

A History of Commissions Threads of An Ottawa Planning History

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Résumé de l'article

Les premiers efforts de planification urbaine à Ottawa ont eu comme résultat un mélange architectural hétéroclite. On retrouve encore des dossiers portant sur des propositions qui n'ont pour la plupart pas été réalisées et qui avaient pour but de promouvoir une image symbolique de l'identité nationale. L'un après l'autre, divers organismes fédéraux et municipaux ont tenté, avec des résultats variables, d'améliorer l'aspect et l'attrait d'Ottawa. Le départ du planificateur anglais Thomas Adams de la Federal Commission of Conservation et la mort subséquente de cet organisme ont représenté, vers la fin des années 20, le creux de la vague sur le plan de la recherche de stratégies de planification globale. Tout au long de sa carrière, Noulon Cauchon, premier directeur de la *Ottawa Town Planning Commission*, a cherché à intégrer la notion de planification au développement de la ville. Certaines de ses propositions, qui n'ont pas obtenu tout le crédit qu'elles méritaient, offrent beaucoup de similitude avec les travaux de planification entrepris par MacKenzie King et Jacques Greber avant la Deuxième guerre mondiale. L'héritage de Cauchon nous est parvenu grâce à des projets qui ont été intégrés aux travaux de planification fédéraux d'après-guerre.

A History of Commissions: Threads of An Ottawa Planning History

Ken Hillis

Abstract

Early planning in Ottawa takes the form of a piece-meal architectural admixture. On paper there remains a series of largely unrealized proposals designed to promote an image symbolic of national identity. Successive federal and municipal agencies worked to various degrees of success to augment Ottawa's appearance and amenity. British planner Thomas Adams' departure from, and the subsequent demise of, the Federal Commission of Conservation in the early 1920's marked a low point in efforts to evolve comprehensive planning strategies. The career of Noulan Cauchon, first head of the Ottawa Town Planning Commission, aimed to keep the notion of planning alive in the city. Certain of his little-acknowledged proposals bear remarkable similarity to the pre-W.W. II planning efforts of MacKenzie King and Jacques Greber. Cauchon's legacy endures in proposals which appear to have been incorporated into federal planning activities during the post-war era.

Recent years have witnessed a re-evaluation of the career of MacKenzie King. In part, this has involved investigating his role as shaper of the physical image of Ottawa, the national capital. While true that King was responsible for "forcing the issue" of long-standing debate about planning the national capital region, his actions were not taken in a vacuum. This paper traces aspects of the earlier planning history of Ottawa; of other individuals, agencies and ideas that also contributed in significant measure to the eventual built form of the capital.

In 1884, Wilfrid Laurier had commented: "I would not wish to say anything disparaging of the capital, but it is hard to say anything good of it. Ottawa is not a handsome city and does not appear to be destined to become one either."¹ By 1895, speaking to the Ottawa Reform Association, Laurier's stance had shifted:

... it shall be my pleasure ... to make the city of Ottawa the centre of the intellectual development of this country and the Washington of the North.²

1896 marked the beginning of the economic upswing following the "Great Depression" of 1873-1896. In this year, flush with electoral success, Laurier repeated his Washington of the North remarks at a rally at Cartier Square. His speech received wide coverage, and Ottawa's civic elite believed that physical improvements befitting a capital were at last at hand. To date, for example, few principal thoroughfares had been paved. A committee was struck by City Council to investigate the relationships of other capitals in the British Empire to their respective governments. It presented its findings in the form of a petition to Laurier in 1897.

This report detailed the City's fiscal difficulty, brought on by the Crown's exemp-



***Figure 1: Looking North Along the Driveway, from Fifth Avenue
From: Ottawa Improvement Commission. The Capital of Canada, Parks and Driveways,
1899-1925, 1925 (Courtesy National Archives of Canada/C10847).***

Résumé

Les premiers efforts de planification urbaine à Ottawa ont eu comme résultat un mélange architectural hétéroclite. On retrouve encore des dossiers portant sur des propositions qui n'ont pour la plupart pas été réalisées et qui avaient pour but de promouvoir une image symbolique de l'identité nationale. L'un après l'autre, divers organismes fédéraux et municipaux ont tenté, avec des résultats variables, d'améliorer l'aspect et l'attrait d'Ottawa. Le départ du planificateur anglais Thomas Adams de la Federal Commission of Conservation et la mort subséquente de cet organisme ont représenté, vers la fin des années 20, le creux de la vague sur le plan de la recherche de stratégies de planification globale. Tout au long de sa carrière, Noulan Cauchon, premier directeur de la Ottawa Town Planning Commission, a cherché à intégrer la notion de planification au développement de la ville. Certaines de ses propositions, qui n'ont pas obtenu tout le crédit qu'elles méritaient, offrent beaucoup de similitude avec les travaux de planification entrepris par MacKenzie King et Jacques Greber avant la Deuxième guerre mondiale. L'héritage de Cauchon nous est parvenu grâce à des projets qui ont été intégrés aux travaux de planification fédéraux d'après-guerre.

tion from property taxes under terms of the British North America Act. As the Union and then Federal governments had continued to grow since inception in 1859, the City faced a dilemma. New government buildings such as the Southern Block (Langevin Building 1883-89³) removed land from private ownership and municipal taxation. The Langevin being but one of a number of new federal properties, the tax base had not kept pace with demands on the municipal purse. Moreover, new development meant additional municipal outlays for fire protection, water and sewer provisions. Although the Dominion government had begun to pay the City for water supply in 1877, and in 1883 and 1885 had assumed maintenance costs of certain bridges and roads fronting its property,⁴ by 1897 civic authorities argued these contributions were inadequate.

The 1899 formation of the Ottawa Improvement Commission (OIC) may be viewed as part of a sympathetic federal response to these concerns, as well as an adroit manoeuvre to avoid its total share of infrastructure costs.⁵ The Commission was authorized to acquire land in the Ottawa area to create and maintain parks, streets and driveways. Mandated to cooperate with the City in producing physical embellishments befitting a capital, at first the OIC was governed by four unpaid commissioners: three federally and one municipally appointed. No professional planning staff was contemplated. An initial annual budget of \$60,000 was increased by increments until on July 7, 1919 the amount was boosted to \$125,000 annually for the decade to follow.⁶

Laurier was eager that the OIC attend to the west bank of the Rideau Canal. This feature afforded a first impression to those arriving at the Capital, the railway yards and station occupying the Canal's east bank. The site lay cluttered with

warehouses and lumber yards. From Maria (Laurier Av.) southward, these were acquired and razed, and construction of a scenic "Driveway" was begun. Concurrently, management of Rockcliffe Park, lying to the City's north-east, was assumed from the municipality.⁷

Todd Report

Limitations imposed by lack of professional staff quickly became apparent. Vice-regal lobbying of J. Israel Tarte, Minister of Public Works, by Lord and Lady Aberdeen to "get a plan" also may have hastened the decision to obtain expert advice.⁸ Frederick G. Todd, noted Montreal landscape architect, was engaged by the OIC to devise a master plan. His 1903 report is the first systematic analysis of certain existing situations and makes specific and staged recommendations for improvements to the Capital area.⁹

Walter Van Nus has suggested that architects of the City Beautiful movement, whose origins are associated with the 1893 Chicago World's Fair, were preoccupied with three principles of urban aesthetics: coherence, visual variety and civic grandeur.¹⁰ The "Todd Report" fits this prescription in its goal to unify the image of Ottawa through a series of grand parkways, natural settings and open urban vistas, and is one example of the City Beautiful movement's influence on late Victorian planning. Todd noted Laurier's "Washington of the North" remarks, but cautioned as to the differences between the two capitals—the principal one being that Washington had proceeded from a plan. Mindful of the then paramount role of industry and its siting to the Ottawa economy, Todd proposed a park system hierarchy: Large Natural Parks, Suburban Parks, Boulevards and Parkways, Waterway Parks, City Parks, Squares and Playgrounds.



Figure 2: Looking East Along Laurier Avenue, from Elgin Street
From: Ottawa Improvement Commission. The Capital of Canada, Driveway Improvements
(Courtesy National Archives of Canada/C139364).

He sketched what is today known as Gatineau Park, and outlined the scenic Parkway that now traverses the 88,000 acre park. Foreseeing a 1952 population of 300,000, he recommended land “banking” in advance of need, stating that infrastructure could be improved as monies and demand permitted.

His examination of OIC public works at Rockliffe Park led him to recommend adjacent land acquisitions to greatly increase the park’s size. His proposed cliffside Parkway still forms part of that park’s road system.

On the outskirts of Ottawa and Hull, Todd suggested four typically suburban parks be created for public enjoyment of their natural open spaces. He believed these parks, linked by landscaped parkways, in time would provide the inner-city amenities the expanding city would require. Implemented to varying degrees, these facilities are all to be found roughly where Todd first proposed. Two cases in point: *Chaudiere Park* forms part of the ribbon of green along the Ottawa shoreline; while the *Chaudiere Parkway* (Ottawa River Parkway) runs from the west of the city, past Remic Rapids, to terminate at the downtown core.

Todd understood the dynamics of competing economic uses for land and recommended that the OIC:

... have prepared as soon as possible a general out-line plan for your park system and also carefully studied plans for the suburban and city parks.¹¹

Although not a formal land-use plan, Todd’s Report called for the comprehensive planning policy vital for its own implementation. In so doing, it recognized its limitations as an advisory plan. Nevertheless, it remains the first planning

document for the Ottawa area, its stamp embedded on the capital's future planning studies and built forms.

Laurier's influence on Ottawa's appearance was not limited to his support for the OIC. He was involved directly in securing construction of the Chateau Laurier hotel. The absence of a major first-class hostelry, and the resulting perception of inadequate accommodation for government officials and visitors, had been seen to plague official life for many years. The federal government previously had taken over Major's Hill Park from the City, and in the early 1900's gave the Canada and Atlantic Railway, later merged with the Grand Trunk Railway, that portion fronting onto Rideau Street for construction of the hotel. Wide criticism followed.¹² The City saw itself as having forfeited a potentially lucrative transaction. Commenting on the hotel in 1907, *Canadian Engineer* stated its construction was due in large measure to Laurier's untiring zeal to see it built. The Grand Trunk also was building a station across the street. The two buildings, whose design was credited to the New York firm of Bradford, Lee and Gilbert, complemented each other and were:

In keeping with the Parliament buildings ... The station and hotel ... will all help towards the future realization of "the city beautiful."¹³

The integrated construction of these facilities greatly enhanced Connaught Square, and is an early example of informal federal coordination of improved public facilities.¹⁴ The Chateau Laurier in particular was to exert great influence over King, and to inspire the "Chateau" style of architecture.¹⁵

Towards a Federal Plan

By 1910 the OIC had reached a crisis point. While its park and "Driveway" con-

struction garnered praise from many quarters, the Ontario Association of Architects, and the Royal Architectural Institute of Canada criticized the workmanship of ornamental structures erected as part of Driveway embellishments (e.g., Figure 1). Worse still, engineering methods and construction materials of the Lady Grey Drive roadbed—a project recommended by Todd—were alleged to be sub-standard.¹⁶

Referring to the OIC's implementation of Todd, Ottawa architect Major C. Powell Meredith stated in 1910 that:

... it was too big apparently for the Commission to grasp, and it was consequently pigeon-holed.¹⁷

Coincident with this period of criticism, the Commission's budget was increased substantially. The architects' attacks, presented in a brief to the newly-elected Borden government, influenced creation of a Federal Planning Commission (the Holt Commission) in 1913.¹⁸ Before reviewing Holt, the reforming activities of the federal Commission of Conservation (COC), and the typhoid outbreaks of 1911-1912 also merit brief examinations for a more complete understanding of the 1913 decision to commission a Federal Plan.

Commission of Conservation

The COC was formed following the 1908 North American National Conference on Conservation hosted in Washington by Theodore Roosevelt. The agenda posited an interventionist role for government, with the private sector recognizing its responsibilities and accepting greater state controls. The Canadian response is one of the more interesting experiments in the history of the Federal apparatus.

Created February 18, 1909, the Commission was responsible solely to Parliament as a whole. Even then, it reported only

"from time to time," through the Minister of Agriculture, though not responsible to him in any capacity. In return for this remarkable degree of political independence, its powers were limited to studying, observing and recommending on issues of concern to itself, as defined by the then-current "doctrine of usefulness." With Sir Clifford Sifton as Chair came a voice with a great deal of "advisory" capacity. One of the strongest politicians of his day, and credited as architect of Laurier's immigration and western settlement policies, Sifton's was a patronage award. A nationalist, he broke with Laurier in 1911 over the Reciprocity issue, and worked to elect Borden's Conservatives. Hence he remained Chair despite the change in government. An individual of great personal and political power, Sifton accounts in large measure for the Commission's virtually free hand in promoting its agenda for change during the 1910's, as it "tried to deal with all the problems of the new urban-industrial order."¹⁹

He favoured a decentralized organization. Seven committees were empowered to meet as required. The Public Health Committee's Adviser, Dr. Charles Hodgetts, had served as Medical Inspector for the Ontario Board of Health and was, according to the Ottawa Free Press, "the foremost public health authority in Canada,"²⁰ holding firm beliefs that were reflected in the Commission's 1912 Annual Report:

... the importance of the town planning and housing question commands a foremost place, not only is it necessary from the purely health standpoint, but it is of economic importance that the physical standard of our people be of the highest character.²¹

The COC was concerned about the urban housing shortages then emerging as a result of rapid immigration, a boom-

ing economy, and inflated land values, and investigated overseas planning practices as potential remedies for emerging urban social ills. In this way the Commission justified inclusion of planning within its mandate.²² In 1912 Hodgetts organized a national lobby to have the Dominion hire British planner Thomas Adams. Regarded as a leading authority of his day, Adams had been well received at a 1911 planning conference at Philadelphia.²³ His nationality would have been an asset. Hodgetts was steeped in the British approach which stressed health, housing and open space. Adams embodied a planning philosophy already accepted by the Commission before his arrival, as witnessed by its organization of the first National Planning Conference in Toronto in May 1914.

Direct intervention by Robert Borden eventually led to Adam's July 1914 acceptance of the position of Federal Town Planning Adviser. He is important in legitimating planning in Ottawa, and his contribution is examined later in this paper. That the COC lobbied diligently for his procurement underscores a federal determination to address issues of land use and housing then facing the Dominion. Borden's support for planning initiatives at this time—as witnessed by his involvement in securing Adams' services, and his appointment of the Holt Commission by Order-in-Council dated September 12, 1913—appears strong. A more proactive climate fostered by the COC's investigations also may have spurred the government into a fundamental planning assessment of the capital.

Two outbreaks of typhoid in Ottawa within an eighteen month period during 1911-1912 also ought be considered as furthering creation of the Federal Plan Commission (FPC), particularly in light of Hodgett's membership on the 1909 Ontario Commission to investigate water supply and sewerage disposal at

Ottawa. After analyzing the epidemics,²⁴ the COC then invited a public health specialist from New York City to recommend ways to avoid repetition of the avoidable tragedy. His graphic report virtually accused the responsible authorities of murder.²⁵ Given the combined number of fatalities—174 dead and 2,365 ill—and the geographically-even affliction within the City, as the disease was spread through the water-supply system, there can be little doubt federal officials were affected personally. The impact of the catastrophe, despite the 1913 introduction of chlorinated water, might have led federal powers to conclude that the future of Ottawa, and their own personal safety, required a planning effort that superseded the abilities of complacent and procrastinating municipal politicians. Earlier outbreaks of the disease had been confined to poorer wards of the City and had been met with indifference by city fathers. Yet this time, again, “despite a proven crisis, reformers met strong resistance from an orthodox political and business community that over two decades had maintained an indifferent record on health questions.”²⁶

Finally, Ottawa's pre-war boom coincided with the peak of City Beautiful influence. Though not widely imported into Canada, there being few cities of sufficient wealth to match the grandiosity of the approach, the fashion of doing a grand plan cannot have been lost on the Dominion government, as references to the City Beautiful influence on the Chateau Laurier Hotel and railway station imply. The City Beautiful also would have appealed to a Tory concern at this time “with the public image implicit in all public architecture.”²⁷

Holt Commission

The FPC board, chaired by Herbert Holt, Chairman of the Bank of Montreal, comprised six members: two Montrealers,

two Torontonians and the Mayors of Ottawa and Hull. Its terms of reference required it to plan comprehensively the future growth of Ottawa, Hull and environs, with specific attention paid to parks, boulevards, public buildings, and transportation.²⁸

The FPC engaged Chicago town planner E.H. Bennett, prominent due to his work on the Washington and Chicago plans. A Canadian engineering staff was headed by A.E.K. Bunnell. E.L. Cousins of Toronto was consulting engineer. Noulan Cauchon supervised survey mapping.

The Report's central recommendation was creation of a Federal District, to include Hull, Ottawa and environs. Within it, facilities necessary for a “dignified” and “beautiful” capital would be the fiscal responsibility of the entire country. In proposing a national context for responsibility, this plan built upon a foundation established in the original rationale for the OIC.

Having laid a political framework, Bennett outlined a series of built-form planning recommendations. Examined today, they profess much of the folly and grandeur of the full-blown City Beautiful schemes at which he excelled. So sweeping was the purview that bringing the Plan to fruition would have required infrastructural rebuilding of the centre city. Figure 3 illustrates the scope and grandeur which so clearly imprint this Plan with City Beautiful credentials.

Unlike some City Beautiful advocates, Bennett also examined urban services, suggesting ways to achieve greater efficiency. To this end, this plan has also been labelled an example of the emerging City Efficient movement—characterized by a desire to improve the working efficiency of the city.

By 1913 urban congestion at grade-level railway crossings was a serious concern. Holt recommended “a complete re-

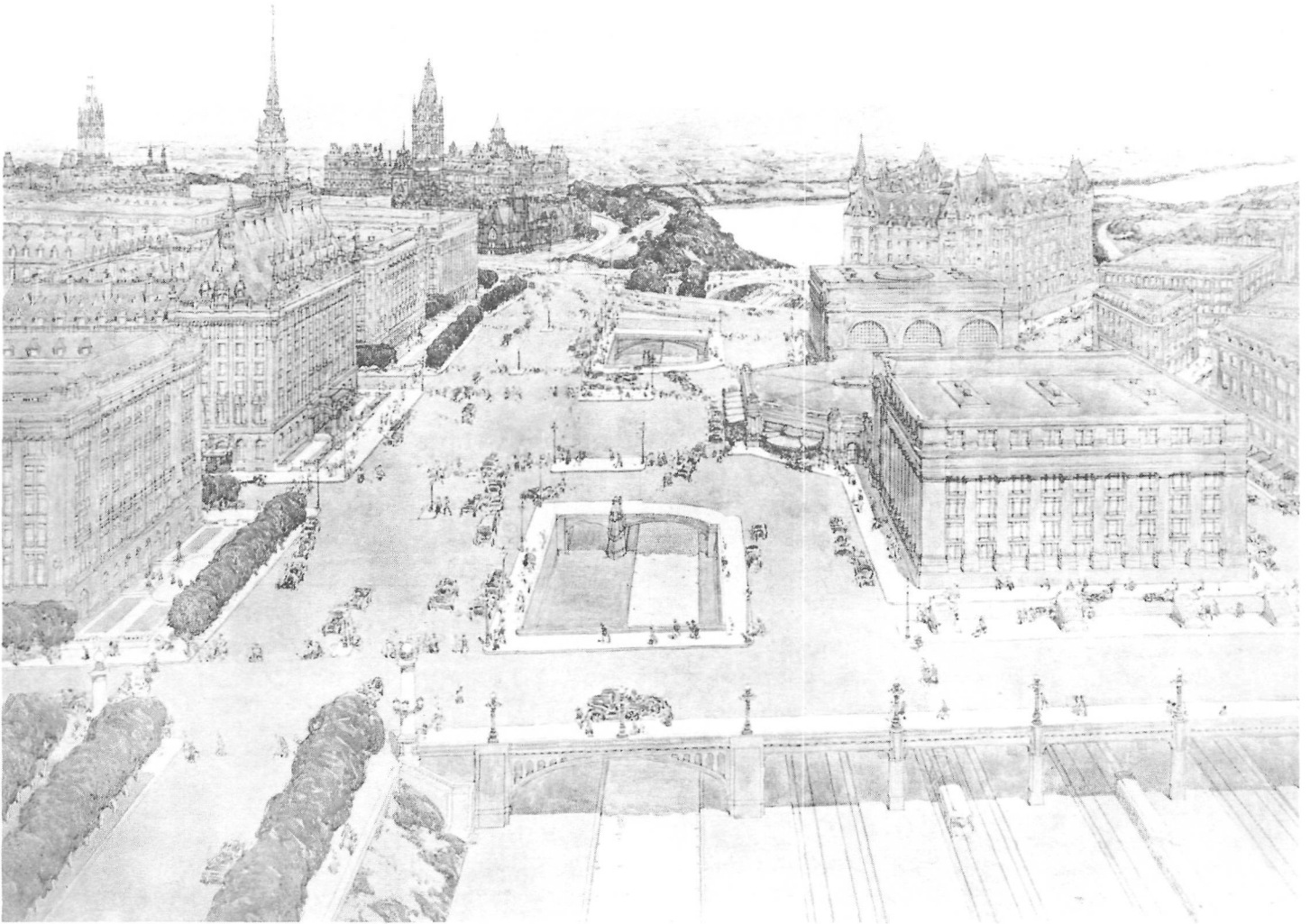


Figure 3: Illustration of central plaza. Report of the Federal Plan Commission (Courtesy National Archives of Canada/C139365).

arrangement" of rail rights-of-way be effected by a single agency, and that the Grand Trunk station become a Union Station linked by a tunnel under Wellington Street with lines to the City's west. To further this rationalization, Holt advised relocating industries from their many scattered sites to four industrial zones: one on the east side of town, another at Chaudiere Falls where much activity was already concentrated, and two in the Hull area.

The Federal Plan Report also proposed an eight-station street-car subway. Beginning at Sussex and Rideau, tunnels would have run westward to Bank Street, thence southerly to Laurier Avenue, with westward and southward legs along Sparks Street to Bronson, and down Elgin Street to Laurier Avenue.

Holt suggested Federal government building proceed in a rational decentralization westward along Wellington Street. Previously, much federal building had occurred along Sussex Drive. Some other improvements foreseen were a sewage treatment plant at Green's Creek (since built), an incinerator fed by a fleet of garbage-hauling streetcars, and a gas-works near Lees Avenue (now demolished).

Beyond the downtown core, the Plan advised rebuilding central Hull; the laying out of suburban streets in advance of development; and, coupled with enforced building regulations, the "district" control of new residential and manufacturing areas.

These recommendations promoted a more balanced population distribution, achieved through decentralized employment. Reduced congestion, and improved urban services were seen as public health objectives furthering compatibility between federal, municipal and private land uses.

The Great War, and Federal bailout of the bankrupt railways, consigned the sweeping Plan to virtual oblivion. That it was beyond Federal abilities is clear when the burden created by the 1916 burning of the Centre Block of Parliament is placed in context. The "mere" \$12,000,000 required for rebuilding was a main public works focus of the federal treasury for many years. The Holt Plan, with its many grand avenues and buildings, their turreted Chateau rooflines suggesting the architectural equal to any of the world's great cities, was the product of an expansionary era. It withered under the fiscal stringency imposed by the unbroken string of Federal deficits between 1914 to 1924.²⁹

Whether the Plan might have enjoyed partial implementation if war had not intervened, or Tory rule continued, is open to question. In 1939 C.J. Ketchum, former assistant to Noulan Cauchon (City of Ottawa Planning Director) and later to Jacques Greber commented: "Without question the recommendations of the Commission would, in part at least, have been acted upon long before this had the war not intervened ... " Charles Hope-Well, Mayor of Ottawa and Commission member, offered a different perspective: "We got a beautiful set of plans which would have been fine if we had started to carry them out a hundred years ago. An ideal plan was made, but an utterly impossible one."³⁰

Van Nus has argued that by the end of 1915, critical observers of town planning had concluded a choice had to be made between City Beautiful, and suburban regulation and planning. The latter was seen as a better way to house the poor. After 1910, due to phenomenal urban population increases, and private capital's inability to satisfy housing demand,³¹ social reformers came to view the housing shortage as the country's greatest urban challenge. Criticizing a

1914 lecture on the Federal Plan delivered by Bennett, Noulan Cauchon stated:

... smooth with accepted generalities, [it] gave no inkling that the Commission was seized with the fundamentals of ... town planning—the ethics of shelter.³²

The comments, remarkable considering Cauchon's duties as Plan Surveyor, echo a growing criticism of monumental planning. In fact, the federal government was the first to disregard the Plan's recommendations. In constructing the Hunter Building, on O'Connor Street south of Parliament Hill, it ignored recommendations to build westward along Wellington St.

The Plan addressed sewage treatment but its silence about a safe water supply was noted in one 1914 editorial alluding to the typhoid outbreaks:

... and may we add the hope that when—in 1934—the visitor to Ottawa has been duly impressed with the dignity and importance of Canada's Capital, that he will be able to obtain a drink of pure water ...³³

By 1926, Cauchon, then the Town Planning Institute's guiding light, had come to believe the Federal Plan a mistake:

[It] has done us an immense amount of harm because it has suggested that the whole thing is impracticable. A plan ... is not imposed upon citizens from without.³⁴

In 1916 Thomas Adams, always a strong proponent of regulation, had had this to say about Holt:

Had the British method of preparing a town planning scheme been adopted, the plan and scheme to give it effect would have been prepared simultaneously, but the Federal Commission

adopted the simpler American method of preparing a plan and making a general report, leaving the detailed scheme and the financial considerations for subsequent consideration.³⁵

Although early 1920's COC publications on occasion mention the Federal Plan,³⁶ Adams' lack of opposition to its shelving is apparent. In 1932, following his return to England, he allowed that: "[the Plan] did not lead immediately to much in the way of statutory planning, but it influenced to a considerable extent the development of the Civic Centre and the location of Government buildings and semi-public structures."³⁷ However, after this brief entry, Adams promoted his own 1918 proposal for extending the Government Centre at Ottawa, failing to note similarities between his own and Holt's earlier proposal. Adams keenly had wanted a master plan for Ottawa, but one that embraced a social agenda at variance with the grandiosity of Bennett's outlook. Perhaps, as a former civil servant, he felt constrained from openly rebuffing the only attempt at comprehensive planning for Ottawa commissioned during his tenure there.

Shifting planning priorities within the COC, federal deficits, the dislocation of the post-war years, a change of government, and even the influenza pandemic³⁸ go far to explain the lack of enthusiasm for the Federal Plan at the time. However, as an early example of comprehensive planning, it remains "one of the outstanding state documents of Canadian history, and no subsequent capital planner has been able to ignore it."³⁹

After the Great War

The COC and Thomas Adams had continued to lobby and organize during the War. Adams' assistant was A.G. Dalzell, who along with C.J. Ketchum (Cauchon's

assistant) later worked with Greber at the National Capital Planning Committee.

A tireless promoter, Adams had launched the Civic Improvement League in 1916. At its inaugural conference, he described himself as a "central bureau for information." The League was a national lobby group, and at this conference the Governor-General urged it to promote the values of the Garden City movement. In effect, Adams as a Federal contractor organized pressure on the national government for a greater role for town planning.

As mentioned, housing was a priority for reformers at this time, and the COC's lobbying efforts are to be partially credited with the striking of an Ontario Housing Committee.⁴⁰ Legislation was enacted to permit lending \$2,000,000 to municipalities for housing construction. The Dominion then created a \$25,000,000 fund for similar purposes, with Adams directing the newly-minted Federal Housing Commission.⁴¹ In 1919, the COC's *Town Planning and Conservation of Life* reported that two 40-acre parcels had been secured through the Ontario Committee for the erection of houses in Ottawa.

One of these sites, a 22-acre lot purchased for \$66,000, offers the sole concrete instance of Adams' legacy in the capital area. He was the architect of Lindenlea, Ottawa's only garden suburb. Developed by the Ottawa Housing Commission, for whom Adams prepared the plans, building began in the fall of 1919. A year later sixty houses were ready, with contracts placed for fifty more.⁴² The suburb's curving streets and natural gradients recall Adams' Letchworth Garden City origins.

Justification for the Lindenlea involvement was offered by COC Secretary James White:

... assistance was given in preparing a plan for a housing development but merely for the purpose of making one object lesson in this kind of development.⁴³

In addition to providing a site for the educating example, Ottawa-as-location was expedient, close at hand, and provided easy access from the office. Yet even this nearby foray did not go as planned. Although the physical site was crafted as per Adams' specifications, the quality of housing of the city-sponsored project drew criticism:

... it is quite apparent that a mistake has been made in building a large number of houses of what is probably the least attractive type of house on the property.⁴⁴

These remarks, attributed to Cauchon, appear at a time of inflated building material costs, exacerbated by the War, and the announcement of the federal housing scheme. In 1920 such costs were 183.8% higher than in 1913 and partially explain the shortages and short-cuts that dogged the project.⁴⁵

Lindenlea was the last federal planning venture in the capital, other than the parks and parkway approach of the OIC, until MacKenzie King's 1927 announcement for redevelopment of Confederation Square and Elgin Boulevard. Shortly after Adams' Lindenlea involvement, the COC was dissolved, the political victim of its lifetime of independent action.

Adams' personal energy merits credit in assessing the Commission's influence. He alone authored one hundred and thirty-nine different Commission articles, pamphlets and books on planning during his Canadian stint.

Yet Lindenlea aside, his physical contribution to Ottawa's fabric is nonexistent.

Throughout his years as Town Planning Adviser, Adams called for the production of town plans and the introduction of planning acts in municipalities and provinces across the country. However, apart from the landscaping efforts of the OIC, by 1923 Ottawa was no closer to "getting a plan" than it had been in 1899, with improvements to the city's built form largely the result of a piece-meal, private sector approach.

Adams arrived with great fanfare, departing quietly in 1923 to work for the Regional Planning Association at New York. Lindenlea remains a desirable residential community with correspondingly upscale property values. It is ironic to consider that had Adams engaged in the kind of second-order "project" planning he decried, his influence on the capital might be more apparent today.

Noulan Cauchon: Ottawa Planner

Strong similarities exist between certain Ottawa schemes of Cauchon's, and certain collaborations of King and Greber. Greber's introduction to his 1950 *Plan for the National Capital* acknowledges Cauchon as "one of Canada's most outstanding town planners of international repute," stating that his work "has been most useful in the making of the new master plan, particularly his studies of the railway problem and of the proposed new bridge over the Rideau Canal."⁴⁶

As an early Canadian planner, Cauchon (1872-1935) was somewhat unique in being native-born. Many were American or British, attracted by commissions and returning home when these dried up. The son of Edouard Cauchon, first Speaker of the Federal Parliament and later Manitoba's first Lieutenant-Governor, Cauchon followed a career with the C.P.R., and in 1908 became Assistant Engineer with the Board of Railway Com-

missioners in Ottawa. By 1910 he was a consulting engineer.⁴⁷

He produced the FPC's detailed survey mapping, and after the Great War worked on a variety of planning projects, the most notable being at Hamilton, Ontario. Throughout, he maintained his Ottawa address. His belief that "Ottawa in fact should be our national school of town planning, a beacon to sociological betterment . . .,"⁴⁸ motivates his career, and echoes Laurier's 1893 call for the capital as a "centre for intellectual development."

In an effort to achieve partial implementation of the Holt Report, the City had attempted to secure town planning powers through private legislation, but had been refused at Queen's Park. Legislators there deleted a key phrase within existing legislation, having been persuaded that planning commissions should be advisory only and not usurp the power of municipal councils. The 1921 Ottawa Town Planning Commission (OTPC) was a municipal response to keep planning efforts alive. Ottawa was the first city in the Dominion to establish such a body. Cauchon was its first director. While earlier federal initiatives had sensitized the country and capital to the necessity of planning, when the impetus for reform abated in the early twenties, it was left to Cauchon to almost single-handedly preach the "gospel" of planning's reform potential.

The OTPC was created under the *Ontario Town Planning and Development Act* of 1918. Cauchon understood the limited scope of this legislation. An annual budget of \$10,000 also ensured the OTPC would exercise a largely advisory role. Cauchon, commenting on the precarious position of his Commission *vis-a-vis* the Ottawa Board of Control said: "Safety lies in convincing them." He has been called the honorary planning con-

sultant to the City. This reflects both his missionary commitment and independent financial situation. He retained his unpaid OTPC post until his death in 1935.

The advantages to Cauchon in so doing lay in the platform the OTPC afforded, and the ability to play off his twin roles as its director, and his senior positions (President in 1924-25) at the Town Planning Institute of Canada (TPIC). Formed in Ottawa in 1919, with support from Adams and the COC, the Institute promoted urban planning through propaganda, research, and maintenance of professional standards. With the COC's demise, the TPIC became the sole national planning voice, and its *Journal* a pulpit for Cauchon and friends. It is full of praise for the activities of the OTPC and the valiant efforts of one Mr. Noulan Cauchon. Yet Cauchon tried to use this position to effect, lobbying against federal planning inactivity, while simultaneously advocating greater comprehensive planning for Ottawa. For example, in 1921 the *Journal* criticized the OIC for failing to use the railway grade crossing fund to eliminate dangerous bottlenecks created by level crossings intersecting Commission Driveways.⁴⁹ As OTPC director, Cauchon lobbied federal and railway officials for line relocation and grade separations, even producing the required survey mapping. Congestion was worst along the C.N.R. (Grand Trunk) line which bisected north-south streets such as Elgin, Bank and Bronson. Here Cauchon enjoyed success, as the Chairman of the C.N.R. was sympathetic to his position. In 1927 Ottawa voters were asked to approve municipal debentures of \$350,000 to construct subways under this line.⁵⁰

Cauchon was a prolific writer, as a review of the *Journal* or *Canadian Engineer* reveals. His articles have a religious zeal. He would have needed faith to soldier through this bleak era for planning.

Former Ottawa Mayor Hopewell had stated, with reference to the prevailing political climate, that he could not understand how Cauchon sustained enthusiasm,⁵¹ while Hamnett Hill, former M.P.P. for Ottawa said: "Noulan Cauchon and I are fast becoming the two village bores of Ottawa. I regularly inflict upon you tales of Ottawa's past and Noulan Cauchon is equally insistent with visions of the future."⁵²

His proselytizing was tempered by pragmatism. He was proud of "corner-roundings" accomplished by his Commission—the widening of dangerous intersections created by incongruencies at the adjoinments of neighbouring grid patterns. The OTPC introduced streetcar passenger "safety islands" on several downtown streets, and negotiated the pedestrian underpass beneath the now-raised Daly Building at the corner of Sussex and Rideau. Cauchon believed these "city efficient" activities educated the public to the merits of town planning. Indeed, he almost convinced City Council to implement comprehensive zoning. In 1923 the OTPC was authorized to produce a model zoning by-law for the Sandy Hill neighbourhood: the *Ontario Municipal Act* having been amended in 1921 and 1922, following pressure from the real-estate lobby, to permit residential zoning.⁵³ However, land-use concerns were felt eventually to be adequately addressed by restrictive area by-laws, and Cauchon's detailed work was pigeon-holed.

While at the OTPC Cauchon continued to produce model planning proposals. As early as 1914 he had sketched a triangular open-space plaza at Connaught Square.⁵⁴ In 1919 he refined the Federal Plan's railway tunnel scheme beneath Wellington Street. Three years later, through the OTPC, he proposed a broad diagonal to link the east end of York St. with the St. Patrick St. Bridge. This would

have devastated much of Francophone Lower Town, but Cauchon appealed to property-owners to band together for a local improvement by-law to "reap the benefits of the improvements in traffic conditions and enhanced values which would follow," stating that "the new diagonal ... disturbs few houses of any value and will remove many undesirable fire-trap structures ...".⁵⁵ This marks a change from his earlier criticism of Holt's lack of housing policy. In his opposition to sub-standard accommodation he failed to consider the cold comfort such a scheme would afford displaced residents in the absence of alternative accommodations. The TPIC's *Journal* noted his frustration when later that year the City decided to build the Champagne Baths directly in the diagonal's proposed alignment.

One of Cauchon's more grandiose schemes involved creation of a Parkway along the shore of the Ottawa River, beneath Parliament Hill. *Vimy Way* would have joined a new bridge across the Ottawa, running northward from the base of Kent Street, west of Parliament Hill. That this location was through the steep rock-face of the cliff did not deter Cauchon, who proposed the resultant sides of the matching cuts be sculpted to resemble the Sphinx.⁵⁶ This example of twenties' Egyptomania may have led Ottawa Controller C.J. Tulley to remark: "Town Planning was a form of education in beauty, it was a kind of municipal poetry."⁵⁷

Vimy Way was to bridge the Canal cut north of Wellington St., and find its eastern termination at *Courcellette Place*—a traffic circle, and centrepiece of Cauchon's ambitious proposal for Major's Hill Park. The 1992 Peacekeeping Monument within the traffic circle in front of the National Gallery gives form to this long-forgotten proposal.

The above works notwithstanding, Noulan Cauchon perhaps is best known for his 1922 "Cauchon Report." This Plan comprised his studies of the capital beginning in 1907. Many of its ideas also are found in Todd and Holt—the parkway belts and Gatineau Park are examples. Like Holt, Cauchon planned for Hull, a city he believed had "not profited by any concessions to its adornment on the part of the Dominion Government."⁵⁸ Certain ideas, however, were unique to this Plan. It foresaw the future role of the car, and recommended construction of high-speed limited-access highways. These *Interceptors* utilized abandoned railway lines, and incorporated streetcars running along median strips. The Queensway, built upon the Grand Trunk Railway right-of-way, manifests this suggestion.

Cauchon was bolder in recommending railway and industrial relocations than Holt. Union Station was to be moved south to Billings Bridge, the yards to Walkley Road. Greber echoed these recommendations twenty-five years later and both facilities today are roughly where Cauchon first proposed.

The Report exhibits a degree of planning comprehensivity not seen earlier in Ottawa. Cauchon's *realpolitik* model for a Federal District is the document's most compelling suggestion. A refinement of the concept informs the present National Capital Commission's interactions with area municipalities. He proposed a Federal District "on both sides of the Ottawa River, so far as the physical features and public services are concerned."⁵⁹ This plan's "new idea" lay in its recognition of the need to preserve municipal jurisdictions.

Though it was perhaps naive of Cauchon to have assumed municipalities would voluntarily transfer certain powers to a Federal District, the ongoing dialogue he

envisioned between the tiers of agencies that govern the capital area has produced such diverse results as superhighway and bridge construction, pedestrian studies, design controls, architectural competitions and interprovincial transit transfer agreements.

Greber's 1950 *Plan for the National Capital* allowed that:

The Cauchon report embodies much in the way of recommendations which are fundamental to the basic consideration of planning of the Capital Area and which to some extent, have fallen within the purview of the present report.

While only a period of some seven years between the dates of the Holt Commission and the Cauchon reports, it is a matter of interest to query just to what degree and in what particulars the transition of factors affecting urban conditions within that period had bearing upon the obviously differing approaches to the solutions recommended.⁶⁰

Confederation Place

MacKenzie King's writings appear in the *TPIC Journal* for the first time February, 1927. "Garden City Movement,"⁶¹ from his book *Industry and Humanity*, showcases King's support for this suburban approach, and town planning principles in general.

King's archival papers pinpoint his awareness of town planning and its aims. A file titled "Town Planning" contains a profusely annotated copy of "The Garden Cities of England" by F.C. Howe, as well as an application form and letter from planner Raymond Unwin, in response to King's enquiry about attending the 1913 Summer School of Planning, Hampstead Garden Suburb.⁶²

His 1928 remarks show a concern for Capital planning:

... I believe that with Ottawa's natural and picturesque setting, given stately proportions and a little careful planning, we can have the most beautiful capital in the world.⁶³

1925 marked a return to balanced Federal budgets. The Dominion Diamond Jubilee was on the horizon. Coincident with this celebration, in 1927 the OIC was reorganized and renamed the Federal District Commission (FDC). Though still a landscaping agency, the FDC's increased powers now extended to the Quebec side of the Ottawa River.

The Commission was granted \$250,000 annually, for a sixteen year period. This was reduced to \$200,000 in 1928 following creation of a \$3,000,000 capital and reserve fund. Credit for securing this endowment is given to Thomas Ahearn, prominent Liberal businessman, confidant of King, and first FDC Chair.⁶⁴ Frustrated with the slow pace of capital works, Ahearn personally funded construction of the Ontario approaches to the Champlain Bridge, and a portion of the actual bridge. These actions may have nudged the government into accelerating the pace, with the creation of the fund partially the result of his initiative.⁶⁵

The 1928 Russell Hotel fire is given greater prominence in official explanations for this fund's creation. The federal government and City had begun work on *Confederation Place* and Elgin Boulevard as a joint-venture Diamond Jubilee commemorative project.⁶⁶ The City's share of \$1,000,000 was committed to building the Boulevard. The Dominion directed \$2,000,000 to land acquisitions and construction of the Place. Work was to be phased in over a seven-year period, as finances permitted.⁶⁷

The owners of the Russell sought to rebuild on the same site, located within the future *Place*. King intervened, marshalling the FDC's capital funding through the Commons. In April 1928 half of this fund's capital was used to expropriate the Russell site.⁶⁸ At this time, Cauchon submitted a finished proposal for *Confederation Place* signed June 23 of this year. His scheme would have been under development at exactly the time of the expropriation.

The Depression, and the R.B. Bennett administration of 1930-35, slowed progress on the *Place*. Only with King's 1935 re-election and his engagement of Greber in 1936, was the project readied for the 1939 Royal Visit.

After 1928 the western portion of the future *Place* had been planted in grass, awaiting funds to permit completion, and then the political will to proceed that King would again provide after 1935. Indeed, the old post office, which sat in the middle of the site, was not demolished until its current replacement on the north-west corner of Sparks and Elgin opened in 1938.

King had wished the *Place* constructed as a circle, like Piccadilly or Oxford Circuses in London. The difficulty lay in the triangular shape of the parcel, and its asymmetrical placement *vis-a-vis* Parliament Hill. Like Cauchon, King wished the War Memorial located at *Confederation Place*, but directly in the centre of the circle.⁶⁹ The relationship to Parliament Hill meant that if the Memorial were to be viewed from the Hill its formal positioning within the *Place* would be lost. Similarly, the processional access from the *Place* to the Hill would not be on a formal axis, but at the edge of an off-balanced triangle.

As stated, in 1928 Cauchon produced a comprehensive scheme incorporating a

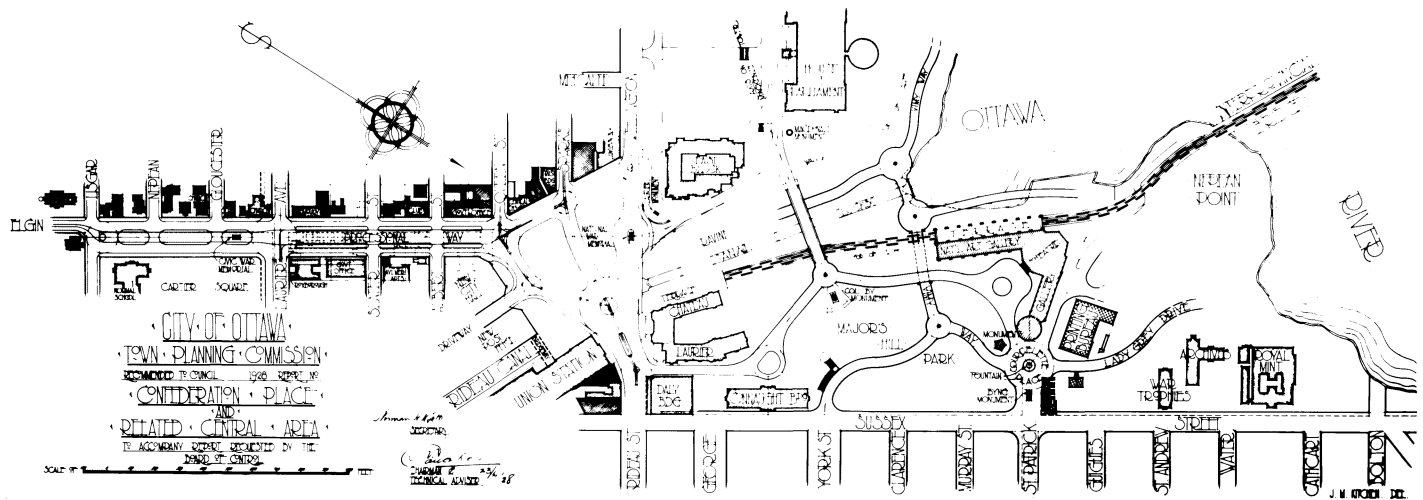


Figure 4: Ottawa Town Planning Commission, 1928. National Map Collection, PAC (Courtesy National Archives of Canada/F/440/OTTAWA/1928).

widened Elgin Street (*Processional Way*), and transforming Connaught Place and the approaches to Parliament Hill.⁷⁰ Of significance is his proposal for a triangular-shaped *Confederation Place* (Figure 4), anchored at its north end by a National War Memorial oriented to the *Processional Way*. He anticipated cost-sharing between federal, municipal and private interests, in keeping with the monumental nature of the venture. Cauchon's claim that this scheme was "substantially as recommended since 1911"⁷¹ is significant in light of the following.

When Cauchon/OTPC released this 1928 plan, the City already had committed to the joint agreement to widen Elgin Street. The plan was well received, and City and FDC officials alike sought a conference to discuss Cauchon's proposal.⁷² It is inconceivable King, or later Greber, remained unaware of this City-sponsored plan. Why Federal authorities did not validate Cauchon remains a question for more detailed investigation. The *Canadian Engineer* had praised Cauchon for his untiring efforts to unite all levels of government in a planning process, commenting that: "the appointment of this

new Commission (the FDC) may be in great measure due to his persistent efforts to get something done ..."⁷³

"Federal authorities" in 1928 may be taken to mean King himself. His diaries evince a wish to make an imprint on the Capital's urban fabric, and it is not far-fetched to suggest his eventual ability to mastermind all credit to himself. King chose Greber, who produced the official plan for the War Memorial's siting after Cauchon's demise in 1935. During his later years, the Tory Cauchon had been an irritant, constantly chipping at Federal inactivity from the sidelines of his municipal sinecure.

In 1937 Greber finalized plans for *Confederation Place* and the War Memorial. He had favoured Major's Hill Park for the monument, but was overruled by King. The politician's diaries record his thoughts on Greber's final proposal:

It was a return to the original idea of the Monument on Connaught Place—he had found the space could be made large enough by a "V" development, instead of a circle. ... Greber

has been worth all his fee for this one suggestion in the placing of the Monument down Elgin St.⁷⁴

Both Cauchon's and Greber's proposals are reproduced for comparison. Cauchon's plan clearly delineates a sightline from the War Memorial down the centre of Elgin Street. Greber's appears to be a refinement of Cauchon's earlier concept. One important difference is that King received the prestige obtained from association with the world-renowned Greber.

This is not to minimize King's role in initiating a planning process for the Capital area, but to situate his actions within a broader context of practice. That he was personally interested in planning is clear, but he was rooted in a matrix of earlier planning theories and practices which some investigations promoting King as "auteur" have left unexamined.

Though Cauchon was not recognized for his contribution to the *Place*, his influence is real. If Thomas Adams (or E.H. Bennett) left little physical imprint on Ottawa, Cauchon's proposals achieved

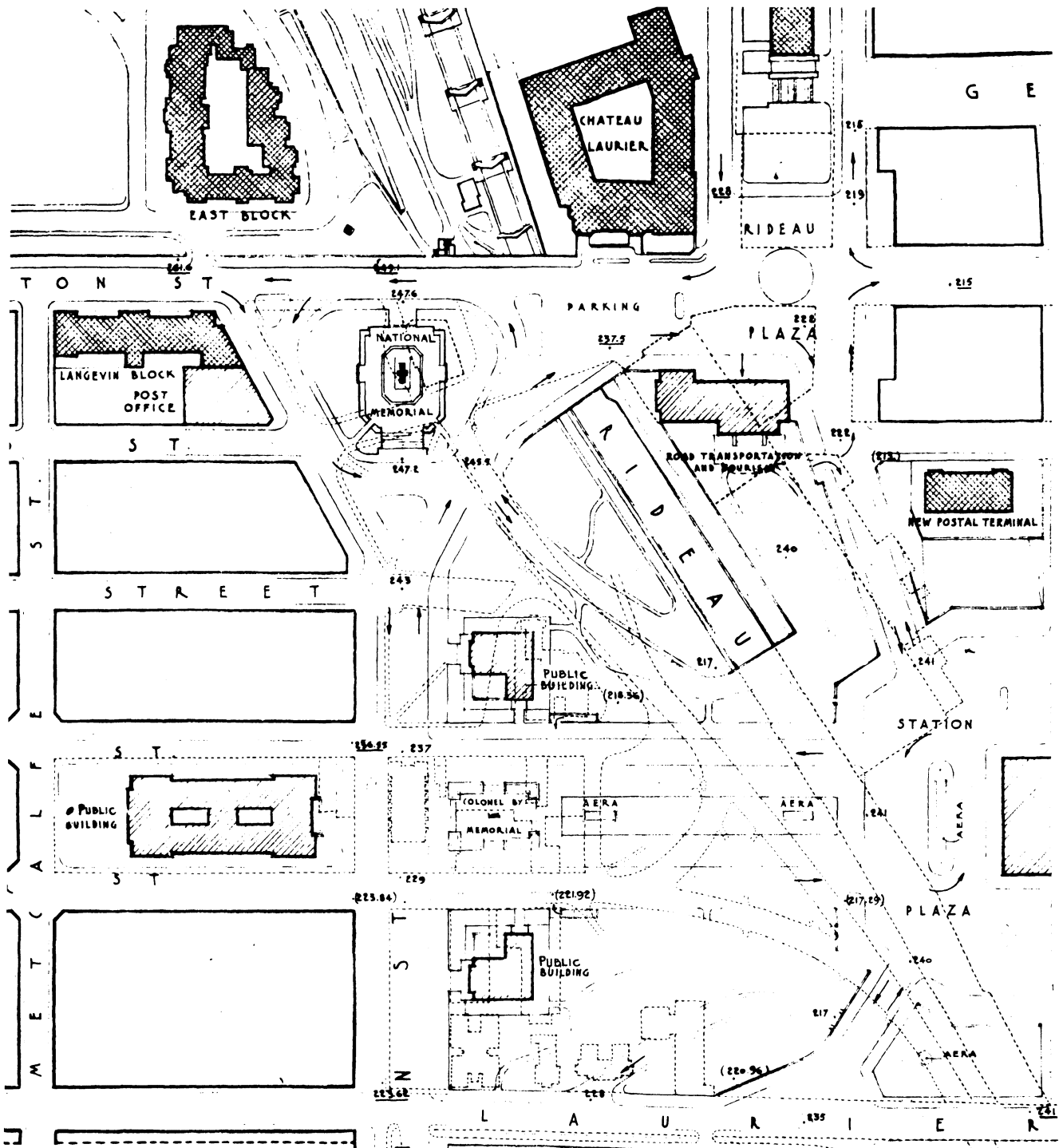


Figure 5: Plan for the National Capital, Greber, Jacques, 1938, National Map Collection, PAC (Courtesy National Archives of Canada/G/1149/08G45G73/1938/F01).

greater success. The reasons for this may be ironic, lying in the differences of approach between the British Adams and the Canadian Cauchon. The conceptual sophistication of Adams' British approach to regional planning appears to have fallen on largely infertile Canadian ground. As Lemon argues in a similar history of early 20th century Toronto:

... functional management solutions were to rule—the norm was ... not “ideal principles” since Toronto was not “aiming at aesthetic pre-eminence.” Toronto's political culture was one of making do, of managing the mundane. By all means it had to avoid “unnecessary extravagance” in politics and on the landscape.⁷⁵

Though Cauchon championed comprehensive planning, and his theory of hexagonal planning won international acclaim, he also produced volumes of specific proposals. Few were realized, but they were more attuned to the “make-do” attitudes of the day that grasped concrete proposals more readily than regional planning theories. The 1928 study for *Confederation Place* is a clear example of a specific Cauchon proposal that had wide influence and, I would argue, ultimate implementation.

Adams and Cauchon were both prolific, but the latter's volume of specific schemes, coupled with his long stint at the helm of the OTPC and TPIC, allowed for a greater penetration of his ideas into the mentality of the Canadian political establishment. This may explain Greber's complimentary remarks in his 1950 Plan. Though both Cauchon's and Adams' assistants worked for Greber, and might be expected to have advanced their mentors' reputations, Adams' work is not mentioned.

Cauchon railed against “piece-meal” planning, though many of his proposals

demonstrate that very property. Complete within themselves, they sometimes are out of context or even hostile to their environments. The “diagonal” boulevard bisecting Lowertown Ottawa is a prime illustration. An irony lies in that although his approach is often “bite-sized,” his fundamental analysis as expressed through certain theories, and the 1922 Report, shows a more complete planning awareness than any one scheme might convey. A good example is his *Interceptor*, occupying the route of the modern-day Queensway. This was a concrete proposal, easy to grasp, yet predicated on correct analysis of the automobile's coming role. Here theory and plan converged.

Further research might examine Cauchon's interpersonal skills as partial explanation for his relative obscurity. Nonetheless, he remains part of the slim connection that sustained the planning ideals represented in the pre-1914 years by the Holt Report, and the will, as found in the personage of MacKenzie King, to implement the post W.W.II Greber Plan.

King viewed Laurier as his mentor, believing it his mission to fulfil the latter's “Washington of the North” vision. Laurier initiated planning efforts at Ottawa, and fostered a broader sense of how the capital might take shape. However, other timely events and committed individuals were responsible, and merit credit, for keeping that dream alive between Laurier's 1893 speech and King's eventual resolve to make it a reality.

Endnotes

JTPIC – Journal of Town Planning in Canada

CE – Canadian Engineer

TPCL – Town Planning and Conservation of Life

PAC – Public Archives of Canada

COC – Commission of Conservation

1. National Capital Commission Planning Branch. *A Capital in the Making: Reflections of the Past, Visions of the Future*, Queen's Printer, Ottawa, 1987.
2. Ketchum, Carleton J. *Federal District Capital*, Ottawa, 1939.
3. Matthews, Geoffrey T. *Historical Atlas of Canada, Vol III*, U. of T. Press, Toronto, 1990, Plate 56.
4. Federal District Commission. *Brief Submitted by the Federal District Commission to The Joint Committee of the Senate and the House of Commons*, Ottawa, March 1956.
5. Ketchum. 1939, p.19.
6. Eggleston, Wilfred. *The Queen's Choice*, National Capital Commission, Queen's Printer, Ottawa, 1961; See also: Ketchum. 1939.
7. National Capital Commission Planning Branch. 1987.
8. Eggleston. 1961.
9. Todd, Frederick G. *Report of Frederick G. Todd, Esq., Landscape Architect, Montreal, to the Ottawa Improvement Commission*, Montreal, August 28, 1903.
10. Van Nus, Walter. “The Fate of the City Beautiful Thought in Canada, 1893-1930”, *The Canadian City, Essays in Urban History*, Stelter, G.A. and A.F. Artibise (eds). McLelland and Stewart, Toronto, 1977.
11. Todd. 1903.
12. Eggleston. 1961.
13. CE, Vol.14, 1907, pp.360-61.
14. O'Malley, Michael. “The Most Beautiful City in the World”, *Canadian Heritage*, Ottawa, February 1986.
15. Kalman, Harold. *The Railway Hotels and the Development of the Chateau Style in Canada*, Maltwood Museum, Victoria, 1968.
16. Eggleston. 1961.
17. *Ibid.* p. 165.
18. Rowat, Donald C. “Ottawa”, *The Government of Federal Capitals*, Rowat, Donald C. (ed.), U. of T. Press, Toronto, 1973, p.319. See also, Eggleston. 1961.
19. Rutherford, Paul. “Tomorrow's Metropolis”, *The Canadian City, Essays in Urban History*, Stelter, G.A. and A.F. Artibise (eds.), Macmillan of Canada, Toronto, 1966.

A History of Commissions

20. Morgan, H.J. (ed.). *The Canadian Men and Women of the Time*, William Briggs, Toronto, 1912.
21. COC. "Town Planning and Housing", *Third Annual Report of the Commission of Conservation*, Montreal, 1912, p 5.
22. Rutherford. 1966.
23. Hall, D.J. *Clifford Sifton, Vol.2*, UBC Press, Vancouver, 1985, p. 257.
24. PAC. COC. *Report on the Epidemic of Typhoid Fever Occurring in the City of Ottawa, January 1st. to March 19th, 1911*, Ottawa, 1911.
25. PAC. Camac, Dr. C. *The Epidemics of Typhoid Fever in the City of Ottawa*, COC, Ottawa, October 30, 1912.
26. Lloyd, Shiela, "The Ottawa Typhoid Epidemics of 1911 and 1912", *Urban History Review*, Vol. VIII, No. 1, June, 1979.
27. Archibald, Margaret. *By Federal Design: The Chief Architect's Branch of the Department of Public Works 1881-1914*, Ministry of Supply and Services, Ottawa, 1983, p.36.
28. Federal Plan Commission of Ottawa and Hull. *Report of the Federal Plan Commission on a General Plan for the Cities of Ottawa and Hull*, Ottawa, 1915.
29. Eggleston. 1961. pp. 169-173.
30. *JTPIC*, Vol. IV, No.3, (June 1925). p.11.
31. Van Nus. 1977.
32. PAC. *Cauchon Papers*, MG30 C105, Vol. 2, File: Clippings 1911-1915, Ottawa Citizen, April 25, 1914.
33. "Federal City Planning Commission", *CE*, Vol 26, Jan. 15, 1914.
34. *JTPIC*, Vol. V, No. 5 (October, 1926), p. 8.
35. COC, *Conservation of Life*, Vol. II, No. 4, Ottawa, July-Sept., 1916.
36. COC, "The Future of Ottawa", *TPCL*, Vol. 6, No. 2, (April-June, 1920), Ottawa, 1920, p.32.
37. Adams, Thomas. *Recent Advances in Town Planning*, J. and A. Churchill Ltd., London, 1932, pp. 155-56.
38. *TPCL*, Vol. 6, No. 3 (July-September 1920).
39. Eggleston. 1961, p. 168.
40. COC. *TPCL*, Vol. 4, No. 4, (October, 1918), Ottawa.
41. Van Nus. 1977, p. 375.
42. Parry, B. Evan. "Ottawa Garden Suburb", *TPCL*, Vol. 6, No. 3, (July-September, 1920), p. 68.
43. *JTPIC*, Vol. 1, No. 2 (February, 1921), p. 3.
44. *JTPIC*. Vol. 1, No. 3, (April, 1921), p. 9.
45. *JTPIC*. Vol. I, No. 9, (April, 1922), p. 48.
46. National Film Board of Canada. *Planning Canada's National Capital*, Federal District Commission, Ottawa, November 1948, p.17.
47. Coutts, Sarah. *Science and Sentiment: The Planning Career of Noulan Cauchon*. unpublished research paper, Ottawa, 1982, p. 20.
48. PAC. *Cauchon Papers*, Vol. 3, Scrapbook 1, 1913-1919, "Ottawa should be National School of Town Planning", Ottawa Citizen, March 13, 1915.
49. *JTPIC*. Vol. I, No. 4 and 5 (Summer issue, 1921).
50. *JTPIC*. Vol. V, No. 6 (December, 1926).
51. *JTPIC*. Vol. IV, No.3.
52. *JTPIC*. Vol. III, No.2 (March 1924), p.2.
53. Hulchanski, J.D. *The Origins of Urban Land Use Planning in Ontario 1900-1946*, unpublished Ph.D. thesis, U. of T., 1981.
54. Cauchon, Noulan. "Town Planning with Special Reference to Ottawa", *CE*, Vol. 37 (November 13, 1919), Toronto, pp. 455-457.
55. *CE*, Vol. 42 (June, 1922), Toronto, p.613.
56. "Ottawa Memorial Drive", *CE*, Vol. 48 (February 10, 1925), Toronto, p.215.
57. *JTPIC*, Vol. IV, No.3 (June 1925).
58. *Municipal Review of Canada*, Vol. 23, No. 5, 1927, pp. 194-96.
59. Cauchon, Noulan. "Planning the Canadian Capital", *Municipal Review of Canada*, May, 1926.
60. Greber, Jacques. *Plan for the National Capital*, King's Printer, 1950, p.142.
61. *JTPIC*, Vol. VI, No. 1, (February 1927).
62. PAC. *King Papers*, MG26 J13, Memoranda and Notes, No. 229.
63. *Hansard*, April 24, 1928, p. 2321.
64. Ketchum. 1939, p.20.
65. Haig, Robert. *Ottawa, City of the Big Ears*, Haig and Haig Publications, Ottawa, 1970, p.190.
66. *Hansard*, p.2319.
67. *JTPIC*, Vol. VI, No.6 (December 1927), p.210.
68. *Hansard*, p.2321.
69. Eggleston. 1961, p. 174.
70. "Improvement of Central Area, Ottawa". *CE*, Vol. 55 (July 17, 1928), pp. 142-44.
71. *Ibid*. p.142.
72. *CE*, Vol. 55, July 17, 1928, pp.142-44.
73. *CE*, Vol. 52, April 26, 1927, p.475-6.
74. PAC. "King Diary", Thursday, August 12, 1937, pp. 750-51, *King Papers*.
75. Lemon, James. "Plans for Early 20th-Century Toronto: Lost in Management", *Urban History Review*, Vol.XVIII, No.1, June 1989.