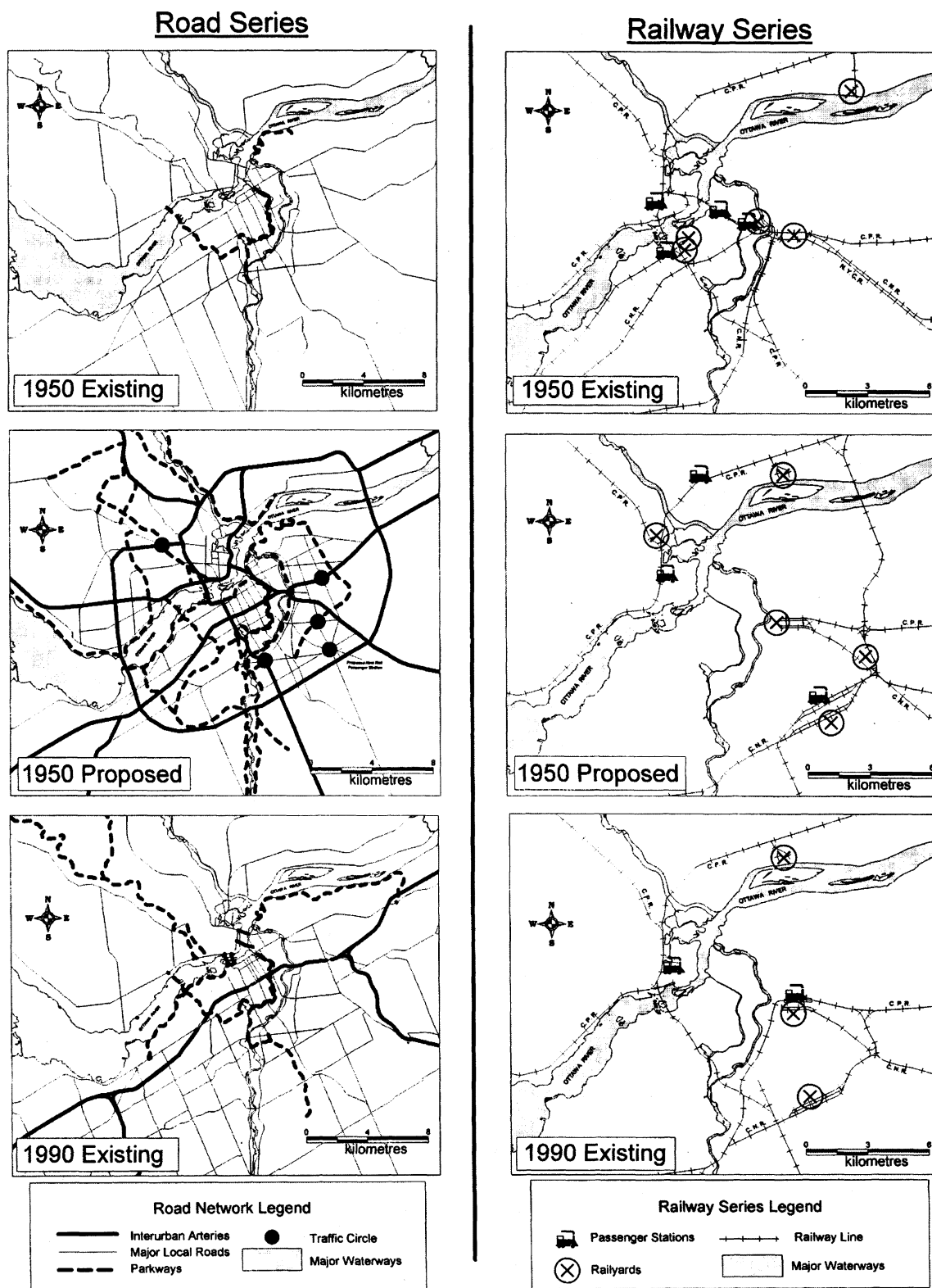


Figure 7: Comparisons of existing and proposed transportation networks 1950–1990
 Source: Gréber 1950, plates 6, 9, 25, and 26. NCC 1990 base map. Drawing by J. T. O'Neill

needed, citing Paris, London, New York and Philadelphia's regional plans, but the issue continued to cloud politics in Quebec.⁵⁰ In 1959, at the suggestion of the editor of *Le Droit*, the Federal District Commission was renamed the National Capital Commission.⁵¹

The City of Ottawa supported the FDC by establishing the Ottawa Area Planning Board (OAPB) in 1947 to control unregulated suburban expansion. However, the suburban townships continued to approve low-density subdivisions without municipal services. The City reacted in 1948 by attempting to annex all the land to the proposed inside boundary of the Greenbelt.⁵² The rural townships fought the annexation, and lost. They also fought the Greenbelt, refusing to incorporate it into their zoning bylaws and approving subdivisions. The Nepean Township reeve referred to the Greenbelt as the "weed belt" and suggested that it be developed with half-acre lots using wells and septic tanks for servicing.⁵³ After six years of conflict, it became clear that Ontario and Quebec planning legislation was not strong enough to establish a Greenbelt by regulation, as in the London model. Following a 1956 parliamentary enquiry, the federal government decided to buy or expropriate the lands required.⁵⁴

Mackenzie King ensured an early start on the plan's implementation by establishing a \$25 million National Capital Fund through a Cabinet decision. It was agreed that \$2.5 million would be put in the estimates for 1948 and annually thereafter, using executive powers to avoid a potentially divisive debate similar to 1928.⁵⁵ The 1950 plan did not include a financial analysis of its proposals. Instead, the FDC submitted annual financial reports and estimates of future capital spending to the Treasury Board. The FDC and NCC hired expert landscape architects, planners, engineers, and project managers, eventually developing a reputation for good fiscal management. As their organizational competence increased from the 1930s through the 1950s, they were given responsibility for maintaining the grounds of all federal buildings in the National Capital Region, project management of infrastructure and land-use planning approval for federal properties.⁵⁶

The FDC's good managerial reputation allowed them the room to move quickly to implement elements of the Gréber plan. The FDC began the railway relocation and a bridge across the Rideau Canal even before the plan was released in 1950. The railways were not expropriated. Instead, the FDC built new and better lines and yards in the suburbs, and exchanged them for their downtown rights of way. Land was acquired at rural prices for the yards, industrial parks and road rights-of-way needed to complete the infrastructure. The FDC then entered into a cost-sharing agreement with the Ontario government and City of Ottawa for the construction of the cross-town expressway in the CNR right-of-way, which was named the Queensway.⁵⁷

By 1956 it was clear that, because of inflation, the \$25 million National Capital Fund would not be enough for expropriation of the Greenbelt and better cost estimates were needed for the infrastructure. Almost twenty million dollars had been spent by

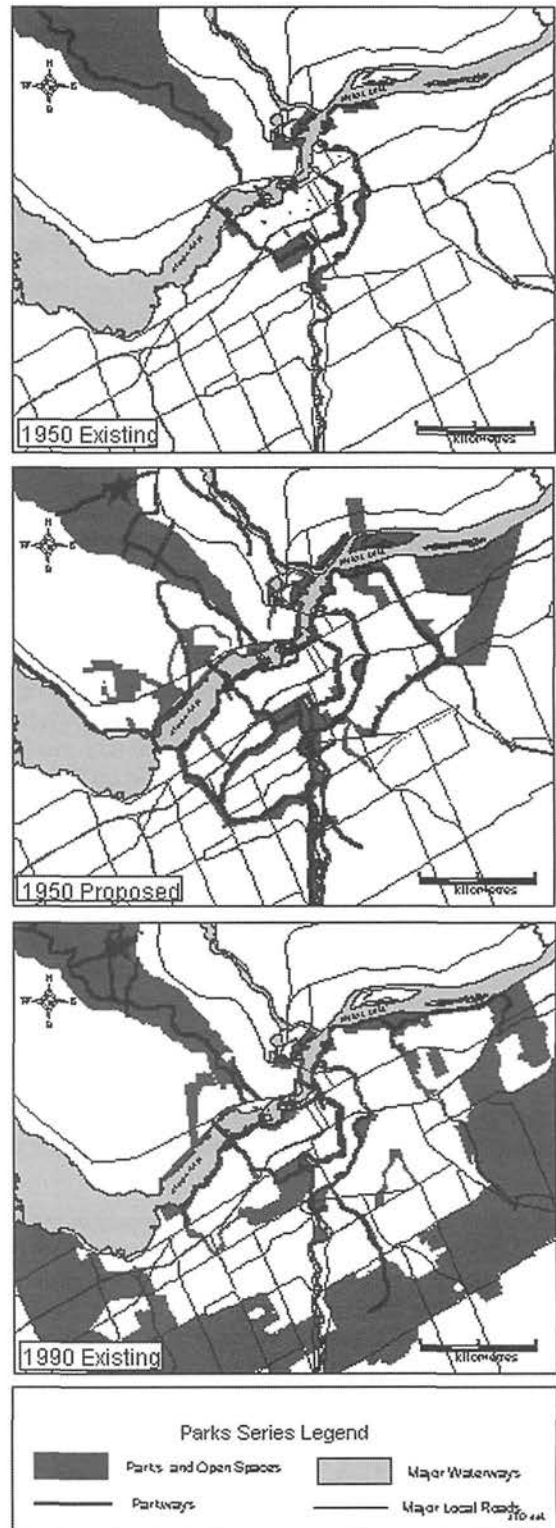


Figure 8: Development of the Ottawa-Hull Parks System, 1950-1990
Source: Gréber 1950 atlas, plates 16 and 17.
NCC 1990 base map. Drawing by J. T. O'Neill

1957, and a further seventy million dollars was estimated for the next decade. The joint Senate-Commons committee recommended that the NCC's annual capital grant be at least doubled.⁵⁸ By 1970, when most of the plan had been implemented, the NCC had spent \$243 million.⁵⁹ In the thousands of pages of federal records of the 1944, 1956 and 1976 enquiries, it is difficult to find reference to any suggestion that the federal government was spending too much to develop the capital.

After the 1956 parliamentary enquiry, the NCC and Ottawa abandoned attempts to enforce regional planning objectives through planning regulations. The federal planners continued to assist some local governments in Quebec, while most Ontario municipalities established their own planning departments. The NCC used its land ownership, expropriation power and infrastructure budget to shape urban form according to its plan.

Freight railways and their associated industries were relocated to suburban sites by the late 1950s, and a new Union Station opened at a Queensway interchange four kilometres from the Central Business District (CBD) in 1969. The NCC converted the old station into a conference centre, built a parkway along the former tracks along the Canal, and redeveloped the downtown yards into a hotel, convention centre and shopping complex. Other parkways were built along the Ottawa River, and into Gatineau Park, which was expanded as a wilderness area well into the northern hills. The Greenbelt on the Ontario side of the Ottawa River was acquired or expropriated rapidly at the end of the 1950s, just ahead of the developers.

Other elements of the plan were built, but not in the anticipated locations. Ottawa City Hall, after a long internal political debate, was not built in either of the downtown plazas proposed by Gréber. Instead, the City built a sleek modern building on an island at the mouth of the Rideau River.⁶⁰ A new central bridge over the Ottawa River was built, but the older Interprovincial Bridge was retained as an element of industrial heritage. The National Arts Centre was built adjacent to the Rideau Canal and Confederation Square, while the National Library and Art Gallery were given prominent downtown sites adjacent to the Ottawa River.

The suburban neighbourhoods were built largely in the locations suggested in the plan, but the local governments did not build the radial street patterns suggested by Gréber (figure 6), preferring to extend the original rural grid, following conventional North American practice. Many government laboratories and offices did move out to five suburban office parks, built in the functional modern style advocated by Gréber.⁶¹ However, the downtown offices were rarely the elegant departmental buildings suggested in the plan. The Department of Public Works (DPW) needed cheap space to cover rapid expansion of federal offices in the 1960s. They began to lease from private developers, who erected quite ordinary commercial buildings to meet the demand. In the mid 1960s, Robert Campeau, a well-connected suburban developer, challenged the downtown Ottawa 110-foot height limit designed by Bennett to protect the view of the Parliament Buildings. City Council was split, with

considerable interest in the tax revenue from high-rise office buildings. The DPW and NCC were split over costs and urban design. The developers exploited the divisions to burst through the height limit with a series of second-rate Modern structures that obliterated the view of Parliament Hill from the south.⁶²

The "satellite towns" suggested for development well outside the Greenbelt turned into ordinary suburbs clinging to its edge. Private developers assembled land outside the Greenbelt and the first subdivisions appeared in the late 1960s. The semi-rural townships were eager for development and easily swayed by the large builders. The regional governments established by Ontario and Quebec in 1969–70 took years to become effective. In the meantime, the local governments facilitated large suburban projects west, east and south of the Greenbelt.

The major change in the plan was a more prominent role for Hull. The city had frequently lobbied for more government buildings, beyond the printing plant. Separatist sentiment in Quebec pushed the federal government towards a more bilingual, inter-provincial national capital in the 1960s.⁶³ Following the election of Pierre Trudeau as Prime Minister in 1968, the federal government moved quickly to build a bridge to downtown Hull and erect office buildings for 25 percent of the civil service on the Quebec side of the river. The provincial government, not to be outdone, erected its own high-rise office building and the municipal government built a new city hall. Trudeau also arranged for the Canadian Museum of Civilization to be built on the former riverfront industrial site opposite the Parliament Buildings. In less than a decade, a cluster of large buildings sprouted in the run-down centre of Hull, leaving some awkward edge conditions. The NCC has attempted to knit both sides of the river together with its Confederation Boulevard project.⁶⁴

A few other elements of the 1950 plan were not implemented. The Greenbelt was not popular with Quebec municipalities, either. It was quietly dropped on the north side of the river. The NCC made a tactical error by landscaping many of the rights-of-way it reserved for future roads. The adjacent residents promptly appropriated these corridors as linear parks, and objected vigorously when the roads were designed a decade later. The north-south boulevard was partially abandoned, the entrances of the Montreal and Toronto highways were deflected into the Greenbelt and the circumferential parkway and its two bridges were eventually abandoned.⁶⁵ Finally, the Second World War memorial terrace designed by Gréber for the Gatineau Hills was also dropped after veteran's associations demanded that the 1939–45 war be recognized with a downtown memorial.⁶⁶

Evaluation of the National Capital Plan

The FDC's public relations programme ensured that the initial media reaction to the plan was largely positive, with the exception of the local Greenbelt and federal district controversies mentioned above. The early professional reviews were mixed. Many Canadian architects and landscape architects wanted the job and resented a foreign consultant.⁶⁷ Once the project was

underway, it was often regarded as the most important Canadian plan in progress.⁶⁸ Advocates of modern architecture attacked vigorously the plan and the early building designs, perhaps incited by the plan's Beaux-Arts presentation.⁶⁹

An early critique came from Harold Spence-Sales, director of McGill University's urban planning programme, and Canada's only professor of planning in 1949. He believed that "our National Capital is a small city that can only support a limited amount of grandeur, or become a hollow spectre"⁷⁰ Spence-Sales recommended even more decentralisation than Gréber:

Only when the population of the capital grows far beyond 500,000—and the spacious urban area and its surrounding Greenbelt are no longer able to contain such an increase—do the proposals admit that satellite development may be necessary. An eventuality unforeseeable for generations!⁷¹

Spence-Sales opposed the scale and grand urban design elements of the plan, invoking the criticisms usually deployed against City Beautiful projects:

In essence the plan derives its heroic qualities from forces at play to create a capital city after a bygone European concept. That stateliness transplanted to other climes may produce a mirage of magnificence, neither achieving the essential qualities of its origins, nor reflecting the cultural complexities of the countries to which it is applied.

. . . The pursuit of the ideal of visual beauty may have obscured the significance of the structure of Canadian cities.⁷²

Perhaps the most perceptive critique came from Hans Blumenfeld, in "Glories and Miseries of a Master Plan."⁷³ Although closely identified with Modern architecture and planning, he was surprisingly sympathetic to the urban design objectives of the 1950 plan. Blumenfeld identified the low population projections, praised the freight railway relocations and parks system, and criticized the closing of the downtown rail station. He believed that Gréber had gone too far in pushing the private automobile, and predicted that Ottawa would become as automobile dependent as Los Angeles.⁷⁴ Ironically, the rights-of-way for some of the abandoned road projects proposed in the 1950 plan were recently converted for extensions of Ottawa's acclaimed bus-way system.

Blumenfeld's conclusion was a surprising rebuke to the critics of the City Beautiful:

Gréber rightly emphasized that the desire for beauty is not the preserve of upper-class snobs, but a basic and universal human need. As influence and leisure time increase, the value of the esthetic qualities of the National Capital Region created by the Master Plan will rise from year to year.⁷⁵

Strengths of the Plan

Several of the strengths of the 1950 plan are hard to discern today, and can only be appreciated by comparison to the

immediate post-war conditions. The relocation of the freight railways and their associated yards and industrial development has been an unqualified success. The railways, the local road network, industries and adjacent neighbourhoods were all improved after the move. It is hard to imagine how Ottawa would function without the Queensway, which is the spine of the expressway and the express bus network. Similarly, the Ottawa River is much less polluted following the NCC and local governments' investment in sewage treatment and clearance of some of the riverfront industries.

It is hard to miss the 1950 plan's open space network. The parkways are magnificent, with wonderful views along the Ottawa River and Rideau Canal. The Greenbelt and the many parks built by the NCC and its predecessors contribute to an attractive capital for visitors and a high quality of life for its residents. Gatineau Park is an extraordinary natural resource reaching almost to the core of the urban area. The Greenbelt creates a strong edge to the inner urban area and a gracious entrance to the capital by road and air. The good environment and quality of life fostered by these improvements are essential conditions for high-technology development and tourism, the two industries the region pursued to expand the economic base beyond the federal government.

Weaknesses of the Plan

The Achilles heel of the 1950 plan was its population projection. It expected that the national capital region would double in population from 250,000 to 500,000 between 1950 and 2000. The post-war baby boom and rapid government expansion were unforeseen by the planners and also by critics like Professor Spence-Sales. The boom caused the regional population to pass 500,000 by 1966, and 1.1 million people by the 1996 census. The NCC realized by 1961 that the region was growing far faster than projected, and the federal government acquired a site for the first satellite town southeast of Ottawa. The NCC featured this town site in its 1974 plan, but the new regional governments preferred to grow into the suburban lands assembled by private developers.⁷⁶ Although the 1950 plan did accommodate the proposed 500,000 people within the Greenbelt, the post-1970 development outside the Greenbelt has been largely conventional suburban development with few redeeming features.

The LeBreton Flats urban renewal project followed the worst traditions of this genre. The lands were acquired and the community dispersed in the early 1960s, but the project stalled, leaving a vacant site. Perhaps one quarter of the lands was developed for social housing in the 1970s, but the LeBreton project became tangled in inter-governmental disputes and stalled again.⁷⁷

Relocation of the railway passenger station from downtown Ottawa seemed like a good idea in 1948, but the new station location left rail travel at a comparative disadvantage. Passenger rail traffic collapsed across North America after the war, but the downtown station might have maintained a higher market

share and been useful for commuter rail, since passengers could walk to many destinations. The parkway along the east bank of the canal would have been foregone if the station were kept. However, the hotel, conference centre and commercial development might have been built on platforms above the tracks similar to Gréber's 1938 plan (figure 9) or Boston's 1960 Prudential Center.⁷⁸

The major streets and boulevards planned in 1950 were not as gracious as those designed by Gréber, with the exception of the NCC's parkways. Although the NCC provided rights-of-way and financial assistance for many of these routes, provincial and regional traffic engineers designed and built the roads. The Queensway and the arterial roads network are not the European boulevards shown in the plan, since street trees, generous sidewalks and quality street furniture were omitted in favour of maximum traffic capacity.⁷⁹ The NCC's Confederation Boulevard project is the first attempt to make a great urban street in the capital in many years.

Finally, the modern Ottawa skyline would discourage Gréber and Bennett. Both urban designers had gone to considerable lengths to create a skyline for the Capital that would give prominence to important national institutions while still permitting much urban redevelopment.⁸⁰ That silhouette was still intact as late as 1965. Although the Parliament buildings are sited on the highest ground in the capital area, they are now overwhelmed from the south by the cluster of high-rise office buildings. Fortunately, the height of the bluff above the river means that the view from the north shore is relatively intact.⁸¹

The unsatisfactory approach to Parliament from the south recently led to a revival of Mackenzie King's 1927 proposal to widen Metcalfe Street to create a grand visual axis leading to the Peace Tower.⁸² Gréber opposed this urban-design approach, even though he is associated with the Beaux Arts school.⁸³ He recommended that the neo-gothic Parliament buildings were best viewed on an angle to accent their picturesque style and sitting on the bluff. Gréber and Bennett both designed diagonal views of Parliament Hill: Bennett creating a short vista from Elgin Street (figure 2) and Gréber establishing a longer vista along the east bank of the Rideau Canal (figure 9).⁸⁴

Conclusions

At first glance, it is tempting to dismiss the 1950 plan, and Jacques Gréber, as relics of the past. Any plan rendered in watercolour paintings, charcoal sketches and a tapestry invites classification as part of the abandoned City Beautiful movement, and Gréber's Beaux Arts background only reinforces this first suspicion. A closer reading of the plan reveals a remarkable montage of themes:

- a civic survey of Geddesian thoroughness,
- a parks system inspired by Olmsted and Todd,
- grand downtown boulevards and plazas that echo the City Beautiful's Burnham and Bennett,

- a Greenbelt and satellite towns in the Garden City tradition of Howard and Abercrombie,
- City Efficient railroad, expressway, utility and zoning proposals from Cauchon and Cousins,
- CIAM land use planning and urban renewal proposals, and
- suburban planning using Perry's neighbourhood unit

Many of the ideas were adapted from previous plans (generously acknowledged) and few of the theoretical approaches are original. Gréber's accomplishment was to weave a plan using the best threads of the many planning movements from the first half of the century, avoiding the worst excesses (except for LeBreton Flats) and packaging it in a manner that facilitated implementation. A rich and determined client, served by a powerful and skilled development agency, ensured that it would be thoroughly implemented.

The 1950 *Plan for the National Capital* played an important role in re-launching community planning in Canada by importing ideas from abroad. The federal government's actions in preparing the plan are a clear example of "Undiluted Borrowing" in Stephen Ward's typology of international diffusion of planning.⁸⁵ The role of indigenous Canadian planners was moderate, with Fiset, Kitchen and Cousins assisting Gréber, who was the most important influence as the prime consultant for the plan. While the Canadian professionals certainly deferred to Gréber's obvious expertise, they had plenty of contact with British and American planning practice.

The plan's implementation showed "Selective Borrowing," (in Ward's terms) from both the plan and the planner. The urban wilderness park wedge in the Gatineau hills, originally planned by Canadian professionals Todd and Cauchon, was expanded immediately. The railway plan, which was also prepared with indigenous leadership, was implemented immediately, and with a major change in the Union Station location designated by Gréber. The Greenbelt was delayed and rejected in Quebec and adopted by land purchase in Ontario, after the Canadian planning legislation proved inadequate to implement Gréber's regulatory proposals in the mode of London or Paris. American planning models replaced the cross-town boulevard, which became the Queensway expressway and the proposed satellite towns, which became dormitory suburbs.

The 1950 *Plan* should have had a fairly low potential for distinctiveness, based upon Ward's diffusion typology. However, Gréber's plan appears to be an unusual conglomeration of planning ideas from French, British, and American sources. Perhaps this is because Gréber himself was engaged in "Synthetic Borrowing" (from Ward's typology) at this stage in his career. He abandoned his exclusive reliance on Beaux-Arts methods found in his Fairmount Parkway in Philadelphia, and imported a wide range of planning traditions into the Canadian capital's plan. His promiscuous borrowing of external models thus continued Gréber's important role as a trans-Atlantic pipeline for planning ideas.⁸⁶



Figure 9: Jacques Gréber's 1938 model showing the view of Parliament from Elgin Street and the expanded train station and commercial buildings located on a platform over the railway tracks in the foreground.
Source: Gréber 1950, 146.

Gréber returned to Canada annually to advise the NCC and also prepared plans for Montreal and Québec.⁸⁷ The 1950 Plan remains as one of the high points of his career, along with the 1917 Fairmount Parkway and the 1930 Marseilles plan. Comparison of the Philadelphia and Ottawa-Hull projects demonstrates how far Gréber's *urbanisme* evolved over his fifty-three-year practice. The Beaux Arts architecture, landscape and urban design in Philadelphia evolved into a multi-layered approach to urbanism for Canada's capital, working at several scales. Gréber's architecture evolved from the classical (1929 Rodin Museum with Paul Cret) to the modern (1962 Esso Building, La Défense),⁸⁸ his landscape repertoire expanded from the *jardin à la française* to incorporate wilderness parks, and his planning embraced the CIAM without adopting their urban design manifesto. Gréber's urban public spaces typically avoided the tabula rasa, super-block and free plan. He preferred formal streets, blocks and public plazas. The models show Modern buildings in pre-Modern civic spaces (figure 10).

Gréber cloaked his modernity in Beaux Arts representations. The models, watercolours, sketches and tapestry were beautiful objects, which perhaps made the plan easier for politicians with conservative aesthetic tastes to accept.⁸⁹

When Jacques Gréber died in 1962, *La Vie Urbaine* mourned him as "le plus grand des urbanistes français."⁹⁰ Yet within two decades he was practically forgotten in France, despite his prodigious output as an architect, planner and educator over a career spanning a half century. André Lortie argues that Gréber's memory was erased by a new generation of planners dedicated to "un urbanisme moderne, scientifique et sans précédent."⁹¹ It is therefore perhaps appropriate that the 1950 *Plan for the National Capital* should be popularly known as "the Gréber Plan," as a reminder of his accomplishments in the latter stage of his career.⁹²

The 1950 *Plan* was the most important Canadian plan of the mid-century, setting a standard for comprehensiveness that was

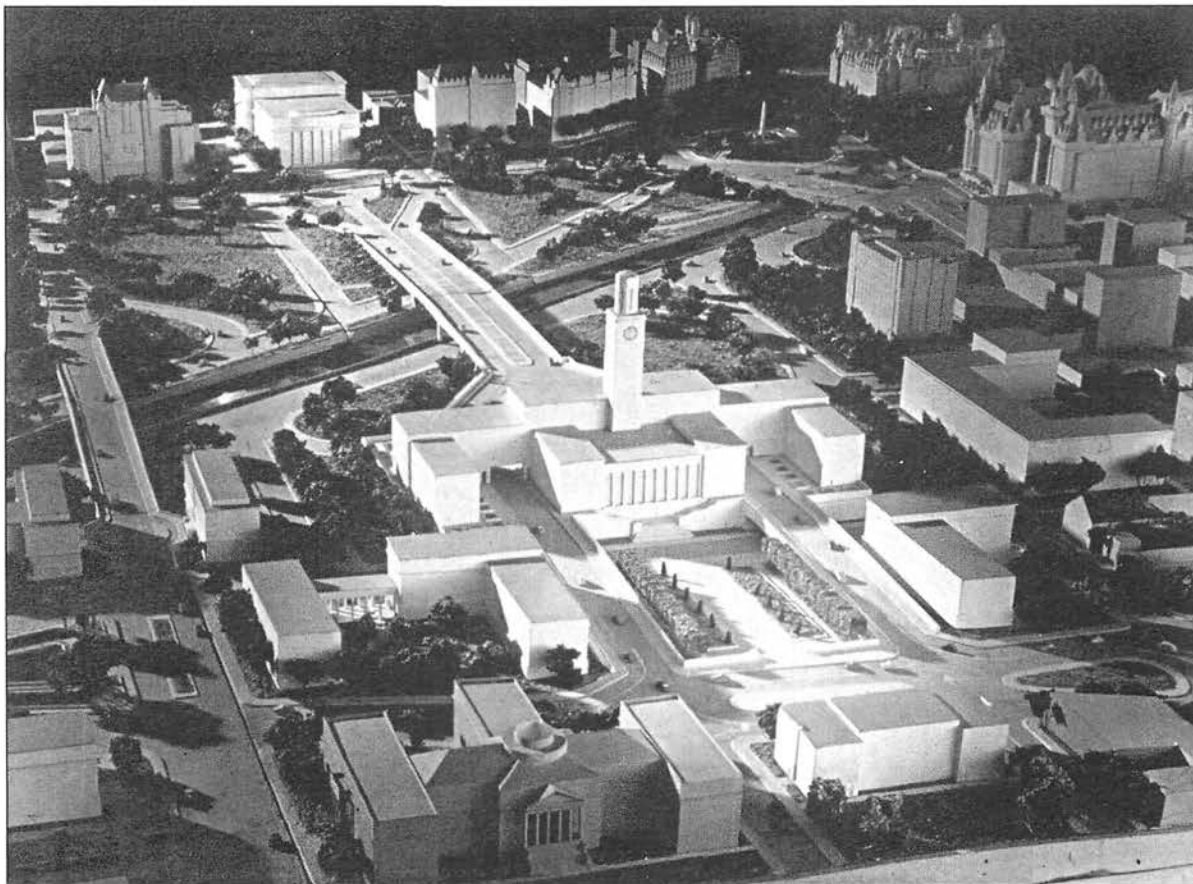


Figure 10: Modern classical architecture in a framework of pre-modern public spaces. The 1950 model shows a City Hall (centre) and Art Gallery (top) at either end of the Mackenzie King Bridge. Only the bridge was built. The regional government centre, adjacent to the Laurier Bridge (centre left) became the new City Hall in 2001.

Source: Gréber 1950, 218.

rarely exceeded in the decades ahead.⁹³ The plan, and the agency established to implement it, were important examples of professional practice that helped inspire the resurrection of Canadian urban planning from its nadir of 1935–1950.⁹⁴ It is a pity that the Gréber name is now more widely known in North America than in his native land.

Notes and References

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Abbreviations for primary sources

CPM	Colborne P. Meredith papers, National Archives of Canada, MG 29 E62
DHB	Daniel H. Burnham papers, Art Institute of Chicago, Burnham Library of Architecture Collection 1943.1
EHB	Edward H. Bennett papers, Art Institute of Chicago, Burnham Library of Architecture, Collection 1973.1
FIN	Department of Finance, Ottawa Improvement Commission papers, National Archives of Canada, Ottawa, RG 19, Vol. 551.
NC	Noulan Cauchon papers, National Archives of Canada, Ottawa, MG 30 C105
NCC	National Capital Commission Reference Library, Ottawa, special collections
NMC	National Map Collection, National Archives of Canada, Ottawa
OA	Records of Olmsted Associates, Inc., Manuscript Division, U.S.

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- Library of Congress, Washington DC, Job File 5070, "Ottawa City Plan, Ottawa Canada 1913–1914"
- OIC Ottawa Improvement Commission papers, National Archives of Canada, Ottawa, RG 34
- RBB Richard Bedford Bennett papers, Section F, Prime Minister's Office Files, National Archives of Canada, Ottawa, MG 26 K
- RLB Sir Robert Laird Borden papers, National Archives of Canada, Ottawa, MG 26 H
- WL Sir Wilfrid Laurier papers and correspondence, National Archives of Canada, Ottawa, MG 26 G
- WLMK William Lyon Mackenzie King papers, National Archives of Canada, Ottawa, MG 26 J1, J2
- William Lyon Mackenzie King diary, National Archives of Canada, Ottawa, MG 26 J6
1. National Film Board of Canada press release 55411, December 5, 1950; Braquenié & Cie. (Paris), "Interview demandée à M. Jean Dautzenberg-Braquenié au sujet de la tapisserie d'Aubusson offerte au Canada par le Gouvernement Français" (Paris, octobre 31, 1950). NCC file 5-014, box 235; "French Tapestry Immortalizes the New Ottawa," *Ottawa Journal*, September 29, 1950.
 2. Jacques Gréber, *Plan for the National Capital: Atlas* (Ottawa: King's Printer, 1950), plate 20.
 3. "[T]he first glimpse of the city was from the lately fire swept district and it was gloomy enough. The business part of the town is small and like that of a provincial town, not interesting, but tiresome . . . Ottawa is not a pretty place, save about the prlmt. bldgs. [Parliament Buildings] and has all the non-attractions of a small town" WLMK Diary, May 24, 1900.
 4. Frederick G. Todd, *Report of Frederick G. Todd, Esq., Landscape Architect, Montréal, to the Ottawa Improvement Commission* (Ottawa: Ottawa Improvement Commission, August 28, 1903); Peter Jacobs, "Frederick G. Todd and the Creation of Canada's Urban Landscape," *Association for Preservation Technology (APT) Bulletin* 15, no. 4 (1983): 27–34.
 5. For Thomas Mawson: "Improvement Commission Gets Criticism from Landscape Artist," *Ottawa Evening Citizen*, May 26, 1911, 10; "The Planless Capital" (editorial) *Ottawa Citizen*, May 26, 1911; "The Ideal Capital City: How to Plan and Build It," *Addresses Delivered before the Canadian Club of Ottawa 1911/12* (Ottawa: The Mortimer Press, 1912), 156–74. For Raymond Unwin: "Ottawa Has Opportunities, for Obtaining Ideal City," *Ottawa Citizen*, May 22, 1911, 1; "Canada and Town Planning: Interview with Mr. Raymond Unwin," *Record, Hampstead Garden Suburb* 2, no. 2 (February 1914): 87–9.
 6. Joan Draper, *Edward Bennett: Architect and City Planner, 1874–1954* (Chicago: Art Institute of Chicago, 1982); Daniel H. Burnham and E. H. Bennett, *Plan of Chicago* (Chicago: Commercial Club, 1909); Daniel H. Burnham and E. H. Bennett, *Report on a Plan for San Francisco* (San Francisco: Sunset Press, 1905); see also Edward H. Bennett (EHB) papers, Art Institute of Chicago, Collection 1973.1 Boxes 52 and 53, and the Daniel H. Burnham (DHB) papers, Art Institute of Chicago, Collection 1943.1.
 7. David L. A. Gordon, "A City Beautiful Plan for Canada's Capital: Edward Bennett and the 1915 Plan for Ottawa and Hull," *Planning Perspectives* 13 (1998): 275–300.
 8. "The Washington of the North," *Ottawa Evening Journal*, June 19, 1893, 1.
 9. William Lyon Mackenzie King, "The Story of Hull House," *Westminster*, November 6, 1897, 350–3. Jane Addams, *Twenty Years at Hull House* (New York: The Macmillan Company, 1910). Autographed copy given to WLMK, held in Laurier House, Ottawa.
 10. William Lyon Mackenzie King, *Industry and Humanity* (New York: Houghton Mifflin Company, 1918), 359–60 and Appendix.
 11. King speeches, April 6 & 7, 1927, *Hansard*, 175–1980; 2039–47.
 12. Sally Courtts, *Science and Sentiment: The Planning Career of Noulan Cauchon* (M.A. thesis, Department of History, Carleton University, 1982); NC papers.
 13. King speech, April 24, 1928, *Hansard*, 2313–9. Opposition speeches, April 24, 1928, *Hansard*, 2342–59.
 14. This began a twenty-year period during which the federal government treated the local government particularly poorly. See John H. Taylor, "City Form and Capital Culture: Remaking Ottawa," *Planning Perspectives* 4 (1989): 79–105; *Idem*, *Ottawa: An Illustrated History* (Toronto: J. Lorimer, 1986).
 15. Toronto architect Henry Sproatt was retained to evaluate the schemes, and recommended against the federal proposals. He believed that Cauchon's plans were better, but still not good enough. Sproatt to WLMK, June 6, 1929, WLMK reel 3277, pp. 143941–2.
 16. WLMK diary. Gréber was officially appointed by Canada Order-in-Council P.C. 63/185, January 28, 1937.
 17. Mackenzie King Diary, entry for Thursday, August 12, 1937, p. 750. Gréber preferred the monument in the adjacent Major's Hill Park, and published his sketches for this location as figures 114 and 116 in the 1950 plan.
 18. Gréber collection, 1937 plans for Confederation Square, May–November 1937; Jacques Gréber, "Report on City Improvements," February 7, 1938; *Idem*, *City of Ottawa, Consultation on Development of Government Grounds*, June 24, 1937; *Idem*, "Notes sur les Travaux d'Embellissement de la Ville d'Ottawa," *La Vie Urbaine* 52 (juillet–août) 1939, 199–210; Gréber also had input on the location of Ernest Cormier's Supreme Court building. See Isabelle Gournay and France Vanlaethem, *The Supreme Court of Canada and its Justices, A Commemorative Book* (Ottawa: Supreme Court of Canada, 2000), 200–1.
 19. André Lortie, "Jacques Gréber Architecte Urbaniste 1882–1962: les allers retours France Amérique une énergie cynétique au service de d'art urbain?" (thesis, Institut d'urbanisme de Paris, 1988), 48.
 20. Gréber, *Plan for the National Capital*, 1. The original telegram is on display in the lobby of the National Capital Commission planning offices, Ottawa.
 21. Canada Privy Council order #P.C. 5624, August 15, 1945.
 22. National Film Board short films include *Ottawa: Today and Tomorrow* (1951, 10 min., NFB #113C0151 056); *Planning Canada's National Capital* (1949, 21 min., NFB #106B 0149 057); *A Capital Plan* (1949, 11 min., NFB #106C 0149 035). Examples of Gréber's speeches and radio talks include "Conference by Mr. J. Gréber, Chateau Laurier, under the Auspices of La Société d'Études et de Conférences d'Ottawa," November 14, 1948; "Address Given at a Luncheon in Honour of the National Capital Plan Given by His Excellency Francisque Gay, Ambassador of France," November 25, 1948; "Address Given to the Ontario Citizens' Planning Conference, Convocation Hall, Toronto University, under the Auspices of the Community Planning Association of Canada," October 15, 1948; "Address Presented by Gréber to the Standing Committee on Public Buildings and Grounds of the Senate," April 21, 1948; "CBC Radio Interview of Gréber Following Convention of the Ontario Branch of the Community Planning Association, Toronto," October 20, 1948; "Address Given to the Corporation of Land Surveyors of the Province of Quebec," April 19, 1950. All at the NCC Library, Ottawa.
 23. Canada Privy Council Order No. 5635, August 16, 1945.
 24. Jacques Gréber, *The Planning of a National Capital: Address Delivered by Mr. Jacques Gréber before the Honourable Members of the Senate and the House of Commons, October 25, 1945* (Ottawa: King's Printer). This speech was in many ways similar to Edward Bennett's 1914 speech to kick off the Federal Plan Commission; see Edward Bennett, "Some Aspects of City Planning, with General Reference to a Plan for Ottawa and Hull," address at the Normal School, Ottawa, Ontario, April 21, 1914,

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- EHB papers, Box 40; David Gordon, "Introducing a City Beautiful Plan for Canada's Capital: Edward Bennett's 1914 speech to the Canadian Club," *Planning History Studies* 12, no. 1–2 (December 1998): 3–51.
25. Patrick Geddes, *Cities in Evolution: An Introduction to the Town Planning Movement and to the Study of Civics* (1915; reprint, London: Williams and Norgate, 1949).
 26. Gréber, *Plan for the National Capital*, 81.
 27. E. L. Cousins, the engineer for the 1915 plan, was an NCPC member and chaired the railway committee. Gréber, *Plan for the National Capital*, 13.
 28. Jacques Gréber, *Plan for the National Capital: Preliminary Report* (Ottawa: King's Printer, 1948).
 29. NFB films, op. cit.
 30. "Ottawa: A National Responsibility" (editorial), *Calgary Herald*, April 17, 1954; and "A National Responsibility" (editorial), *Ottawa Journal*, April 21, 1954.
 31. King's diary noted his concern for the national capital plan, WLMK diary, May 25, 1948.
 32. Although printed towards the end of 1950, the plan was not tabled in the House of Commons until May 22, 1951. Federal District Commission, *Brief Submitted to the Joint Committee of the Senate and House of Commons*, Ottawa, March 1956, 18. English and French versions were tabled at the same time.
 33. Office decentralization was also promoted for civil defence against bombing, although this argument disappeared after the power of the hydrogen bomb was understood. See FDC, *Brief Submitted to the Joint Committee*, 44.
 34. See Phil Jenkins, *An Acre of Time: The Enduring Value of Place* (Toronto: Macfarlane Walter & Ross, 1996). Peter Linkletter, *Redevelopment in a Jurisdictional Swamp: A Case Study of the LeBreton Flats* (master's report, School of Urban and Regional Planning, Queen's University, Kingston, 1997).
 35. Perry 1929; Stein 1949/56; See Sewell, John, *The Shape of the City*, chap. 2–3 (Toronto: University of Toronto Press, 1993), for discussion of how the neighbourhood unit was adopted in Canada.
 36. Gréber, *Plan for the National Capital*, plate 28.
 37. Gréber did design one model neighbourhood at the request of the Village of Pointe-Gatineau. Jacques Gréber, *Plan for the National Capital: General Report* (Ottawa: National Capital Planning Service, 1950); *Idem*, *Plan for the National Capital: Atlas*, figures 147 & 148, p. 202. The plan was partly implemented with a main street named Gréber Boulevard.
 38. Howard Ebenezer, *Tomorrow! A Peaceful Path to Real Reform* (London: Swan Sonnenschein, 1898), diagram 7; See also Peter Hall and Colin Ward, *Sociable Cities: The Legacy of Ebenezer Howard* (Chichester, UK: Wiley, 1998) for a review of how this structure is returning in current British and American planning.
 39. P. Abercrombie, *Greater London Plan* (London, HMSO, 1945); Gréber visited Abercrombie in London after several of his Ottawa trips.
 40. WLMK diary March 29, 1946; "Investigation Launched into Hull Fire," *Ottawa Evening Citizen*, March 30, 1946, 1, 14, 15.
 41. José L. Sert, *Can Our Cities Survive?* (Cambridge, MA: Harvard University Press, 1942), 246–9. This "Town Planning Chart" was developed at the Fourth C.I.A.M. Congress, Athens, 1933.
 42. Federal District Commission by-law no. 28, March 8, 1946.
 43. NFB short films, op. cit., Gréber interviews, op. cit.
 44. "Ottawa: A National Responsibility" (editorial), *Calgary Herald*, April 17, 1954; "Quebecers See Famed Master Plan of Future Ottawa for First Time," *Quebec Chronicle Telegraph*, November 17, 1949; "Comment Ottawa deviendra la plus belle capitale," *La Tribune, Sherbrooke*, November 21, 1949; "City Planning Exhibit in Sherbrooke Today," *Montreal Gazette*, November 25, 1950; John G. Diefenbaker, "Acquisition of Land to Establish a Green Belt around the Nation's Capital," *Community Planning Association of Canada* 8, no. 3 (September 1958): 78–9.
 45. Joint Committee of the Senate and the House of Commons, *Proceedings of the Joint Committee of the Senate and the House of Commons Appointed to Review the Special Problems Arising out of the Location of the Seat of Parliament in the City of Ottawa, Final Report, August 1, 1944* (Ottawa: King's Printer, 1944); City of Ottawa Submission, *Papers and Proceedings of the Joint Committee of the Senate and House of Commons Appointed to Review and Report upon the Progress and Programs of the FDC in Developing and Implementing the Plan of the National Capital* (Ottawa: Queen's Printer, 1956).
 46. See *Report of the Federal Plan Commission in a General Plan for the Cities of Ottawa and Hull* (Ottawa: Federal Planning Commission, 1915), 13; Noulan Cauchon, "A Federal District Plan for Ottawa," *Journal of the Town Planning Institute of Canada* 1, no. 9 (1922): 3–6; Carleton Ketchum, *Federal District Capital* (Ottawa, n.p., 1939); D. C. Rowat, "The Proposal for a Federal Capital Territory for Canada's Capital," in *The Confederation Challenge*, ed. H. I. Macdonald (Toronto: Queen's Printer, Ontario Advisory Commission on Confederation Background Papers, 1966), 216–81. The electors of Ottawa voted 7335 to 2942 in favour of creating a federal district in 1912; see "Federal District—Town Planning," *Ottawa Citizen*, March 23, 1912; file #34: RLB, vol. 133, OCA 29, pp. 70623–32; but Hull refused to put it to the ballot.
 47. Hull city council refused to pay its share of the Holt Commission's expenses, OIC papers, File 142-1. The major regional French language newspaper *Le Droit* continuously opposed a federal district. For a detailed review of the federal district issue, see Aidan Carter, "Planning a 'Capital Worthy of the Nation': The Federal District Controversy and the Planning of the Canadian Capital" (master's thesis, School of Urban and Regional Planning, Queen's University, 2001).
 48. WLMK speech to House of Commons, April 21, 1944, *Hansard*, 234–40; F. Bronson (FDC chair) brief to the 1944 Committee, 70; Nationalist groups in Hull reacted with inflammatory language; Western Québec Chamber of Commerce brief to the 1944 committee; St. Jean Baptiste Society brief, 1944 committee.
 49. Letter from Joseph Jolicoeur, managing-director of *Le Progrès de Hull*, to Mackenzie King, February 6, 1946; letter from King to Jolicoeur, February 9, 1946, King papers vol. 464, file 0-25-2(A).
 50. Gréber; Fiset speeches; Ottawa Submission, *Papers and Proceedings of the Joint Committee*, 1956; *Proceedings of the Joint Committee of the Senate and of the House of Commons on the National Capital Region* (Ottawa: Queen's Printer, 1975); D. Rowat, "Proposal for a Federal Capital Territory"; D. H. Fullerton, *The Capital of Canada: How Should It Be Governed? Special Study on the National Capital* (Ottawa: Information Canada, 1974).
 51. Ottawa Submission, *Papers and Proceedings of the Joint Committee*, 1956.
 52. Ottawa Submission, *Papers and Proceedings of the Joint Committee*, 1956. The Greenbelt boundary moved outward in the final versions of the plan, leaving pockets of Gloucester and Nepean townships in the urban area.
 53. See D. Aubrey Moodie brief to the 1956 Committee, 557; "Nepean Bylaw Not to Assist in Greenbelt," *Ottawa Citizen*, April 30, 1955, 17; "Greenbelt Non-existent for Nepean Councillors," *Ottawa Citizen*, July 29, 1955, 2. "Gloucester Councillors Rap 'Secret' Greenbelt Policy," *Ottawa Citizen*, August 15, 1955, 1.
 54. Ottawa Submission, *Papers and Proceedings of the Joint Committee*, 1956; Diefenbaker, "Acquisition of Land to Establish a Green Belt."
 55. WLMK diary, November 15, 1948.

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56. The Department of Public Works continued its role as the client and lessor of federal buildings; see Janet Wright, *Crown Assets: The Architecture of the Department of Public Works: 1867–1967* (Toronto: University of Toronto Press, 1997).
57. The provincial government built the expressway and paid for most of its capital cost.
58. FDC, *Brief Submitted to the Joint Committee*, Appendices C, D, and E, 2–94; 1956 Joint Committee final report, 1055.
59. NCC 1969–70 Annual Report, Appendix “NCC Expenditures from April 1, 1947, to March 1970.”
60. The Green Island site was provided by the FDC, replacing a sawmill and industrial buildings.
61. 1950 plan, figures 66, 67; Wright, *Crown Assets*.
62. Robert W. Collier, *Contemporary Cathedrals* (Montreal: Harvest House, 1975); J. Lorimer, *The Developers* (Toronto: James Lorimer and Co., 1976), 19–24.
63. City of Hull, submission to the 1944 and 1956 committees.
64. National Capital Commission, *Confederation Boulevard Master Plan* (Ottawa: NCC, 1990).
65. The NIMBY protests of the 1970s may have had a more environmentally sustainable outcome, since the expressway corridors now support the NCC’s extensive bikeway system and some have become links in the regional busway network.
66. Gréber, *Plan for the National Capital*, 261–4; WLMK teletype message from Washington, D.C., March 30, 1948, MG 26 J2 vol. 463 file 0-25.
67. Todd letter to WLMK, July 15, 1937; Letter from Edwin Kay to WLMK, re: The Appointment of a Member of the Canadian Society of Landscape Architects, January 9th, 1937; Anonymous, “Behind the Scaffolding: A Critical Preview of Official Architecture in Ottawa,” *Canadian Art* 8, no. 2 (1950): 72.
68. Jacques Gréber, radio interview following convention of the Ontario branch of the Community Planning Association, Toronto, October 20, 1948.
69. Anonymous, “Behind the Scaffolding,” 72–74; R. C. Hale and H. A. Elarth, “Architectural Competitions: Can They Help Us Obtain Better Public Buildings?” *Canadian Art* 8, no. 3 (spring 1950): 120–1; Alex Colville, “Deplores the Gap Existing between Architects and the Public,” *Canadian Art* 8 no. 3 (spring 1950): 121–2.
70. Harold Spence-Sales, “The Preliminary Report on the Plan for the National Capital of Canada: A Review,” *Layout for Living* (Ottawa: Community Planning Association of Canada, 1949), 3.
71. Ibid.
72. Ibid., 7.
73. Blumenfeld immigrated to Canada in 1955, after a distinguished European career and a brush with McCarthyism in Philadelphia. See Hans Blumenfeld, *Life Begins at 65: The Not Entirely Candid Autobiography of a Drifter* (Toronto: University of Toronto Press, 1987); “Glories and Miseries of a Master Plan,” *Architecture Canada*, April 1967, 32–5.
74. Ibid., 35.
75. Ibid.
76. National Capital Commission, *Tomorrow’s Capital, La Capitale de demain* (Ottawa: National Capital Commission, 1974); Regional Municipality of Ottawa-Carleton, *Official Plan*, 1974.
77. Linkletter, *Redevelopment in a Jurisdictional Swamp*; Jenkins, *An Acre of Time*.
78. Jacques Gréber, “Report on City Improvements,” sheets 2, 9, 10m and 11, May–November 1937, NMC 88267; 93467–69; Holt 1915 op. cit., drawing 6 by E. H. Bennett and E. L. Cousins.
79. Gréber 1950 *Report*, op. cit. Figures 144, 145, 146.
80. Holt, *Report of the Federal Commission*, drawing 17 by E. H. Bennett; Gréber, *Plan*, 249–54.
81. This iconic view was printed on the Canadian one-dollar bill until it was replaced by a coin.
82. WLMK speech, *Hansard*, April 24, 1928, 2435; The United States consulate was also interested in the Metcalfe Street proposal, to give a more imposing site for its new embassy on Wellington Street: U.S. Ambassador Philips to King, February 14, and June 5, 1928. Harold Fisher to King, April 23, 1928, Baldwin (King’s secretary) to W. Philips (U.S. ambassador), June 6, 1928, WLMK papers reel 3266, 129478–9; 132632; National Capital Commission, *Plan for Canada’s Capital: A Plan for Federal Lands in the National Capital Region (Draft)*, Ottawa, NCC June 1998, 37–8.
83. Holt, *Report of the Federal Commission*, 109–12, although Bennett did regret the lack of an axial approach; Gréber, *Plan for the National Capital*, 179–80.
84. Gréber designed the vista as the ceremonial entrance to the city from Montreal; see Gréber, *Plan for the National Capital*, figure 133. A portion of this view is present from the Nicholas Street exit of the Queensway, but the best view is from pleasure boat or ice-skating on the Rideau Canal.
85. S. V. Ward, “Re-examining the International Diffusion of Planning,” in *Urban Planning in a Changing World: The Twentieth Century Experience*, ed. R. Freestone (London: Spon, 2001).
86. Gournay paper in this issue of *Urban History Review*.
87. E. Fiset and J. Gréber, *Projet d’aménagement de Québec et de sa région: Rapport* (Québec, QC: Commission d’Urbanisme et de Conservation de Québec, 1956).
88. Colette Felenbok, “1910–1920 : L’avenement d’un architecte urbaniste franco-américain,” *Les Gréber : Une dynastie, des artistes*. Musée départemental de l’Oise, catalogue de l’exposition, 1993, 329–41.
89. Mackenzie King was adamant about his preferences for classical architecture, waxing eloquent over the National Research Council laboratories disliked by Gréber. See WLMK diaries; Gréber, *Plan for the National Capital*, figure 67.
90. Pierre Lavedan, *La Vie Urbaine*, avril–jun 1962, 160 (no title); *Idem*, “Jacques Gréber : 1882–1962,” *La Vie Urbaine*, janvier–mars 1963, 1–14.
91. André Lortie, “Jacques Gréber urbaniste,” *Les Gréber : Une dynastie, des artistes*. Musée départemental de l’Oise, catalogue de l’exposition, 1993, 351–67; *Idem*, *Jacques Gréber (1882–1962) et L’Urbanisme le temps et l’espace de la ville* (Ph.D. thesis, Université Paris XII, 1997).
92. Although Gréber insisted from the moment of his arrival in Canada that he did not want to create a “Gréber Plan.” See letter from Robertson to King, October 5, 1945, WLMK papers, R-3421; Gréber, *The Planning of a National Capital*.
93. Gerald Hodge, *Planning Canadian Communities: An Introduction to the Principles, Practice, and Participants*, 3d ed. (Scarborough: International Thomson Publishing, 1998); Jeanne Wolfe, “Our Common Past: An Interpretation of Canadian Planning History,” *Plan Canada*, July 1994, 12–34.
94. The Town Planning Institute of Canada was inactive from 1931 to 1952 after most of the pioneers like Cauchon, Meredith, and Thomas Adams had died or moved on to other projects. See: NC papers 1930+; CP Meredith papers; National Archives of Canada, MG 29 E62; Michael Simpson, *Thomas Adams and the Modern Planning Movement: Britain, Canada, and the United States, 1900–1940* (London: Mansell, 1985); Eric Thrift, NCC general manager 1960–70, was TPIC president 1953–4 and 1961–2. See ET papers, Queen’s University.