

## The D.C. Freeway Revolt and the Coming of Metro Introduction

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## The D.C. Freeway Revolt and the Coming of Metro

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“Washington’s transportation problems are—in one form or another—a microcosm of our Nation’s transportation problems.”

Secretary of Transportation Alan S. Boyd  
September 26, 1967

### Introduction

#### A Template for Cities

On April 27, 1939, President Franklin D. Roosevelt submitted a report to Congress called *Toll Roads and Free Roads*. At the request of Congress, the Bureau of Public Roads (BPR) had examined the feasibility and cost of three east-west and three north-south toll superhighways. BPR concluded that the toll superhighways were not financially feasible, but offered an alternative: a master plan for a network of toll-free express highways.

The need to improve the primary interstate portions of the Nation’s road network was clear, but BPR was especially interested in the alignment of expressways to help solve problems in metropolitan areas. The report explained that “the new facilities most urgently required are belt-line distribution roads around the larger cities and bypasses around many of the smaller cities and towns.” Through traffic, however, was only a small part of the congestion problem:

By far the greater part is originated in or destined to points in the city and largely points near its center or customarily reached by traveling through the center. Bypass routes, therefore, may not be regarded as means for the relief of congestion on the highway-connecting streets of large cities.

Belt-line distribution roads with control of access were needed for all large cities and many smaller ones to allow traffic not bound for the city to bypass it and to serve as a transfer route among the radial highways serving the city. An inner belt-line should also be built “generally somewhere within the ring of decadent property surrounding the central business area.” The property had been abandoned by the middle and upper class residents who had moved to new suburban housing, usually still within the city limits, and they had been replaced by residents with lower or no income. The report explained:

Such a belt line, connecting at appropriate points with radial arteries extending out of the city, may avoid the cutting of a new route directly through the business sections, and may either serve as a substitute or supplement for the outer belt line.

An outer belt-line was needed to serve similar purposes at a distance from downtown. This belt-line could be built within the outer limits of city boundaries where possible, or just beyond the

boundary. [*Toll Roads and Free Roads*, Message from the President of the United States, House Document No. 272, 76<sup>th</sup> Congress, 1<sup>st</sup> Session, April 27, 1939, page 95-98]

In April 1941, President Roosevelt appointed a National Interregional Highway Committee to investigate the need for a national highway system to improve the facilities now available for interregional transportation and to advise on the character of such improvements. Thomas H. MacDonald, Commissioner of Public Roads, served as chairman, while Herbert S. Fairbank of the Public Roads Administration (PRA, as BPR was known in the 1940s) was secretary and primary author. Harland Bartholomew of St. Louis, one of the Nation's leading urban planners, was an active non-PRA member of the committee.

The committee essentially completed its work in 1941, but the report was held during World

War II while PRA and State highway officials focused on defense highway needs. Moreover, its release could be delayed until near war's end because constructing the interregional network was seen as a source of jobs for the returning soldiers after victory. President Roosevelt transmitted *Interregional Highways* to Congress on January 12, 1944.

It outlined a proposed National System of Interregional Highways, but with special emphasis on segments in metropolitan areas. For the largest urban areas, the report prescribed a series of circumferentials. One would encircle the central business district, a second would be located further out but within or near the city boundary, and a third (or more) would be located at a greater distance. All would serve bypass traffic while providing links among the radials for local traffic. [*Interregional Highways*, Message from the President of the United States, House Document No. 379, 78<sup>th</sup> Congress, 2d Session, January 12, 1944, pages 64-65, 71-74]

Full control of access in urban areas, the report stated, "may require the raising or lowering of extended sections of the interregional route above or below the adjoining ground level, in order to carry it over or under frequent cross streets or over some and under others." Crowding an elevated highway "into the narrow space generally afforded by existing surface streets will usually result in unsatisfactory design of the express route and impairment of the utility of the surface street for local service." A wider right-of-way was needed, with one option being to acquire properties on one side of the street. "In general, the Committee considers elevation of the express routes a solution acceptable only in a commercial or business environment." The committee agreed with the "widely held opinion opposing the cutting of such facilities through residential areas."

By comparison, the committee preferred depressed expressways if obstacles could be overcome. Depression of the express highway would "usually require extensive reconstruction of underground facilities, such as water mains, sewers, and electric conduits." As a result, achieving full depression within the right-of-way of an existing street would rarely be possible. However, where the obstacles could be overcome, the depressed expressway "may be considered by many, more pleasing to the eye and more consonant with a gracious improvement of the urban environment than any other solution of the express-highway problem." [*Interregional Highways*, page 80]

In the Federal-Aid Highway Act of 1944, Congress directed the Federal Works Agency, which included PRA, to consult with the State highway agencies to designate a 40,000-mile National System of Interstate Highways. PRA asked the State highway agencies to propose mileage for inclusion in the Interstate System.

### **The Comprehensive Plan for the District**

The District of Columbia is unique among cities because it is not part of a State, but rather is a separate entity created under a provision of the Constitution. Section 8, which lists the powers of Congress, includes the following:

To exercise exclusive legislation in all cases whatsoever, over such District (not exceeding ten miles square) as may, by cession of particular states, and the acceptance of Congress, become the seat of the government of the United States, and to exercise like authority over all places purchased by the consent of the legislature of the state in which the same shall be, for erection of forts, magazines, arsenals, dockyards, and other needful buildings . . .

After President George Washington identified the location for the capital city, officials created a diamond-shaped District out of Maryland and Virginia centered on the Potomac River and including the existing cities of Georgetown, Maryland, and Alexandria, Virginia. After the central government moved to the ill-prepared District in 1800, Congress exercised varying levels of control over the years. (In 1846, Congress returned the Virginia portion of the District to the Commonwealth of Virginia.)

The District committees in Congress were the real power over virtually every aspect of civic life, including highways and parks. The District did not have a vote in Congress.

By the 1920s, Washington was searching for a template.

On June 6, 1924, President Calvin Coolidge signed legislation creating the National Capital Park Commission. The legislation authorized the commission to acquire land in the District, Virginia, and Maryland for parks and playgrounds, with advice from the Commission of Fine Arts. For this purpose, the legislation authorized \$1.1 million a year. In particular, the commission was to turn its attention to “Rock Creek and the Potomac and Anacostia Rivers . . . and to provide for the comprehensive, systematic, and continuous development of park, parkway, and playground systems of the National Capital.” [Gutheim, Frederic, and Lee, Antoinette J., *Worthy of the Nation: Washington, DC, from L’Enfant to the National Capital Planning Commission*, 2<sup>nd</sup> Edition, The Johns Hopkins University Press, 2006, page 178]

Congress expanded the role of the commission and changed its name in legislation that President Coolidge signed on April 30, 1926. The amendment directed the new National Capital Park and Planning Commission to prepare, develop, and maintain “a comprehensive, consistent and coordinated plan” for the National Capital and its Maryland and Virginia suburbs, as well as coordinating the plans of Federal and District agencies. The legislation also abolished the 1895

District Highway Commission and transferred its powers to the new commission. [Gutheim and Lee, page 180]

According to Frederic Gutheim's and Antoinette J. Lee's history of planning in the Washington area, the chairman of the commission, Frederic A. Delano, was not a trained planner but was "a longtime activist in planning in Washington, having been "a prime organizer of the *Regional Plan of New York and Its Environs*, which was published in 1928." (Delano was future President Franklin Delano Roosevelt's uncle.) [Gutheim and Lee, pages 170, 194]

Frederick Law Olmsted, Jr., "made substantive contributions to the Planning Commission in its early years, taking on much of the work himself." He "had established his own reputation distinct from that of his famous father," the leading landscape architect of his generation, and had "Secure lines of communication with influential people." Staff member Charles W. Eliot II, at 27 years old, was the commission's initial "City Planner." He was the "nephew and namesake" of a famous landscape architect who had helped prepare the 1893 Boston Metropolitan Park System, "a model which many Washingtonians admired." Eliot II had trained in Harvard's Graduate School of Landscape Architecture, which offered city planning, and had worked for Olmsted in Massachusetts. Eliot, according to Gutheim and Lee, "saw his job as the function of 'allowing for necessary municipal growth, yet preserving as much as . . . I can of the flavor of the past.'" [Gutheim and Lee, page 194]

Colonel Ulysses S. Grant III was the executive officer. At the time, he was Director of the independent Office of Public Buildings and Public Parks of the National Capital, which had an *ex officio* seat on the commission. Eliot said that Colonel Grant had excellent contacts with President Herbert Hoover, crediting the executive officer with "managing the White House" on policies affecting planning the city. [*Worthy of a Nation*, page 195]

Unlike other commission officials, Colonel Grant would be involved in transportation issues in a variety of roles well into the 1960s. The grandson of the Civil War hero and President (1869-1877), Colonel Grant graduated from West Point in 1903 and was commissioned a 2<sup>nd</sup> Lieutenant in the U.S. Army Corps of Engineers. He began his first stint in Washington in August 1909 when he became Superintendent of the State, War, and Navy Buildings. He held the post through May 1913. After service in other parts of the country and in Europe during and after World War I, he returned to Washington as Director of the Office of Public Buildings and Public Parks in 1925, receiving his promotion to Lt. Colonel in 1926.

This assignment was the start of his activities in city planning. According to a summary of his career by the Columbia Historical Society:

In this capacity he had responsibility for the construction, maintenance, care, custody, policing, upkeep, and repair of public buildings, parks, monuments, and memorials in the District of Columbia . . . . Additional duties were added: he was Executive and Disbursing Officer of the Rock Creek and Potomac Parkway Commission, the Lincoln Memorial Commission, the Arlington Memorial Bridge Commission, and the Ericsson Memorial Commission; member and Executive Disbursing Officer of the National

Capital Park and Planning Commission and the Public Buildings Commission;  
Coordinator of Motor Transport in the District of Columbia; etc., etc.

After graduating from the Army War College in Washington in June 1934, he was assigned to posts outside the District. He was commissioned Colonel later that year and Brigadier General in October 1940. In June 1942, General Grant became War Department Representative on the Board of Civil Protection, Office of Civilian Defense in Washington.

After Delano asked to be relieved of his post of chairman of the National Capital Park and Planning Commission, his nephew, President Roosevelt, asked General Grant to take the position. It was, the President wrote to Grant, an “urgent job,” especially “in times like these when the pressure to meet quickly the wartime needs for office buildings, housing and public services of all kinds tends to push planning aside.” He wanted the commission “to take a strong role and exercise real leadership to expedite these facilities and at the same time build toward a well planned National Capital.”

On September 11, 1942, General Grant became chairman. In 1944, President Roosevelt relieved General Grant of his military duties so he could devote full time to the commission. He retired from the army in July 1946 after 43 years.

General Grant’s term as chairman ended in April 1949, but he remained active in Washington planning for the rest of his life in a variety of roles, such as president of the American Planning and Civic Association and one of the original trustees of the National Trust for Historic Preservation as well as Vice-Chairman (1950-1954). As will be discussed, he would be involved in most battles over highways and bridges affecting the area’s monuments, National Mall, and parks until his death on August 28, 1968, at the age of 87. [Rubincam, Milton, “Major General U.S. Grant, 3<sup>rd</sup>, 1881-1968, *Records of the Columbia Historical Society*, Published by the Society, 1969, pages 387-400]

While in Washington, he lived in homes at several addresses, including 1868 Columbia Road, 1929 Q Street, 1135 21<sup>st</sup> Street, NW., and, finally, 1255 New Hampshire Avenue, NW. [*Congressional Directory*, various years]

The commission unveiled its comprehensive plan on January 17, 1930, in a presentation at Constitution Hall. Governor Albert C. Ritchie of Maryland, Governor John Garland Pollard of Virginia, Secretary of the Treasury Andrew W. Mellon, and Members of Congress attended the event. The Virginia General Assembly attended in a body along with other officials from the two States and the District.

President Hoover was unable to attend but sent a letter to Chairman Delano saying that creation of the revitalized commission was “one of the fundamental steps taken in national recognition of our need and opportunity to build the most effective and most beautiful capital city in the world.” The 1926 legislation ensured that the city would have “the advantage of the diversity of skill and experience in this renaissance of the City of Washington through our new undertaking for the expansion and revision of our Capital city.”

The first necessity was a “continuous study of the character and probable growth of this city, with intelligent anticipation of such growth.” President Hoover listed problems to be addressed such as “the scores of problems of transportation, of abolition of slum areas, development of park and recreation facilities,” and issues related to schools and other concerns. He concluded:

It is our national ambition to make a great and effective city for the seat of our Government, with a dignity, character, and symbolism truly representative of America. As a nation we have resolved that it shall be accomplished. To succeed in the fullest measure we have need for planning not only within the District of Columbia, but also for co-operation from the adjacent States.

Colonel Grant presented the plan. A comprehensive plan can never be complete, he said, “any more than a single suit can be patterned to permanently clothe a growing child,” but plans for the District, Maryland, and Virginia must be “a single seamless garment, so that we may have here a region that is a living, growing organism, each part of which fits into and collaborates with adjacent parts.”

*The Plan for the National Capital and Its Environs* was in sections: highways, railroads, water terminals, airports, parks within the district, and regional parks. For highways, Colonel Grant said:

Because highways constitute the most important contribution made at public expense to the individual’s life, because they are the arteries through which the life-blood of the community must circulate and finally because they are the specific part of the city in which the conditions have changed most in a very short time, the ‘battle of the streets’ commands our full attention. City planning studies naturally begin with a consideration of the highway system and the work done in the past—that is, existing conditions—is found to set certain limitations upon what can be done in the future.

The plan that Pierre L’Enfant devised at the city’s creation “was originally laid out on a scale amply adequate for a large city,” and subsequent generations continued the plan despite great increases in population after the Civil War and other changes:

But this highway plan was for the days of animal-drawn transportation and to meet traffic conditions incident thereto. With the advent of the automobile and motor truck traffic(,) conditions and requirements have changed. The need for differentiating between streets according to their use and purpose, just as telephone lines, sewer lines and other public works are designed to meet their special purposes economically, is being more and more generally appreciated. The differentiation between thoroughfares or traffic arteries and the secondary streets or system of veins to pick up local traffic and bring it into the thoroughfares permits curvilinear location of the latter, their relation to the natural contours of the land and the preservation of attractive features of the topography of trees and of the natural surface soil, as well as the lengthening of blocks and other variations which not only add measurably to the individuality and interest of each residential neighborhood, but also save materially in both the first cost of development and in the annual cost of maintenance and administration.

With 29.3 percent of the city's usable surface devoted to streets and alleys, the best use of such land deserves "the most careful study, and which should not be left to be solved by the method of appropriation in compliance with the loudest expressed local demands."

Accordingly, the comprehensive plan must include a major thoroughfare plan that was in development. Some thoroughfare work was underway, such as straightening Michigan Avenue and upgrading B Street, NW. (future Constitution Avenue), to "a great cross-town artery from the Capitol to the Rock Creek and Potomac Parkway and the Virginia road system."

In addition, high-level crossings of Rock Creek Park were needed, "at least one immediately to stop the danger and prevent the waste of time and traction incident to carrying all cross-town traffic 140 feet down hill and then again up the same height on the other side." They would be built at intervals of about a mile at Aspen Street, Military Road and Utah Avenue leading to Madison and Kennedy Streets, and Tilden/Upshur Streets.

The commission's study of urban growth in the past decade revealed an octopus-like growth "based on transportation facilities." To the extent that such facilities could be fitted into the topography and existing developments, "the general growth of the region will be better balanced and distributed":

This has been a major consideration in the location on our map of proposed radial roads leading into the adjacent area of Maryland and Virginia; that is, the foreseeing of a system which will make possible as nearly equivalent transportation facilities in every direction available for residential or commercial development. Of course, as far as possible this system has been based on existing roads and their widening and extension as necessary and justified from time to time. The distribution of this inflow and outflow of traffic around the perimeter of the congested part of the city has also been cared for.

Colonel Grant cited examples such as connecting Massachusetts Avenue with the Maryland road system and linking Arlington Memorial Bridge with the Virginia road network "so that the solution may be arrived at which most nearly meets the best interest of all concerned, and reconciling any conflict of interest that may be found to exist." The cooperation of State and local officials in resolving such conflicts had been "most gratifying."

However, "a good system of radial highways is not enough." The area also needed "cross-connections, not only to permit easy exchange of traffic from one radial to another and for local hauling, but also to permit the by-passing of congested areas." As an example, he cited traffic moving between Baltimore and Richmond that had to pass through the District's "congested business center and out over one of the most heavily traveled bridges," the Highway Bridge at 14<sup>th</sup> Street carrying U.S. 1, the East Coast's main road, across the Potomac River. Colonel Grant considered that "the direct connection with our nearest metropolitan neighbors on the north and on the south—Baltimore and Richmond—are of first and special interest."

A solution of "great mutual advantage" would be "a broad and adequate boulevard over which [a motorist] can pass by the crowded city streets, skirting the hills of Montgomery County and at the same time obtain, perhaps, various impressive and inspiring views of the Capital City, then over



a bridge near Great Falls or near Little Falls and connecting with a good road in Virginia which will permit him to go on his way without being entangled in the most congested local developments near the river or overloading the terminals of the city bridges even if they were to be improved.”

He discussed railroads, waterways, parks, and other aspects of the regional plan, including rail and water terminals:

A plan which considers only questions of beautification and public projects having an aesthetic value, such as our great public buildings program [in what is now known as the Federal Triangle, authorized by the Public Buildings Act of 1926], even though it may be artistically splendid, will not be complete economically in so far as it fails to provide for the less attractive and perhaps less inspiring, but equally or more important, utilitarian and commercial needs of the community.

He also emphasized that the city must not be influenced by the tall buildings being erected elsewhere:

Washington also had been most fortunate in having had since 1910 a law preventing the construction of buildings higher than 130 feet, for to the constantly more accentuated crowding of the land [by construction of skyscrapers] in most of our cities we must attribute a large part of their traffic congestion, which is gradually throttling the circulation essential to their economic life. This commission believes that present conditions in this city already justify the contention that even the 130-foot limit is too high, and that the 110-foot limit originally established by the Zoning Commission should have been adhered to.

He admitted to favoring height restrictions in part for “the sentimental one of preserving the dominance of the dome of the Capitol as the chief characteristic of the National Capital, just as the dome of St. Peter’s dominates Rome.”

At present, traffic was within the limits that the L’Enfant plan could handle “without recourse to such expensive public works as subways, double-deck streets, overhead pedestrian crossings, etc.” These were common ideas for city planning at the time, and Colonel Grant thought they might be needed some day, but not at present.

Colonel Grant concluded his presentation:

For the perfection of the plan as here laid before you, and for the work of keeping it up-to-date and further fitting it to the needs and best interests of the entire region, the National Capital Park and Planning Commission begs your sympathetic understanding, your criticism and advice, your collaboration and help, so that we may all have a hand in constructing the edifice, in finding what is America’s highest attainment in the art of city building. [“Hoover Pledges Nation’s Aid For Greater Capital,” *The Evening Star*, January 19, 1930; “Rock Creek Park High Level Bridge Plan Is Explained,” *The Sunday Star*, February 2, 1930]

An editorial in *The Evening Star* said of the event:

After a hundred years or so of pitiful neglect of the American capital, such meetings as those held last night come as inspiring reassurance that the renaissance of the last twenty-five years gains in strength and that the ideals so nobly expressed by the fathers in their original conception of the American Capital are becoming the ideals of the Nation. ["The Nation's City," *The Evening Star*, January 18, 1930]

### **Major Thoroughfares**

By "thoroughfare," Colonel Grant did not mean the urban expressway that would come in later generations. The thoroughfare might be designed to carry more traffic than a regular street, but it typically had access points from private properties along the way and at-grade intersections that undermined the free flow of traffic. It was designed to pull through-traffic away from congested areas, such as the downtown business district.

The idea of major thoroughfare plans was not unique to Washington. Cities had been developing such plans since early in the 20<sup>th</sup> century in response to the growth of the automobile. For example, the October 1918 issue of *The American City* carried an article on "Principles of Design for a Complete System of City Thorofares" [sic] by Robert H. Whitten, City Plan Advisor of the Cleveland City Plan Commission. "The traffic problem in all large cities," Whitten began, "is leading to a demand for more radial streets coming from the periphery of the city into and thru the central business section":

Unless heroic measures are taken to provide an adequate thorofare system, the traffic problem will be the limiting factor in the growth of many of our big cities . . . . The present crisis has largely arisen from reliance on a few main thorofares converging at or near a central square. The remedy lies in provision of more streets of adequate width coming from the outskirts of the city into and thru the central business section and out to the city boundaries on the opposite side.

Whitten explained that, "The mixing of vehicles of different kinds, widths, motive power, uses and speeds multiplies difficulties and increases accidents." He believed, therefore, that the thoroughfare system "should be laid out in pairs so as to secure a better segregation of traffic." One route would carry street cars and trucks while the other would carry automobiles. At the same time, the thoroughfares must provide for rapid-transit routes from the outskirts to the central business district. "In order that a rapid-transit route shall be financially self-sustaining, it is essential that it be so located as to secure a large amount of non-rush hour and short-haul traffic."

Whitten recognized the difficulties inherent in change:

After streets are built up solidly with business buildings and apartments, it becomes almost prohibitively expensive to alter greatly the general street plan. Yet it is apparent that the limited number of thru traffic routes that many cities now possess will be absolutely inadequate for traffic needs twenty-five, fifty or one hundred years hence.

Unless measures are taken in time, growth will suddenly stop and the city may be faced with the alternative of permanent ruin or back breaking financial burdens that could have been avoided by a little vision in the planning of the city.

As Professor Robert M. Fogelson discussed in his history of downtowns, planners developed city plans that included new streets, widened existing roads, and crosstown highways, as well as inner and outer belts, to divert traffic not destined for downtown. Some critics feared that such plans were self-defeating because the new streets would lead to increased traffic and worsened congestion. Nevertheless, cities embarked on costly construction programs as a result of which, “the street systems were able to handle far more motor vehicles in the late 1920s than in the early 1900s.” [Fogelson, Robert M. *Downtown: Its Rise and Fall, 1880-1950*, Yale University Press, 2001, pages 256-257]

Eliminating nonessential traffic from central business districts was equally important, but more difficult because it involved costly construction. A few crosstown highways were built to allow passage from one part of a city to another without entering downtown and some cities began building inner belts around the central business district and outer belts for traffic destined for distant locations. Their effectiveness in reducing congestion was limited, according to Fogelson:

But these crosstown highways and inner and outer belts made up only a small fraction of the major thoroughfares, most of which still converged on the central business district, funneling in tens of thousands of automobiles en route elsewhere.

He also explored why so few of these roads were constructed in the 1920s:

The answer is that the authorities could not build all the proposed bypasses and radial highways without raising property taxes to unacceptable levels. Given the choice, most downtown businessmen favored radial highways over bypasses. So did the many motorists who worked and shopped downtown. And though many planners and engineers thought bypasses were the most economical way to relieve traffic congestion, they also believed radial highways were necessary to make the central business district “directly accessible” to all the other parts. [Fogelson, page 258.]

Some attempts were made to segregate traffic, such as construction of rail-highway grade separation structures and parkways that excluded commercial traffic. However, construction of separate street systems faced financial and political hurdles that officials had difficulty overcoming. Construction “would have been prohibitively expensive” while banning automobiles from commercial thoroughfares “would have been very unpopular—and probably unenforceable.” [Fogelson, page 259]

These initial efforts to address urban congestion in the automobile era failed to solve the problem. As Fogelson put it, “By the late 1920s more automobiles were pouring into the central business district than ever, far more than would have been possible if the authorities had not opened new streets and widened existing ones.” Despite the diversion of some traffic, “traffic congestion was as bad as ever.” He cited a few examples:

“Despite every scheme of traffic control so far devised,” midtown Manhattan still “ties itself up in a knot twice a day,” wrote the *New Republic* in 1928. Broadway had traffic jams seventy-five years ago. “It has them still.” Although Baltimore spent millions of dollars on street widening after the great fire of 1904, traffic conditions downtown were just as bad twenty years later, a special committee informed the mayor. Despite the efforts of Harland Bartholomew, chief planner for St. Louis, traffic downtown “moves slowly and irregularly,” wrote the president of the St. Louis street railway system in 1926. “Conditions are bad in the middle of the day, and in the morning rush, but are well nigh intolerable in the evening rush.” Conditions were very bad in downtown Los Angeles too, the city’s traffic commission acknowledged in 1930, a decade after it had been formed by downtown business interests and civic and commercial groups to solve the city’s traffic problem.

Although some observers remained optimistic, many others were skeptical:

As they saw it, the cities were caught in “a vicious circle.” To relieve traffic congestion, the authorities opened and widened streets; but the new streets attracted more traffic, the additional traffic generated more congestion, and eventually every street system reached what Minneapolis engineers called “a saturation point,” a state of “almost but not quite intolerable congestion,” to quote Frederick Law Olmsted, Jr., and two of his associates. Another planner, George A. Damon of Los Angeles, went even further. “Every possible cure seems to be worse than the original disease,” he wrote. [Fogelson, pages 259-260]

The National Capital Park and Planning Commission’s leaders and staff were well aware of these efforts. They developed the comprehensive plan for the Washington area in the context of city planning initiatives around the country. The planners also were well aware of how the automobile created new impacts for the Washington area. Commission member J. C. Nichols, who had worked in city planning in Kansas City, expressed concern in 1928 about the effect of the automobile on cities, as Gutheim and Lee stated:

He observed that, contrary to public notions about city planning’s ornamental results, “the growing acuteness of automobile congestion in all our population centers . . . is forcing upon the public . . . the dire need of better planning to meet the rapidly changing conditions in the size and number of our transportation units.” This enlarged physical dimension of the city increased the “tendency of business to move from downtown districts to suburban neighborhood shopping centers, accentuated by the building of outlying apartments and kitchenettes, neighborhood picture shows, filling stations and chain stores.” [Gutheim and Lee, pages 195, 197]

On January 21, Eliot addressed the Washington Board of Trade’s committee on streets and avenues. He explained the proposal for a major thoroughfare plan, pointing out that such a plan would result in savings from two new ideas in city planning that Colonel Grant had mentioned during his Constitution Hall presentation. One was the use of longer blocks in purely residential sections where traffic did not need a cross street every 400 or 500 feet. This idea would save money on paving costs. The other was the use of curvilinear streets that conform to the natural

contour of the land rather than a predetermined gridiron street pattern. This process would reduce the cost of grading and filling.

The commission had agreed on a tentative major thoroughfare plan. One of the immediate projects in the city planners' proposal was to realign Harvard Street between 13<sup>th</sup> and 16<sup>th</sup> Streets on a straight course as part of a cross-town link. It would carry eastbound traffic while westbound traffic would use parallel Columbia Road. Eliot invited the committee to study the system and provide opinions to the commission. ["Highway Changes Urged By Eliot," *The Evening Star*, January 21, 1930]

By mid-April, the Board of Trade committee had submitted its recommendations, developed in conjunction with Eliot. The commission approved the thoroughfare plan on May 21. ["Heads Are named In Traffic Survey," *The Evening Star*, April 18, 1930; "Commission Approves Thoroughfare Plan," *The Evening Star*, May 21, 1930]

The commission's first annual report discussed the plan:

This plan for major streets proposes the improvement of a comprehensive system of wide, direct arteries in which the vital traffic flow of the community may freely move. To develop such a system requires an acceptance of the principle that all streets are not of equal importance in the circulation scheme, that some are of much greater value to the community than others, and that it is advantageous to select these community routes and work consistently upon them until they function as a system.

There is in Washington and vicinity urgent need for the promotion of the major thoroughfare idea. If streets of this type can be set apart from all others in the popular mind and in the minds of officials, a notable step will have been taken toward the creation of a more perfect Capital City.

The plan was important to other modes of transportation, including franchises for streetcar and bus routes, which "cannot be discussed intelligently without a major thoroughfare plan." Street lighting, traffic signals, paving specifications, school and playground sites, the location of neighborhood store centers and fire and police stations, tree planting, and even deed restrictions on private property – "all are dependent upon a designation of major thoroughfares."

Developers of subdivisions would be "in the dark" without knowing where the major thoroughfares would be. "It will be increasingly helpful to all [of] Washington to have an official major thoroughfare plan."

The report thanked the Washington Board of Trade's special committee for its suggestions for revising the thoroughfare plan. "As a result of those suggestions some additions to the thoroughfare plan have been made by the commission (notably the extension of New Hampshire avenue), and the plan as a whole has been brought up to date."

The 70<sup>th</sup> Congress had helped with the plan by approving the straightening of Michigan Avenue in the vicinity of Soldiers' Home and Trinity College. The project had been completed and the commission staff had prepared a plan for eliminating a dangerous crossing of the Baltimore and

Ohio Railroad tracks just beyond the end of the straightened section. Other work underway on the plan included studies for the east-west pair of Columbia Road and Harvard Street; for a high-level bridge across Rock Creek Park upstream from the Calvert Street Bridge; and a plan to extend Vermont Avenue to Georgia Avenue at Trumbull Street. [“Major Highways Plan Advocated in Annual Report,” *The Evening Star*, December 27, 1930]

Around this time, Edward M. Bassett, a New York City zoning expert, addressed the National Conference on City Planning about a new kind of thoroughfare that would be similar to a parkway in that it had control of access, but that allowed commercial traffic that was excluded from parkways. He coined a term to describe his concept: “freeway.” He said:

This word is short and good Anglo-Saxon. It connotes freedom from grade intersections and from private entrance ways, stores and factories. It will have no sidewalks and will be free from pedestrians. In general, it will allow a free flow of vehicular traffic. It can be adapted to the intensive parts of great cities for the uninterrupted passage of vast numbers of vehicles. [Bassett, Edward M., “The Freeway - A New Kind of Thoroughfare,” *The American City*, February 1930, page 95]

Through the 1930s and 1940s, the District, Maryland and Virginia, and the National Capital Park and Planning Commission attempted to keep up with motor vehicle demand, but during the Depression and World War II could never do so. After World War II, the commission found that the challenges accelerated with population growth, suburbanization, and an explosion of automobile use.

General Grant discussed these challenges in a 1948 article that indicated the city was facing a sudden population increase and a postwar building boom that “threatens to destroy many of the amenities secured by the carefully planned developments of the past twenty years.” Demands for “housing, slum clearance, schools, additional reservoirs, permanent government buildings, and the relief of traffic congestion” were creating “a new crisis in the city’s growth.”

The impact of the automobile “raised new and acute problems”:

By extending in a single generation the radius of convenient urban development from approximately five miles to nearly twenty-five miles, and thus increasing the area available for land subdivision from 75 square miles to 1875, or 25 times, it has encouraged the growth of scattered suburban developments outside the original city limits on cheap ground usually carrying a lesser burden of local taxes, increasing the cost of municipal services such as water, sewerage and roads to serve these new dispersed communities, and at the same time throwing a new load of traffic on the city streets. The consequent congestion of traffic in the central business district has itself become so acute in many instances that it tends to choke the circulation necessary for the transaction of business itself.

In an echo of Nichols’s words from 20 years earlier, General Grant continued:

The result is that retail trade, moving picture theaters and other commercial enterprises, which are a convenience to the suburban communities, tend to move there as soon as it appears likely to be profitable to do so, and thus drain away the substance of the central business district.

The commission wanted to counter these “centrifugal forces” by increasing demand east of the Capitol to shift the focus away from the west side where at the time, permanent Federal buildings were clustered along the National Mall and Pennsylvania Avenue adjacent to the central business district. This goal could be accomplished by disbursing permanent Federal office buildings east of the Capitol, thereby creating demand for housing and businesses in the area while reducing the traffic load on the streets north and west of the present central district, which were “now so over congested by employees working in temporary war buildings.”

(During World War I and II, temporary office buildings were constructed in the city’s open spaces, including the National Mall. Between B Street, NW., and the Reflecting Pool in front of the Lincoln Memorial, two tempcos, as they were called, were built during World War I, one for Army Staff, the other for Navy staff. Three tempcos were built on the south side of the Reflecting Pool, with pedestrian bridges across the water, and three more tempcos were built just west of the Washington Monument. Two tempcos were on Constitution Avenue between 12<sup>th</sup> and 14<sup>th</sup> Streets, with others located on the grounds of Fort McNair, near the site of today’s Robert F. Kennedy Memorial Stadium, and on the site of the future Smithsonian Museum of Air and Space along Independence Avenue, SW, among others.

(Despite the end of the wars they were built to serve, the tempcos remained in place. Even after the Pentagon opened in 1943 the “leaky, hot-in-summer, cold-in-winter tempcos still thrummed with office life,” according to *Post* local columnist John Kelly. A canvass in the 1950s counted 54 tempcos around the city, “housing such agencies as the Veterans Administration, the State Department, the Federal Aviation Administration and the Civilian Aeronautics board.” The tempcos remained in service until 1964, when demolition began on two tempcos at the museum site. The final demolition occurred in 1970 when the Navy and Munitions Buildings, the two structures built in 1918 north of the reflecting pool, were razed. Constitution Gardens is located where they had been for over 50 years.

(Kelly reported that only two tempcos remained as of early 2017. Built in 1919, the Liberty Loan Building at 401 14<sup>th</sup> Street, SW., across from the Tidal Basin processed war bonds. It was upgraded to three floors in 1927. Kelly wrote that the building, now called the Liberty Center Building, “houses something called the Bureau of Fiscal Service” of the U.S. Department of the Treasury. The other survivor, dating to 1944, at 425 Second Street, NW., originally housed the Reconstruction Finance Corporation. Today, it is a homeless shelter operated by the Community for Creative Non-Violence. [Kelly, John, “Answer Man Remembers the ‘Temporary’ Office Buildings That Once Blighted D.C.,” John Kelly’s Washington, *The Washington Post*, January 8, 2017; Kelly, John, John Kelly’s Washington, “Tempcos: More Good and Bad Times of Their Lives,” John Kelly’s Washington, *The Washington Post*, January 15, 2017])

General Grant cited another key component:

In addition, construction of the Fort Drive as an express parkway is recommended, to provide a circumferential route of high traffic capacity outside the congested area to receive and quickly distribute traffic coming in or going out of the city along arterial streets and to join together residential areas within the District between which exchange of traffic is now inconvenient and time consuming.

(Fort Drive, an intermediate circumferential that would link the circle of Civil War forts just within the District border, will be discussed later.)

Space, he said, must be made for parking all the automobiles arriving in the central and government districts, but “it is a physical impossibility to provide . . . all the automobile parking space desired.” As a result, making public mass transportation “as expeditious and convenient as possible” was “of utmost importance.” He added:

Much can be done at little expense to increase the usable capacity of existing streets by reducing on-street parking and loading, and by inducing a natural segregation of through-traffic into especially favored streets, leaving the other streets for local traffic use.

The commission had promoted a major thoroughfare plan in the 1930s to keep through-traffic out of the central area. Now, General Grant said, it favored the modern variant:

An inner belt thoroughfare around the congested area is also an obvious need to receive and distribute traffic or by-pass the most congested streets.

He emphasized that city planning was not simply about beautification. “It is a reconciliation of all the requirements and interests, often competing and conflicting, of utilitarian and social needs to the best advantage of all the inhabitants as a whole, so that the city will be a good place in which to live, to work, and to raise a family.” [Grant, Ulysses S. 3<sup>rd</sup>, “Planning the Nation’s Capital,” *Confidential – From Washington*, The Georgetown Washington Victory Council, The George Washington University, March 1948, No. 44, pages 6-7]

### **The District Creates an Expressway Plan**

The Federal-Aid Highway Act of 1938, which asked BPR for a report on toll superhighways, also contained a provision making the District of Columbia eligible for Federal-aid highway funds under the same terms and conditions as if it were a State starting with FY 1940:

*Provided*, That the system of roads on which Federal-aid apportionments to the District of Columbia shall be expended may be determined and agreed upon by the highway department of the said District and the Secretary of Agriculture [home of BPR] without regard to the limitations in section 6 of the Federal Highway Act (42 Stat. 213) respecting the selection and designation of such system of roads; and, when the system first determined and agreed upon shall have been completed, additions thereto may be made in like manner as funds become available for the construction of such additions.

Previously, the District had received emergency highway funds and grade-crossing funds for FY 1938 and 1939, but not formula Federal-aid highway funds.



Under the Federal Highway Act of 1921, BPR and the States had designated two classes of highways: primary or interstate and secondary or intercounty, with the total limited to 7 percent of the rural road mileage within each State. These were the only roads that would be eligible for Federal-aid highway funds. Unlike the States, the District of Columbia did not have urban and rural or intercounty components; it was entirely urban. The 1938 Act, therefore, exempted the District from the Section 6 limitation to rural mileage.

This change in eligibility also meant that, as in the States, 1½ percent of the District's annual highway allocation must be spent for "surveys, plans, engineering and economic investigations," as provided for in the Hayden-Cartwright Act of 1934 and continued in later Federal-aid legislation. BPR and the State highway agencies had used the funds for highway surveys that provided the data used in preparing *Toll Roads and Free Roads*.

Now, under the 1938 Act, the District was included in the national planning program of assembling information, analyzing and interpreting traffic data, and using the data to develop plans for highway development. The District Department of Highways established a Highway Planning Survey Unit to carry out the function.

According to a 24-year highway department history, the unit accumulated data "from a survey of the parking demand in the General Area of Washington, from a study of the use made of urban routes in and about Rock Creek Park, from interviews with motorists on Trans-Washington trips, and from a study of the travel habits of all employees in the central business and governmental areas."

Captain Herbert C. Whitehurst, District Director of Highways, released a preliminary report on the study during a presentation to the Washington Board of Trade on April 24, 1941. The unit's findings and recommendations had several impacts. First, the results "were of such significance that they were utilized by the Department of Highways to institute a long-range program of highway developments proposed for subsequent years."

Second, in view of the "critical nature of the parking situation in the business and Government districts," Congress authorized a Motor Vehicle Parking Agency for the District in legislation approved on February 16, 1942:

The Act conferred broad powers upon the Commissioners. It authorized the acquisition, creation and operation of public off-street parking facilities in the District, as a necessary measure to insure the free circulation of traffic in the public interest.

The District activated the agency in 1946.

Third, the unit's preliminary report, released on April 24, 1941, resulted in "engineering studies which were aimed directly at the preparation of Washington's highway system to bear the impact of vastly increased traffic pressures engendered by accelerated Federal activities in the approaching war." These studies led to a series of improvements:

Briefly, they consist of major thoroughfare reconstruction on radial trunk highways connecting the central district to outlying residential and suburban areas in Maryland and

Virginia. They also include such major projects as grade separation structures at congested, multiple intersections in the general central area which encircles the business and Government districts. Where structures of this type were not feasible for one reason or another, the faulty intersections were redesigned and channelized on the surface. The narrow streets of the distributor type, which were considered essential to the proper dispersion of heavy traffic streams entering the central area via high-volume radial highways, were widened and repaved.

Fourth, the expanded program required additional funds. Captain Whitehurst called for Congress to approve a 2-cent increase in the gas tax. "It is our considered judgment that the rate in the District of Columbia should be increased to 4 cents and an earnest endeavor made to meet the traffic and transportation situation with an adequate solution of the problem." [*Twenty-Four Years of Progress in Highway Development 1924-1948*, The Department of Highways, Washington, D.C., 1948, pages 62-66]

The report called for five radial trunk highways at a total estimated cost of \$10,175,000, as described in the *Star*:

1. To Southeast and Southwest East of Anacostia River – From South Capitol street and Independence avenue south on South Capitol street across the Anacostia River;
2. To Northeast-K Street Route – From Seventh and K streets N.W. to Florida avenue and K street N.E. with connections at Sixth street to new Ninth street overpass across terminal yards at West Virginia avenue to New York avenue at Florida avenue to Fifteenth street and Benning road;
3. To Northwest Section West of Wisconsin Avenue and Key Bridge – From Connecticut avenue and K street N.W. to Key Bridge, thence via Canal road to Foxhall road and Conduit road;
4. To Northwest Section East of Wisconsin Avenue and West of Rock Creek Park – a. Rock Creek and Potomac parkway connections and extensions. b. Additional highway facilities east of Rock Creek and west of Connecticut avenue through north and south streets to connect Constitution avenue and Massachusetts avenue.
5. To Northwest East of Rock Creek Park - This area, the most thickly populated in the District and carrying the highest registration of motor vehicles, is now served by several north and south streets directly from the central areas, namely, Sixth, Ninth, Eleventh, Thirteenth and Sixteenth streets. As these streets reach the old City of Washington limits [Florida Avenue], they can be made to provide connections with main thoroughfares in such manner as to permit the spread of traffic to all points in this area;

Major projects in the plan included an elevated highway along K Street between Rock Creek Park and Francis Scott Key Bridge, a tunnel under the Potomac River between Alexandria, Virginia, and Shepherds Landing, S.E., in the District (with two lanes, one in each direction), and a bridge to connect South Capitol Street with the area on the other side of the Anacostia River.

(District Commissioner Melvin C. Hazen had been promoting a bridge between Alexandria and Shepherds Landing for several years as part of a bypass of the Nation's capital. Hazen, a Virginia native who had lived in the District for a quarter century, was a bank director, horse

breeder, member of the Board of Trade, and District Surveyor in the engineering department. President Roosevelt appointed Hazen to his post as Commissioner in October 1933.

(On May 2, 1938, in an address to the Congress Heights Progressive Citizens' Association, Hazen said, "We must have a by-pass." He explained that Shepherds Landing south and east of the city was a better location for it than Chain Bridge on the west. Building a bypass to Chain Bridge was objectionable because it would have to go through residential areas in Chevy Chase and northwest Washington. The Shepherds Landing bridge would be ideal for north-south travelers on U.S. 1, the East Coast's main highway from Maine to Florida, as well as motorists bound for Shenandoah Valley in Virginia. Moreover, the Potomac River was at its narrowest point south of the District at Alexandria. Hazen described a bypass route through southeast Washington to Bladensburg or possibly further north to meet U.S. 1. ["By-Pass Bridge Urged By Hazen," *The Evening Star*, May 3, 1938])

The report considered other problems. For example, it recommended that every streetcar loading zone be replaced with a platform:

These death traps should be replaced in the immediate future even at the sacrifice of other work. The number of street car loading points or stops should be reduced to the minimum consistent with proper service. Generally speaking, there are too many stops for both buses and street cars to permit expeditious mass transportation service.

The Whitehurst report also recommended "construction of pedestrian islands of an improved type at intersections on all arterial highways or boulevard streets with a roadway width of 60 feet or more." The report also found that Chain Bridge across the Potomac River in the Palisades area near the western District/Maryland line "is not being utilized to anywhere near its useful capacity, probably due in large part to inadequate approaches and roads leading thereto, particularly on the Virginia side."

The report contained a section on terminal facilities that addressed short-time and long-time parkers in the central business district. Whitehurst wanted to give priority to short-time parkers, such as shoppers and theater-goers who stimulated the local economy. They have access to only 10,000 of the 36,000 parking spaces in the central area. To help them, the report proposed installing parking meters that would discourage long-time parkers.

For long-time parkers, such as government employees, the report adopted an idea recommended in *Toll Roads and Free Roads*, namely parking lots or garages near but not in the central area plus short-line buses to convey the parkers closer to their destination. (As discussed in BPR's report, the inner loop was a terminal where parking facilities would keep traffic out of the central district.) Revenue from the parking meters installed for short-time parkers would pay for the lots or garages serving long-time parkers. The report rejected proposals to provide underground parking facilities in the downtown area for long-time parkers as "economically unsound." ["\$44,450,000 Street, Bridge Program Proposed to Ease Traffic," *The Evening Star*, April 25, 1941; this edition included several articles describing the report]

Speaking after Whitehurst released the report, PRA Commissioner of Public Roads MacDonald addressed the Washington Board of Trade. He put the study in the context of the highway planning surveys that provided the basis for *Toll Roads and Free Roads*:

We developed the fact that cities have become the focus of traffic problems. They are undergoing a migration of values. There is a depreciation of values in the central areas due to congestion of traffic, and the failure of cities to serve newly developed traffic and to meet new conditions.

The findings of the national survey were not the point, he said. The Whitehurst report “comes closer home to you, and attacks the interests of business in the community.” He acknowledged that, “there may be some who will take exception to part of it.” However, if members of the board had confidence in the facts behind the report, “I feel certain you can support its findings”:

If these recommendations are followed through, with reasonable support of the Federal Government, they will attack the disease of cities, which we have found epidemic throughout the Nation.

You will set a model for other cities of the Nation. [“Mitigating ‘Downtown Disease’ Seen in Highway program,” *The Evening Star*, April 25, 1941]

Chairman Delano of the National Capital Park and Planning Commission also praised the Whitehurst report as a “comprehensive and important piece of work.” He had not had a chance to review it in detail, but said, “One thing is certain, and that is that Washington has got to have better transportation facilities.” He doubted that the parking problem could be solved by private parking lots as long as the city provided free parking on city streets. “Automobile owners will not pay for parking as long as they can find free space in the city streets.” At present, he said, Washington transportation facilities were “very backward,” mainly because of the “glut of private motorcars.” [“Delano Praises Whitehurst Road Survey,” *The Evening Star*, April 26, 1941]

Whitehurst made clear that he wanted the report to be presented at a public hearing. He and Engineer Commissioner David McCoach announced that the public hearing would take place on May 20, 1941, in the board room of the District Building.

(Under the District’s form of government at the time, the President appointed three commissioners as the District’s governing body. One was an Engineer Commissioner from the U.S. Army Corps of Engineers. Lt. Colonel David McCoach, Jr., who came to Washington from New York City where he was district engineer, took his oath of office on September 7, 1938, saying, “I never believe in upsetting a going concern, and I have been advised that the municipal government here is one of the best in the country.” [Warren, Don S., “Lt. Col. M’Coach Assumes Duties As District Head,” *The Evening Star*, September 7, 1938])

Shortly before the announcement of the public hearing, Whitehurst had appeared at a meeting of the traffic committee of the Board of Trade. During the meeting, Washington I. Cleveland of the American Automobile Association (AAA) asked Whitehurst about the revenue he expected the

2-cent increase in the gas tax to generate. He estimated it would yield \$3 million a year. With funds already available, the District would have about \$5 million available for a 12-year program of road improvements. If the gas tax were increased only by 1 cent, the city would have about \$3.5 million:

It all depends on how quickly you want this program completed. But I venture to say that if every man and woman in this city were convinced that this plan would make Washington streets safe they wouldn't complain about having a 2 or even 3 cent increase in the gas tax.

Colonel E. G. Bliss, chairman of the board's Statistics and Accident Prevention Subcommittee, said that, "We have got the city so crowded with human targets and automobiles that now it's not merely a matter of enforcing present traffic regulations but a question of a possible cure for traffic congestion." He added that the Whitehurst report "points the way for this cure."

John F. Victory asked Whitehurst about removing all streetcar tracks in the central business district. Whitehurst did not agree. "We are very dependent on mass transportation into the central area and buses alone can't take care of the crowds and [removing all the tracks] would merely increase congestion."

The traffic committee endorsed the Whitehurst plan "in principle" and commended Captain Whitehurst and F. W. Lovejoy of the PRA, which had collaborated with District highway officials on the plan. ["Public Hearing Set on Highway Program," *The Evening Star*, April 29, 1941]

### **The 1941 Plan**

In advance of the public hearing, the *Star* carried a series of articles about the Whitehurst report. The goal of the proposed radial highway system was to eliminate bottlenecks from principal streets to provide a more regular flow of traffic during peak periods. Captain Whitehurst said the goal was not to speed traffic but to eliminate congestion and make traffic safer. He had considered the solution adopted in Manhattan, which built freeways along the edges of the island but in that city, traffic was primarily north-south. A different solution would be needed in the District because traffic moved in all directions, particularly during peak periods.

The city considered elevated or depressed routes, but dismissed the idea because of cost:

The District's problem, it was decided, did not warrant such a large outlay as would be entailed in either elevated or subway transportation, either of which would cost many times more than that of the system finally selected . . . . The department concluded that highly expensive features should be resorted to only if reasonable success could not be obtained by use of surface and depressed highways, with the aid of appropriate grade separations, channelized intersections and light control.

To keep costs down, the District wanted to use existing routes to the extent possible within the current traffic pattern:

In selecting the various trunk routes, the problem was to choose as near as possible the most direct connection with the outlying residential areas and to select streets along which traffic could be made to flow most freely.

For this reason, the department had decided to upgrade K Street instead of M Street as the radial line east of Key Bridge:

M street already was highly congested, it was not wide enough for a depressed highway and it was undesirable because of the business interests involved. As still another bad feature, its roadway was heavily loaded with underground construction and, to avoid a bottleneck in Georgetown, a subway would be necessary.

The department also rejected construction of a bypass north of M Street because “it would require expensive property acquisition, because it would border a residential area and because the eastern terminus would bring the congestion back into Pennsylvania avenue and M street at Twenty-ninth street. Moreover, there would be no connection with Key Bridge.”

By contrast, K Street had “a wide right-of-way and involves virtually no property acquisition,” while connecting with other main highways, “which would make its usefulness much greater.” It also would relieve congestion on New York and Rhode Island Avenues. The city was planning an elevated structure in the K Street corridor.

To serve the greatest percentage of population, which lived west of Rock Creek in the northwest section of the city, the report recommended improving traffic flow on five thoroughfares. They would be widened, with grade separations at intersections, and in some cases, extended to improve connections. The department considered the alternative of building an elevated highway between blocks as far north as Florida Avenue, but the cost was prohibitive. “The conclusion was reached at last that improvements should be made in existing highways, and that grade separations and other relief should be provided at the points of worst congestion.”

In some cases, roads would be depressed, with structures carrying cross roads over them. For example, K Street would be depressed west of Connecticut Avenue to west of 24<sup>th</sup> Street, NW., passing under Washington Circle. “Capt. Whitehurst explained that the costly structures and the grade separations had been decided upon only in instances where no more satisfactory and less costly method was considered feasible. [Jones, Pat, “Radial Street Plan Designed To Eliminate ‘Bottlenecks’ Here,” *The Evening Star*, May 4, 1941]

The city had chosen to build a two-lane tunnel across the Potomac River between Shepherds Landing and Alexandria after considering three alternatives. Aviation concerns prompted rejection of a high-level bridge with a 135-foot clearance. “A two-lane tunnel such as that proposed will cost twice as much as a four-lane bridge, it is estimated, but it is understood the War Department would not approve the additional barrier [that] a bridge would be to planes landing and taking off at nearby Gravelly Point, the Naval Air Station and Bolling Field.” (Gravelly Point, the location of Ronald Reagan Washington National Airport, was named because of the large amount of gravel deposited nearby inside a big bend in the Potomac River. The gravel has been used for construction projects throughout the area, including the nearby

Pentagon. [Kelly, John, “Gravelly Point Park’s moniker is one that shouldn’t just be shoved aside,” John Kelly’s Washington, *The Washington Post*, February 6, 2018]

The city also rejected a low-level bridge because it would require a draw span that would have to be opened so often that it would constitute a serious obstruction for highway traffic:

The proposed tube would extend under the river from Alexandria to Shepherds Landing, a point at which the stream is approximately 3,500 feet wide, and would cost approximately \$9,500,000. It would form part of a suggested bypass route linking Virginia roads with the highways north and west of the District, but its greatest benefit would be in the relief of the immediate traffic load now taxing the Highway Bridge [in the 14<sup>th</sup> Street corridor].

The proposed program included replacing the Highway Bridge at some point, but not immediately; the current bridge had many years of life left in it. However, Captain Whitehurst had been surprised by the amount of inbound traffic revealed by meter check. “The source of this traffic is not wholly known, he added, but an effort will be made to locate it in the hope that there also will be found the reason why Highway Bridge is so much more heavily taxed than [Arlington] Memorial Bridge.” Of the four existing Potomac River crossings, the Highway Bridge was the only one “carrying anywhere near its capacity load.”

The “most important bridge” in the program was the structure across the Anacostia River at South Capitol Street. At the time, South Capitol Street’s southern terminus was P Street, SE., the northern border of Fort Humphreys (renamed Fort Leslie J. McNair in 1948). The nearest bridge across the Anacostia River was at 11<sup>th</sup> Street, NE., with a terminus at the intersection of Good Hope Road and Nichols Avenue:

This [South Capitol Street] bridge, it is expected, would take a good part of the traffic off Anacostia Bridge, now badly overloaded, and would relieve congestion on Nichols avenue and Good Hope road. Moreover, it would provide an important link in the trunk highway to the Southeast and would connect with a new system of streets planned in the Southeast area east of the river. [Jones, Pat, “Potomac Tube to Alexandria Held Best of 3 Possibilities,” *The Evening Star*, May 5, 1941]

(The South Capitol Street Bridge, now called the Frederick Douglass Memorial Bridge, opened on January 14, 1950. Engineer Commissioner Gordon R. Young called it one of the most important public works projects in the District since he took office. Twin sisters Della and Mary Randall of Forest Hills, Maryland, 12 years old, cut the ribbon across one of the eastern approaches to the bridge, after which a motorcade of more than 100 cars crossed the bridge. In brief remarks, General Young said the city’s public works deficiencies were caused by the lack of construction during World War II, coupled with a 40-percent increase in population.

(The new bridge was expected to open up about one-third of the land east of the Anacostia River to direct access to the central city while stimulating growth in nearby Maryland. It would relieve congestion on the 11<sup>th</sup> Street Bridge and, to some extent, the Pennsylvania Avenue Bridge across the river to the north. “The next urgent project is to get one more bridge across the Anacostia

River.” He acknowledged the impatience of residents east of the river who felt they had been neglected, but said that feeling was not justified. “Your area has run away from us so fast that it took longer to catch up.” Young favored placing the bridge at East Capitol Street, but some staff members of the National Capital Park and Planning Commission preferred Massachusetts Avenue for the bridge. “I hope the location will be settled soon so we can go ahead with the construction. [“South Capitol Bridge Opened by Gen. Young,” *The Sunday Star*, January 15, 1950]

(City officials broke ground on February 13, 2018, on a \$441 million project to build a replacement structure.)

Grade separations were included in the proposed program only where no other solution was possible:

“In the interest of safety, where two heavy streams of traffic are always present and roadway capacity is insufficient, to permit effective light installation, there remains only one solution to the problem—separation of grades,” Capt. Whitehurst said. “In some instances, streets can be widened to obtain more reservoir, but not in all.”

The intersection of 14<sup>th</sup> Street and Maine Avenue in the southwest part of the city was a good example:

Possibly the city’s worst congestion point, according to a recent survey, is at Fourteenth street and Maine avenue. This intersection averages 51,000 vehicles daily, heavily augmented on special occasions such as the Cherry Blossom Festival. Cars sometimes are held up there as long as 30 minutes.

To correct this situation, it is proposed that Fourteenth street be raised above Maine avenue and East Potomac Park at that point. A low-level bridge will be constructed across Tidal Basin to handle park traffic, thus making it possible to segregate entirely what may be called through or commercial traffic and park traffic. There also will be interchange roads between Maine avenue and Fourteenth street, providing access in all directions.

Another particularly bad intersection was the six-street junction of Florida and Maryland Avenue, 15<sup>th</sup> and H Streets, and Benning and Bladensburg Roads, NW. (Bladensburg and Maryland Avenue were part of U.S. 50.) This intersection was hazardous to motorists and pedestrians, who could not cross the 126 feet from curb to curb before a change in the traffic light:

Capt. Whitehurst admitted that the situation there is so extreme that no specific plan has been agreed upon. Maryland avenue and Bladensburg road constitute the line of heaviest travel, and it is evident that a grade separation of some nature, possibly an underground tunnel for these two streets, will be necessary.

As noted, the city had already decided on an elevated structure for K Street as a bypass for M Street in Georgetown. “The present grade separation structure at K street and Rock Creek was



designed to take a superstructure that would give access to an elevated highway.” [Jones, Pat, “Grade Separation Projects Urged Only as a Last Resort,” *The Evening Star*, May 7, 1941]

The fringe parking plan was based on a total cost for commuters of 15 cents a day (10 cents for parking all day and 5 cents for a short-haul bus to the destination). This fee structure would cost \$3.75 a month or \$45 a year. Whitehurst thought the lots or garages should have a capacity of 400 to 500 cars; beyond that would lead to congestion at entrances/exits during peak periods. “The cheapest structure to operate, he said, is the three-story parking plaza type.” Land values within the central business district were too high for parking lots to be profitable for the city.

The District could subsidize the parking areas, but “has no authority to proceed with subsidization for Virginia and Maryland car owners, who comprise a major portion of the motorists involved.” Given the complexities of location and coordination, Whitehurst recommended establishing a motor vehicle parking agency with four public officials and three citizens comprising the leadership:

But whatever is done, Capt. Whitehurst is emphatic in his warning that no single individual should be placed at the head to say how the problem should be solved. “I do not believe any one man,” he said, “knows enough about the situation and would give proper enough consideration to all the factors involved to bring about a satisfactory solution . . . .”

The situation was grave, but Whitehurst’s report did not recommend a solution. “That must be worked out with time. What we have tried to do is show the way toward a solution.” [Jones, Pat, “Fringe Parking Plan Is Aimed At 15-Cent Daily Cost,” *The Evening Star*, May 8, 1941]

(As mentioned earlier, Congress authorized a Motor Vehicle Parking Agency for the District in 1942.)

Another issue to be considered was the city’s parkland. Development of roads in Rock Creek Park and the National Zoological Park was vitally important, Whitehurst said, but he understood that park officials might disagree. “The automobile is here to stay, and it is up to us to keep pace with transportation trends. I realize, however, that the co-operation of agencies controlling park land must be secured before park roads can be adjusted to suit the city’s traffic needs.” He knew from experience that the National Park Service (NPS), which controlled Rock Creek Park, and the Smithsonian Institution, which was responsible for roads in the zoological park, wanted the roads preserved for scenic and recreational purposes:

“I don’t blame them in the least for looking at it in that light,” the highway director said, “especially when you consider that the land originally was set aside for park purposes alone. I have become convinced in recent years, nevertheless, that the increased demand for highway facilities makes it imperative that certain park roads be expanded and improved to fit into the general highway picture.”

For that reason, the preliminary report included \$5.7 million for park road development, including \$3.75 million for improvements in Rock Creek Park and the Zoo.

At present, narrow park roads and inadequate bridges resulted in congestion. Whitehurst thought that extending the Rock Creek and Potomac Parkway northward through the zoo would be a prime remedy of a significant obstacle to north-south park traffic. He also recommended a road along the western border of the park north of the zoo connecting with Oregon Avenue and Military Road. The result would be that existing roads within the parklands north of Blagden Avenue-Broad Branch Road could be reserved for park use.

He was concerned, too, about bridges in Rock Creek Park, some of which were only 19 feet wide and had a load limit of 12,000 pounds. Despite this limit, vehicles weighing as much as 30,000 sometimes used the bridges. “Wouldn’t it be a terrible thing if a bus-load of children crashed through one of those bridges?”

Highway surveys demonstrated that only 10 percent of the vehicles entering Rock Creek Park turned off the principle routes while still in the park. “This knowledge led those making the study to the conclusion that since the vast majority of drivers use the roads in the park as a means of traveling on the north-south axis, first-rate thoroughfares or possibly freeways ought to be provided for their convenience.” He explained, “The first thing to consider in making a traffic survey is demand. Roads should be built or improved to accommodate these demands.”

The *Star* reporter reminded Whitehurst of a 10-year old plan to build high-level bridges across narrow parts of Rock Creek Park for cross-traffic between Tilden and Upshur Streets; Military Road/Utah Avenue to 16<sup>th</sup> Street; and Oregon Avenue near Wise Road to Aspen Street at 16<sup>th</sup> Avenue. Whitehurst replied that the proposal offered a “right-angle solution to a diagonal problem.” The heaviest traffic was southwest-northeast, followed by southeast-northwest. The suggested bridges would be almost due east-west, thus not addressing the heaviest need.

The remaining \$2 million in the preliminary report for park roads was to extend and broaden Independence Avenue west of 14<sup>th</sup> Street, NW., and to complete the Fort Drive roadway:

Fort Drive is needed to provide a complete circumferential around the eastern margin of Washington, with interchanges with the major radial highways intersecting it, Capt. Whitehurst said. He explained that Fort Drive would intersect Michigan avenue, Stanton road, Good Hope road, Naylor road, Kansas avenue, Massachusetts avenue, Ridge road, East Capitol street, and Benning road. “It is essential to the general highway plan of Washington,” he declared.

Whitehurst added that Fort Drive would provide another approach to Arlington Memorial Bridge:

“Traffic bottlenecks don’t develop on the bridge itself,” he emphasized, “but on the roads leading into it. Take some of the traffic load away from Constitution avenue and you will hear less talk about the need for another bridge between Arlington and the District.” [Mustin, Henry A., “Park Roadway Developments Face Utilitarian Objections,” *The Evening Star*, May 9, 1941; the series included an article about street improvements (May 6) and safety devices (May 10)]

## Rock Creek Park

Because Rock Creek Park would be a major factor in the transportation debate in coming decades, a brief look at its road network would be helpful.

According to an NPS historic resource study, the park's origins can be traced to Senate interest after the Civil War in providing a new residence for the President to replace the aging presidential mansion situated in an unhealthy part of the city:

The Washington City Canal, which once ran along what today is Constitution Avenue was an open sewer by the 1860s. In 1866 the outlet for this waterway into the nearby Potomac River was located just below the Executive mansion (the Potomac Flats were not reclaimed until the 1880s), at Seventeenth Street. President and Mrs. Lincoln often removed to a cottage at the Soldier's Home to escape the stench, heat, and contagion of the city.

(Soldier's Home, a summer home to several Presidents and their families, is located at 140 Rock Creek Church Road, NW., on one of the highest points in the District. It is near the Petworth and Park View neighborhoods between North Capitol Street and New Hampshire Avenue.)

In 1866, the House and Senate adopted resolutions calling for a study to identify a tract of land of not less than 300 acres for a park and site for the mansion "which shall combine convenience of access, healthfulness, good water, and capability of adornment."

President Ulysses S. Grant vetoed the plans, preferring to retain the existing historic mansion, but the idea of acquiring land for a park "had more permanence." The idea languished until the 1880s:

The renewal of interest in the creation of a major urban park in Washington in the 1880s was also a product of growing public health concerns. Eradication of waterborne diseases, especially typhoid, was a vigorous reform movement in all major American cities in this decade. In 1879 the sewers in Georgetown and Northwest Washington emptied into Rock Creek. By 1889 the pollution of Rock Creek was considered a serious threat to public health . . . . [Bushong, William, *Rock Creek Park*, Historic Resource Study, National Park Service, U.S. Department of the Interior, 1990, pages 63-66]

After much debate and controversy, Congress passed legislation authorizing and funding the park. President Benjamin Harrison approved it on September 27, 1890:

The law establishing Rock Creek Park set a limit of 2,000 acres for the land area with an appropriation of \$1,200,000, equal portions to be paid out of District revenues and the U.S. Treasury. A rough southern boundary was established at Klinge Ford Bridge, and the law specified limits of 600 to 1200 feet for the park's width below Broad Branch and Blagden Mill Roads. This provision accounts for the reservation's parkway character in the neck of land that today forms the southern tip of the park. The width of the park's remaining boundaries was left to the discretion of the Rock Creek Park Commissioners. These officials were the Chief of Engineers, United States Army, the Engineer

Commissioner of the District of Columbia, and three citizens appointed by the president with the advice and consent of the Senate. The remaining sections of the act explained the duties of the commission and outlined condemnation, appraisal, and benefit assessment procedures. The final provision placed the new park under the joint control of the D.C. Commissioners and the Chief of Engineers of the U.S. Army, “whose duty it shall be as soon as practicable, to lay out and prepare roadways and bridle paths . . . .” [Bushong, pages 72-73]

On January 1, 1895, after the park commissioners had completed their work, the Rock Creek Board of Control assumed responsibility for the new park, which consisted of 1,605,976 acres purchased for \$1,740,511.45. The NPS assumed responsibility for Rock Creek Park on August 10, 1933. [Bushong, pages 77, 101]

Under the Capper-Cramton Act of May 29, 1930, the Maryland-National Capital Park and Planning Commission acquired property to extend the park into Montgomery County. (The Capper-Cramton Act will be discussed later.) The NPS remains responsible for Rock Creek Park in the District, but the Maryland commission owns and operates the Maryland portion of the park.

The agitation for park roads began early, as described in an NPS history of the Rock Creek Park roadway network:

The first campaign to compel the government to expand the park’s road network was spearheaded by the Brightwood Citizens’ Association, whose influential members resided in the rapidly developing area on the east side of the park. At a widely reported October 6, 1896 meeting, the association adopted a resolution urging Congress and the District Commissioners to provide \$100,000 for the development of roads and paths in Rock Creek Park. Observing that six years had passed since Congress authorized the park, the group’s president W. W. Cox inveighed, “Yet so far as I am aware, not a single dollar has been spent in making it accessible to the people for whose recreation it was purchased.”

Captain Lansing H. Beach, assistant to the Chief of the U.S. Army Corps of Engineers, was largely responsible for the park’s development beginning in 1896. A native of Dubuque, Iowa, Beach graduated from the U.S. Military Academy at West Point in 1882, was commissioned in the U.S. Army Corps of Engineers, and had worked to improve navigation in the Ohio River Valley and on a commission to settle the boundary between the United States and the Indian Territory (now part of Oklahoma) before arriving in Washington in 1884.

In the absence of appropriations for road improvement, Captain Beach began in 1897 employing chain gangs of prisoners to improve existing roads, reclaim sections of road that had been abandoned, and clear brush adjacent to the paths. With an appropriation of \$24,000 for 1899, Beach focused on improving and macadamizing a road from Blagden Mill Road to Military Road along Rock Creek north of the National Zoological Park:

The completed driveway—7,000’-long, with gently winding curves and an almost undetectable rise of 60’ over the distance between Blagden Mill Road and Military

Road—was widely praised as an engineering feat, as an artistic accomplishment, and as a long-awaited response to the need for enhanced access to Rock Creek Park . . . . The completion of Rock Creek Drive, as it was originally called, not only exposed the beauties of the creek to popular view, it eliminated the need for backtracking or breaking the trip into east and west portions combining park roads and ordinary city streets.

Rock Creek Drive cost \$15,000, with Captain Beach using the remainder of the appropriation on other roads.

On November 20, 1901, Rock Creek Park’s Board of Control honored Captain Beach for his work improving the park’s roads. The board changed the name of Rock Creek Drive to “The Beach Driveway,” soon shortened to Beach Drive, the name the road north of National Zoo still bears. [*Rock Creek Park Road System*, Historic American Engineering Record No. DC-55, National Park Service, pages 37-44; Kelly, John, “The resourceful man who helped make Rock Creek Park more accessible,” John Kelly’s Washington, *The Washington Post*, December 31, 2017]

Despite limited appropriations for park roads, officials gradually improved Beach Drive to meet changing needs as the automobile began to dominate traffic in the District of Columbia. In the 1930s, as the Maryland-National Capital Park and Planning Commission extended the park beyond the District line, park officials planned extension of Beach Drive to Maryland. The Maryland planning commission had begun work on the 1.2-mile Maryland section of Beach Drive to East-West Highway in early 1931. Construction began on March 30.

General Grant, then still Director of Public Buildings and Public Parks, began surveying the District extension in the spring of 1931:

The new three-quarter mile long roadway wound along the southwest bank of Rock Creek from the bridge leading to Kalmia Road to the District line, where it connected with the park drive already constructed by the M-NCPC. This part of Rock Creek had previously been accessible only by foot and bridle paths.

The extension of Beach Drive in the District portion of Rock Creek Park opened to traffic on June 25, 1932:

Completion of this segment enabled motorists to drive along Rock Creek all the way from the National Zoo into Maryland. The Maryland section of the park road system provided an intersection with East-West Highway, the primary route between Bethesda and Silver Spring. These links to the rapidly growing suburbs of Montgomery County helped fuel the transformation of Beach Drive from an isolated park drive into a busy commuter thoroughfare playing an increasingly prominent role in the transportation system of the Washington Metropolitan area. [*Rock Creek Park Road System*, pages 76-77]

The Rock Creek and Potomac Parkway served traffic south of the zoo. President William Howard Taft, on his last day in office, approved the Public Buildings Act on March 4, 1913.

Section 22 authorized a commission “for the purpose of preventing the pollution and obstruction of Rock Creek and of connecting Potomac Park with the Zoological Park and Rock Creek Park.”

Construction began in the 1920s, but land disputes and funding issues delayed progress. The last segment, the bridge over Rock Creek at P Street, was completed on June 4, 1936.

The Rock Creek and Potomac Parkway is 2.5 miles long, from the Lincoln Memorial to the National Zoo. Meanwhile, the Maryland-National Capital Park and Planning Commission had opened its connector road in June 1932 between East-West Highway and the District line. With completion of the parkway in the District, motorists could “drive from the Lincoln Memorial to Maryland without leaving an attractive tree-lined setting.”

An NPS brochure about the parkway explained that the first federally authorized parkway was “conceived as a pleasure route for recreational drivers, but it soon became a major commuter artery for traffic from Washington’s northwest suburbs.” In recognition of its use as a commuter route, NPS instituted one-way use, southbound during the morning peak period, northbound in the afternoon, a change in effect to this day. [*Rock Creek and Potomac Parkway*, Highways in Harmony, National Park Service, 1992; Krakow, Jere L., *Rock Creek and Potomac Parkway, George Washington Memorial Parkway, Suitland Parkway, Baltimore-Washington Parkway*, Historic Resource Study, National Park Service, January 1990, pages 29-36]

Although motorists could drive from the Lincoln Memorial to East-West Highway, they ran into a bottleneck at the National Zoological Park because of sharp curves and periodic high water levels. The NPS history of the Rock Creek Park road system explained the problem:

Following the completion of Rock Creek and Potomac Parkway, District transportation officials continued their efforts to increase the flow of traffic through Rock Creek valley. The first major obstacle—though ultimately one of the last issues to be settled—was the creation of a permanent, all-weather connection between the north end of Rock Creek and Potomac Parkway and Beach Drive in Rock Creek Park. Until the current tunnel was completed in 1966, parkway traffic entered the zoo grounds through a ford located several hundred yards west of the current bridge. Traffic then followed the zoo roads across another ford before joining Beach Drive on the north side of the zoo. Since the zoo grounds were only open during daylight hours, and the fords were impassable during high water, motorists were often forced to take a roundabout route through surface streets to get from Beach Drive to Rock Creek and Potomac Parkway. [*Rock Creek Park Road System*, page 106]

As early as 1933, highway advocates proposed a tunnel link to carry traffic through the area.

Also by the 1930s, pressure began for an all-purpose highway through the valley. The NPS history of Rock Creek Park stated:

In addition to the tunnel project, highway proponents over the years have advocated construction of a highway through the Rock Creek Valley. In 1938 District Commissioner Melvin C. Hazen favored the construction of a highway connection from

the Rock Creek and Potomac Parkway through the zoo grounds and Rock Creek Park to the East-West Highway in Maryland. Opponents stalled the project and World War II delayed serious consideration of Hazen's proposal. [*Rock Creek and Potomac Parkway*; Bushong, pages 145-146]

### **The Public Speaks**

The board room of the District Building was crowded on May 20, 1941, for the public hearing on the Whitehurst plan. While speakers generally supported the plan in principle, they differed on the proposed gas tax increase. The Washington Board of Trade, the Federation of Citizens' Associations, and the Keystone Automobile Club opposed any tax increase. They and others thought the Federal Government should provide more funds for the city's transportation needs, as the trade board explained in a statement:

We desire to call attention to the fact that the Federal Government now is studying ways and means of levying the heaviest taxes which ever have been levied on the people of this country. This it is necessary to do in order to finance the defense programs.

The board anticipated that the Federal excise tax on gasoline, instituted in 1932 as a deficit-fighting measure with no link to Federal-aid highway funding, would be increased as would taxes on individuals and businesses:

We therefore recommend against increasing the gasoline tax until after we have seen what new taxes will be levied by the Federal Government during this session of Congress.

Some groups, including the District division of AAA, favored a 1-cent gas tax increase. ["Citizens Oppose Hike in D.C. Gas Tax for Highway Program," *The Evening Star*, May 20, 1941; "Commissioners Study Mass of Testimony On Whitehurst Plan," *The Evening Star*, May 21, 1941]

(By an act approved on December 26, 1941, Congress approved an increase in the District's gas tax from 2 to 3 cents. Because of wartime rationing of gasoline and tires beginning in 1942, revenues declined despite the increase, prompting a second increase to 4 cents a gallon.)

To consider all options, District highway officials decided to study the feasibility of relieving congestion by construction of "lower-level street or tunnel systems, as a means of diverting excess traffic, particularly mass transportation vehicles, into underground channels. Congress authorized the study by joint resolution approved March 7, 1942, directing the District commissions to study the feasibility of a subway system.

The Director of Highways conducted the study, reporting preliminary findings on June 24, 1942. The study contained three basic conclusions. "(1) That rapid transit subway lines to the outlying sections of the District of Columbia are not warranted or necessary; (2) that a system of streetcar tunnels and underpasses, including appropriate terminal facilities in the central congested area, is feasible and, in many cases, warranted; (3) that the construction of grade separation structures and depressed highways within and beyond the central area is necessary and logical."

The National Capital Park and Planning Commission, in a companion report, “expressed itself in favor of grade separation structures, or localized subways, in the heavily congested multiple intersections caused by the convergence of several arterial streets into overtaxed rotaries, such as Thomas and Scott Circles, and at 14<sup>th</sup> Street, S.W., and Maine Avenue.” [*Twenty-Four Years of Progress*, pages 66-68; underlining in original]

### **Refining a Plan**

In October 1944, the Department of Highways received a report from the consultant firms of J. E. Greiner Company and DeLeuw, Cather and Company. “The report is mainly concerned with a discussion of a master plan for the correction and future development of transportation facilities in the Central Area of the District of Columbia.” The goal was to improve accessibility to the central area’s retail and Federal districts:

In their analysis of conditions in the congested downtown district, the consultants again advanced the proposal of lower-level streets [tunnels] as the only positive means of reducing the conflicts between fixed-wheel mass transportation vehicles [i.e., streetcars] and free-wheel traffic on surface pavements. The contemplated relocation of streetcar lines, which now operate on Connecticut and Pennsylvania Avenues and Fourteenth Street, to underground tunnels in the critical downtown area, is a project which appears to be amply justified.

A subway system of streetcars would serve the greatest number of people with minimum mileage; extend the benefits of rapid transit to all parts of the city; remove streetcars from surface streets in the most congested areas; allow for coordination of rail and bus routes on the surface; and allow for expansion. “It was further pointed out that the flow of buses, after subways were built, would be reduced to the extent that patrons would be attracted to the faster underground routes.”

The consultants also proposed “extensive improvements in the existing street layout through the construction of grade separation structures and channelized connections, to form convenient inner and outer belt line distributor routes around the central portion of the city.” They recommended K Street, “on the northern rim of this area,” for improvement as part of the inner belt route and as a surface distributing artery. For overloaded rotaries at Dupont Circle and elsewhere, the report recommended underpasses to separate heavy traffic flows.

The reference to inner and outer beltline distributors was not unusual, as urban planners had adopted the concept as described in *Toll Roads and Free Roads*. Urban planners would adapt the idea as they developed thoroughfare plans for cities around the country.

The October 1944 report made clear that the District needed major improvements:

The population and traffic volume curves have been on the rise . . . but without a corresponding expansion of the highway system to absorb excess traffic movements in the Central Area. Hazardous conditions, increased cost of motor vehicle operation, delay and inaccessibility of



vital regions located in this area are the wasteful and unproductive results suffered each day by a large segment of the population. [*Twenty-Four Years of Progress*, pages 71-74]

One issue remaining to be resolved was replacement of the Highway Bridge at 14<sup>th</sup> Street, NW.

### **The Highway Bridge**

Today's 14<sup>th</sup> Street Bridge complex is the modern incarnation of the Highway Bridge, itself an incarnation of the Long Bridge, which had been authorized by a law that President Thomas Jefferson approved on February 8, 1808. The toll Long Bridge, which opened in May 1809, was a 1-mile long pile structure with draw span to allow ships to pass. President James Madison was the first to cross the \$100,000 bridge, crossing in his carriage to Alexandria (then part of the capital city) where residents entertained him with a dinner. The bridge included a broad carriageway and pedestrian paths on both sides.

Twenty years later, the bridge sustained damage from floodwaters. When the bridge company was unable to pay for repairs, Congress intervened to finance a new bridge. President Andrew Jackson and his Cabinet celebrated the opening of the new \$130,000 Long Bridge in October 1835 by walking across to Alexandria. They returned in carriages. In later years, flooding and ice flows continually damaged the bridge.

By the 20<sup>th</sup> century, the Long Bridge, now controlled by the Pennsylvania Railroad, was primarily used by railroads and an interurban trolley line. It was replaced by a double-tracked railroad bridge that opened on August 25, 1904 (2,529 feet long with 11 fixed truss spans and a swing span). It included a swing draw span to allow ships to pass on the river.

The old Long Bridge remained in use for road traffic until it was replaced 2 years later. On February 12, 1906, officials inspected the completed through-truss Highway Bridge, although the approaches would not be ready until later in the year. The bridge, which cost \$1,196,000, was 2,667 feet long, 40 feet wide, and 21 feet above the normal river level. It included a swing span similar to the new Pennsylvania Railroad bridge's swing span so they could be synchronized to allow the passage of ships.

Commissioner H. B. F. Macfarland called the new structure "a fine bridge," but added:

My only regret about the two new bridges across the Potomac is that the War Department was not able to carry to success its suggestion that the bridges should be made beautiful as well as useful, which could have been done, the department believed, with little or no additional expense.

Following the inspection, the Alexandria and Mount Vernon Railway Company's trolleys were able to use the new bridge from their District terminus at 14<sup>th</sup> Street and Maryland Avenue.

The Long Bridge was finally closed on December 15 and all nonrailroad traffic shifted to the Highway Bridge. A few weeks later, the engineer in charge, Captain Spencer Crosby, reported:

A careful census of that traffic shows a daily average of 111 electric trains, 822 double teams, 301 single teams, 3 equestrians and 523 pedestrians. These figures apply to the daily traffic in good weather. There is practically no business traffic on Sundays and holidays. The greater part of the travel outside of the electric trains consists of the two-horse teams going to and from the brick yards in Virginia.

[Emery, Fred A., "Washington's Historic Bridges," *Records of The Columbia Historical Society of Washington, D.C.*, Volume 1938, pages 58-60; Cohen, Robert, "History of the Long Railroad Bridge Crossing Across the Potomac River," Washington DC Chapter, National Railway Historical Society, <http://www.dcnrhs.org/learn/washington-d-c-railroad-history/history-of-the-long-bridge>; Proctor, John Claggett, "Old and New Bridges Spanning the Potomac," *The Sunday Star*, March 24, 1946; "New Highway Bridge," *The Evening Star*, February 12, 1906; "Over Highway Bridge," *The Evening Star*, January 19, 1907]

The Highway Bridge was still in operation in the 1940s, when officials began debating how to replace it. With World War II underway, District officials began planning a replacement for the Highway Bridge as a post-war project. Quickly, though, officials split on what was needed, as the *Star* reported on April 20, 1944:

After more than nine months of conferences, District officials are holding out for two one-way bridges of four traffic lanes each in preference to a counterproposal for single six-lane bridge. The latter plan, however, is tied in to a large extent with a scheme to build at some future date another cross-river bridge at Alexandria to by-pass traffic into the Anacostia area.

PRA and the Commission of Fine Arts supported the District's view. The support by PRA was a strong point in favor of the two-bridge option because Congress, which would have to resolve the dispute, usually deferred to PRA. The basis for the District's and PRA's position was that two bridges with eight lanes would be able to carry present and future traffic. According to the *Star*:

The weight of evidence is so overwhelmingly in favor of two bridges, Commissioner Thomas H. MacDonald has pointed out in correspondence on the matter, that it would be most difficult, if not impossible, to approve the single plan if submitted for Federal participation.

The District conceded that its two-bridge plan would cost more than a single span, but contended any bridge that was inadequate for future traffic would be too expensive.

The National Capital Park and Planning Commission and NPS supported the single-span option. Commission Chairman Grant said the commission's preferred option was consistent with studies by Frederic Law Olmsted, Jr. With the Highway Bridge carrying interstate U.S. 1 traffic that did not have any reason to be in the District other than to use the bridge to cross the river, by the time traffic volumes exceeded the capacity of the single span, other crossings would be available, General Grant pointed out, particularly a crossing at Alexandria, Virginia, from Shepherds landing:

Aside from the additional cost of two bridges, he sees no justification for eight lanes of traffic feeding into the six lanes on the Fourteenth street overpass at Maine avenue. The funnel of southbound traffic actually becomes smaller as it enters Fourteenth street, he claimed, by reason of the streetcar tracks.

Gen. Grant contended also that aside from the additional cost of two bridges, the public would be paying also a real loss in the harm that would follow to the appearance and background of the new Jefferson Memorial.

Supporters of the single span also pointed out that with planned post-war dispersal of Federal offices to East Capitol Street, the Pentagon, and Suitland, Maryland, many workers who used the Highway Bridge would no longer have to do so.

Secretary of the Interior Harold I. Ickes strongly agreed with General Grant and his department's own NPS. He had written to the District commissioners in support of the single-span option. He also reminded them that NPS held title to parklands that would be needed for approaches. "He simply asked, however, to be advised before bridge appropriations are sought from Congress and before a final decision is reached, so that he might have an opportunity to present the views of the Park Service."

The Fine Arts Commission supported the two-bridge option, which was surprising in view of its usual consideration of aesthetics in its decisionmaking:

It has emphasized the importance of avoiding an axial relationship between the bridge, or bridges, and the memorial. Nor does the fine arts group subscribe to the view of the Planning Commission that a "regrettable impression" would be creating by building two passenger bridges across the Potomac paralleling the railroad bridge.

The District could ignore the planning commission's view, which was merely advisory, as PRA's MacDonald noted in a letter to General Grant on January 12, 1944:

It is recognized that the District of Columbia and the Public Roads Administration could proceed to design a facility on any basis they might select. It is also recognized that your Commission carries sufficient weight to aid or delay the accomplishment of a civic improvement. [Authorizing the Construction of Two Four-Lane Free Highway Bridges Across the Potomac River to Replace Existing Highway Bridge at or Near Fourteenth Street, Washington, D.C., Committee on Interstate and Foreign Commerce, U.S. House of Representatives, 79<sup>th</sup> Congress, 2d Session, Report No. 2346, June 26, 1946, pages 10-12]

In short, the commission and the Interior Department were influential with Congress and Washington area decisionmakers. [Shepard, Nelson M., "Four Agencies Split Over 6-Lane Bridge For 14<sup>th</sup> Street," *The Evening Star*, April 20, 1944]

On July 21, 1944, the District commissioners approved the two-bridge plan. A statement explained:

The provision of four lane capacity in each direction can be most adequately provided by two bridges of four lanes each, and such facility will not detract from the Jefferson Memorial.

A single six-lane bridge will not meet the prospective traffic needs, and any economy in present construction costs will be more than balanced by the cost of another crossing in the future.

Present access routes in the District and Virginia would be sufficient for traffic using the new bridges.

The statement pointed out that the National Capital Park and Planning Commission, which opposed the two-bridge plan, had “never expressed the opinion that future traffic demands will not require the eight lanes of capacity.” To demonstrate that eight lanes were needed, the commissioners cited a PRA study ordered by MacDonald, who reported:

An analysis leads to the conclusion that the facility should be designed for a peak load of 5,000 vehicles in each direction for a period of time in excess of an hour . . . . The 1960 (probably not more than 10 years after completion) average daily traffic is estimated to be 89,000 vehicles. A normal distribution of the expected average daily traffic for 1960 would result in numerous one-way peak loads in excess of 5,000 vehicles per hour, but the observed distribution at Highway Bridge is such that it would be safe to design for that figure.

Regarding the National Capital Park and Planning Commission’s idea that sufficient traffic would be diverted to the Alexandria-Shepherds Landing bridge to require only six lanes at

14<sup>th</sup> Street, MacDonald said that, “it is my considered judgment that it would be unwise to construct a facility of inadequate capacity with the hope that such an act would cause the building of an additional facility at another location, and that the two combined would solve the problem.”

The District commissioners awarded a contract to the New York City consulting firm of Howard, Needles, Tammen and Bergendoff to prepare working drawing for the bridges, which the *Star* described:

The new crossing will consist of two identical bridges about 400 feet apart and each with four-lane traffic capacity. There will be 15 steel deck girder spans, each approximately 160 feet in length, residing on stone faced piers. Navigation features will have to be passed upon by the War Department, but openings for river traffic are planned for each structure. [Crist, Bainbridge, “Two Four-Lane Spans Approved to Replace 14<sup>th</sup> Street Bridge,” *The Evening Star*, July 21, 1944]

By January 1945, America could anticipate the end of the war. Planning for post-war construction took on urgency, causing the debate over replacing the Highway Bridge to intensify.

The chairman of the House District Committee, Representative Jennings Randolph (D-WV), introduced several bills at the request of the District commissioners, including H.R. 541:

“Authorizing and directing the Commissioners of the District of Columbia to construct two four-lane bridges to replace the existing Fourteenth Street or Highway Bridge across the Potomac River, and for other purposes.” The bill authorized \$7 million for the two bridges.

Senator Theodore G. Bilbo (D-Ms.), chairman of the Senate District Committee, introduced companion bills, again at the commissioners’ request. As for the Potomac River crossing, he thought two tunnels might be better than any bridge. Two tunnels, he said, would put an end to complaints that a bridge or bridges would “mar the beauty” of the area or handicap navigation. He also thought the tunnels would be cheaper than the bridge alternatives, but admitted that despite his comments, he did not have the “question settled in my own mind.”

On January 13, Chairman Randolph released sharply conflicting statements he had received from public officials on the bridge issue; he had sent the statements to Chairman Clarence F. Lea (D-Ca.) of the Committee on Interstate and Foreign Commerce, who indicated he would hold a hearing on the bridge legislation. Secretary Ickes’s statement said the two-bridge option would cost too much and “do violence” to the approach to the Nation’s capital. It also would overburden area streets. The National Capital Park and Planning Commission’s concerns were “based on sound economy and modern city planning.” In view of his preferred options, he said, “Sooner or later, another bridge should be constructed crossing the Potomac at Alexandria. This bridge would provide a by-pass for the passenger vehicles and trucks which do not have occasion to enter downtown Washington.”

Major Philip B. Fleming, administrator of PRA’s home, the Federal Works Agency, said that the assertion that the two-span, eight-lane proposal would overload the street was “not in agreement with the traffic facts.” His agency had considered the national commission’s views, “but the conclusion reached was that neither traffic nor the interests of the District would be served by a bridge which soon would be unable to accommodate the traffic that inevitably would use the structure.” Traffic studies demonstrated the need for eight lanes to support probable growth.

Secretary of War Henry L. Stimson also had commented on the dispute. “I know of no objection to the favorable consideration” of the District’s twin-bridge project. [“Ickes and FWA Clash Over Plans for Spans Across Potomac,” *The Sunday Star*, January 14, 1945]

In December 1945, Representative Virgil M. Chapman (D-Ky.), chairman of the Subcommittee on Bridges of the Committee on Interstate and Foreign Commerce, held a hearing on the debate. On December 11, Chairman Grant of the National Capital Park and Planning Commissioner released a previously confidential report that consulting engineers Sverdrup and Parcel had prepared for the War Department in 1941. He quoted the “pertinent and important” section of the report on the bridge situation:

The very thorough study of highway traffic in the Washington area presented in the special report of the Director of Highways for the District of Columbia, indicates (a) a vehicular crossing at Alexandria to relieve the congestion on the Fourteenth Street Bridge and (more particularly) the city streets leading to it is a present necessity, and, that (b) a reconstruction of the Fourteenth Street Bridge and a revision of the approach roads, to increase traffic capacity, may become a necessity in the reasonably near future.

The report estimated that a six-lane bridge would cost \$4,694,000, while the Alexandria bridge would cost \$3,510,000, for a total cost of \$8,504,000. The two spans the city favored for the Highway Bridge location would cost \$7 million. [Two Four-Lane Highway Bridges Across the Potomac River, Washington, D.C., Hearing on H.R. 541 Before the Bridge Committee of the Committee on Interstate and Foreign Commerce, U.S. House of Representatives, 79<sup>th</sup> Congress, 1<sup>st</sup> Session, page 20]

General Grant also argued that the city had “violated” traffic estimating principles to show the need for four lanes of Washington-bound traffic instead of three lanes. The bridge could not carry the predicted 6,700 vehicles per hour because they would be “poured into the Fourteenth street bottleneck,” which could not be relieved because of the impracticability of removing the Maine Avenue overpass.

He regretted that for the first time, as far as he knew, the commission had to appear before a congressional committee in opposition to a District proposal. “But, unfortunately, they are recommending to you what past experience and sound planning show will inevitably prove an unduly costly and harmful project, to the city, as well as to the Federal Government, which will pay half of this cost and presumably half of that of the future, more expensive remedial measures.” In view of the “dire effects” of the city’s twin-bridge proposal on the central area park system, he was surprised that PRA was advocating a project that would “deluge the Jefferson Memorial with a congestion of trucks and business traffic.”

In a statement introduced for the record, Chairman Gilmore D. Clarke of the Commission of Fine Arts argued that twin bridges would provide a more dignified approach to the Jefferson Memorial area at the edge of the Tidal Basin. In a letter to General Grant, Clarke had written that the issue regarding one versus two bridges is “debatable, since it is based upon esthetics and, in that area of thought, there may be as many answers as there are persons to debate.”

Secretary Ickes, appearing before the subcommittee on December 18, denounced the District’s plan for two four-lane bridges because they would jeopardize the beauty of the Jefferson Memorial along the Tidal Basin. Referring to the appearance of vehicles instead of trees, he said, “I can only compare such a backdrop to the mechanical ducks which move across the back of every two-bit shooting gallery in the country.” He supported General Grant’s claims, arguing that the additional traffic from the eight lanes would require additional funds to depress or elevate roads throughout downtown Washington.

The *Star* summarized another aspect of Secretary Ickes’ attack:

Mr. Ickes charged Public Roads Commissioner Thomas H. MacDonald had taken the position that if the District built a single six-lane, two-way bridge, no Federal funds would be forthcoming for the project.

“I believe I would find it difficult to avoid arriving at the same conclusion as the District Commissioners after Mr. MacDonald had said in effect, ‘Do it my way or else.’

“I believe that Mr. MacDonald misconceives his role as a Federal official, efficient and high minded as he may be. It would seem to me his function is to build the roads that policy-making agencies may determine upon,” Mr. Ickes said.

Secretary Ickes also questioned PRA’s “curious” conclusion that the 89,000 vehicles that would use the crossing to enter Washington would cause no more congestion downtown than the 44,500 using it in 1941. “The two-bridge plan would have sad consequences in the downtown business district.”

He also criticized Clarke for saying that the issue about two bridges was “debatable, since it is based upon esthetics.” Secretary Ickes said he was surprised to hear that “educated judgment” on aesthetics, “which might include his own - is to be taken with a grain of salt.”

Even before Secretary Ickes testified, District officials had threatened to “blow off the lid” in the controversy, promising to present statistics that would conclusively rebut his views. [“Ickes Will Be Horatio for a Single Bridge,” *The Washington Post*, December 12, 1945]

Captain Whitehurst, who followed the Secretary at the witness table, told the subcommittee that the 1941 classified report that General Grant had released was misleading. It had, Whitehurst said, covered only the war emergency and covered not only vehicular but rail traffic. The *Star* summarized his 21 typed pages of testimony:

1. At least four lanes and more are available on both the District and Virginia sides for service to the bridges.
2. By minor changes additional facilities can be provided.
3. If in future still further capacity is necessary, it can be provided without undoing existing improvements and at a relatively small cost.
4. It would be uneconomical to provide less than four-lane capacity bridges in each direction.
5. Bridge facilities of less capacity than that proposed by the District Commissioners would be inadequate.
6. Any facility of whatever cost would prove expensive if inadequate.

On the final day of the hearing, PRA’s Fairbank testified with a mass of data in response to General Grant’s claims. He disputed the idea that the Alexandria bridge would divert any more than 5 percent of the traffic using the Highway Bridge. Based on PRA surveys, he said that most of the traffic was local, with the center of destination at Third and G Streets, NW., for cars and Union Station for trucks.

General Grant had bolstered the commission’s claims of authority by pointing out that the 1944 report to Congress, *Interregional Highways*, had favored giving planning commissions a voice in the design of bridges. Fairbank said that was incorrect. “I wrote the report,” he told the subcommittee and it favored giving planning bodies a role only in the location of bridges.

He also disputed a claim by John Nolen, Jr., the commission’s planning director, who said he had observed 3,000 cars an hour using Arlington Memorial Bridge without difficulty. Fairbank

reported that surveys the past week indicated the bridge was crammed to capacity when volume reached 3,000 vehicles, leaving cars to move at about 10 miles per hour.

The District's traffic director, William H. Van Duzer, disagreed with General Grant's bottleneck argument. He said the District end had enough outlets for traffic from Virginia to avoid the problem. Building a six-lane, two-way bridge would be only a "palliative." Van Duzer said he had never heard of a highway project that had been overbuilt.

Colonel Joseph D. Arthur, assistant to Engineer Commissioner Young, said, "It is neither good economy nor good planning to build a bridge of insufficient capacity at Fourteenth street in order to justify a second bridge at Alexandria." He also disputed the claim by Secretary Ickes that PRA's MacDonald had coerced the city. Colonel Arthur said he had been unable to find any statement by MacDonald along those lines.

General Grant was not willing to recant his claims despite the Fairbank data. Statistics, he said, could be used equally by both sides. ["Twin Bridge Plan Denounced As Too Costly," *The Evening Star*, December 11, 1945; "Ickes Attacks Twin Bridges As Unsightly," *The Evening Star*, December 18, 1945; "House Hearings On Twin Bridge Proposal End," *The Evening Star*, December 19, 1945]

The *Star* editors were particularly skeptical of Secretary Ickes' presentation, preferring Clarke's acknowledgement that appearances were at least "debatable." Regarding the Secretary's reference to mechanical ducks, the editorial said:

To Mr. Ickes, the automobiles are not merely mechanical ducks but ugly ducklings as well. To others, however, they are the chariots which carry busy little taxpayers to and from work, and pictured in this light they are things of beauty and a joy forever. They transport the busy little taxpayers who pay the cost of that coldly austere pile of white marble erected to the memory of Thomas Jefferson, and their movement gives it needed warmth and life. They pay the salary of one-bridge Ickes, the expenses for the two-bridge Fine Arts Commission, the salary of two-bridge Public Roads Commissioner Thomas H. MacDonald and the salary of one-bridge Major General Ulysses S. Grant, 3d.

The purpose of the bridges (or bridge) to be built after the experts are through disagreeing, is to get these busy little taxpayers back and forth across the river. And one cause of the present controversy is that too many people like Mr. Ickes are thinking of them as mechanical ducks, interfering with the appearance of the Jefferson Memorial, instead of as busy little taxpayers who have to get to work in the morning and back home in the evening with a minimum of delay and inconvenience. ["Useful Little Ducks," *The Evening Star*, December 20, 1945]

Secretary Ickes did not appreciate the *Star*'s views. In a letter to the editor, he called the editorial the newspaper's version of the "widows and orphans" fiction that was often cited as the need for action. As for those "busy little taxpayers," he asked, what about those taxpayers "who want a beautiful setting for the Jefferson Memorial for which they helped to pay and who can't quite see the sense of pouring through eight lanes of highway traffic that Washington is not prepared to



handle.” The editors apparently did not “grasp the issues,” and he would not point them out “because I doubt if you would be interested.” He continued:

The thought occurs to me that the “busy little taxpayer” could get back and forth much more quickly if it were not for the circuitous roads around the Lincoln Memorial. So, if Mr. MacDonald, whose ability is unquestionable but whose zeal to use power improperly is as clear as day so far as these proposed bridges are concerned, should want to demolish the Lincoln Memorial in order to build wider and straighter roads I would expect The Star to join in the acclaim.

Asserting that there is “more to human life than mere utilitarianism,” he thought that “beauty and perspective” were also important. But by the *Star*’s standards, why not get rid of the District’s traffic circles and trees that interfere with traffic and “why should there be any inhibitions against the unlimited vehicular use of Rock Creek Park, which now is little more than a glorified boulevard, and of other areas that our childish-minded predecessors thought might be both appropriate and fitting as a frame for what ought to be a lovelier Capital City than it is?” [“My Ickes Replies to Editorial on ‘Useful Little Ducks,’” Letters to The Star, *The Evening Star*, January 1, 1946]

The problem with responding to editorials is that the editors always have the final say. An editorial the same day said that Secretary Ickes “dodges the issues.” After explaining the support for the two-bridge plan, the editorial applauded Secretary Ickes “for his interest in safeguarding the beauties of Washington.” However, the editorial did not concede “that this beauty is enhanced by ignoring the realities of modern traffic needs”:

A few more mistakes by city planners unconcerned with traffic, like their location of a Chinese Wall of Government buildings south of Pennsylvania avenue, closing off such important north-south thoroughfares as Thirteenth, Eleventh and Sixth streets, and the beauties of Washington will be more obscured than they are now by snarled traffic. The problem of constructing an adequate bridge facility should be approached on the basis of facts and not irrelevant rhetoric. [“My Ickes and the Bridge,” *The Evening Star*, January 1, 1946]

### **Elevating the Battle of the Bridge**

On January 14, 1946, Secretary Ickes arranged for President Harry S. Truman to join a group that went to the top of the Washington Monument to observe the site of the dispute. The *Star* reported that in so doing, President Truman became “the first President ever to ascend the shaft, according to records of the National Capital Park Service.”

In addition to Secretary Ickes, President Truman was accompanied by General Grant; Arthur E. Demaray, associate NPS director and a member of the national planning commission; T. Sutton Jett, NPS chief of national and memorial and historical areas; and Edward J. Kelly, administrative assistant to the superintendent of National Capital Parks. They spent a half hour atop the monument discussing the proposal. They also discussed the post-war public buildings program, including removal of the temporary buildings on park property, as well as “new State

and Navy Department buildings, an Interior Department annex, extension of the Treasury annex and two new Smithsonian Institution museums, all within view of the top of the shaft.”

(According to the *Post*, “He spent an hour visiting the Jefferson Memorial, Lincoln Memorial and topped it off with a trip to the top of the Washington Monument.”)

After leaving the Washington Monument, the group took a car across the Highway Bridge into Virginia. They returned via Arlington Memorial Bridge:

In this way he had an opportunity to drive over some of the principal approaches to the crossing; approaches which advocates for twin bridges contend are adequate and which opponents have said are inadequate.

The *Star* reported:

It was reliably understood today that the President did not commit himself on the bridge proposal, allowing these three officials to do most of the talking. [“Truman Views D.C. Bridge Sites From Washington Monument,” *The Evening Star*, January 15, 1946]

Secretary Ickes submitted his resignation on February 13, indicating that he wanted to complete pending business before leaving office on March 31. He decided to resign following a dispute resulting from his unfavorable testimony about a Truman nominee for Under Secretary of the Navy. President Truman accepted the resignation, but made it effective February 15, in view of the Secretary’s statement that the Truman Administration expected him to commit perjury to support the nominee.

On the final day of Secretary Ickes’ 13-year tenure at the Department of the Interior, the *Star* reported:

The Secretary, as had been his custom for years, drove in from his estate near Olney, Md., and was at his desk by 8:30 o’clock. There he found a great stack of mail from people in all walks of life, from national leaders to file clerks in the Interior Department, expressing regret over his departure. [Baird, Joseph H., “Ickes Rushes to Clear Office; Cabinet Meets Without Him,” *The Evening Star*, February 15, 1946]

(The estate was called Headwaters Farm at 11 Shallow Brook Court in Olney.)

Ickes’ successor would be Julius A. Krug, a longtime government servant who had recently been Chief of the War Production Board. He took office on March 18, 1946.

Representative Chapman indicated that before the subcommittee reported on the Randolph bill, members would visit the site of the Highway Bridge and also might follow President Truman’s example by ascending the Washington Monument for a “bird’s eye view” of the area. They also planned to visit the site of the Alexandria-Shepherds Landing bridge. [“House Unit Plans Span Site Tour Before Report,” *The Evening Star*, February 20, 1946]

The tour did not occur until May 14, 1946, just as the committee was finally planning to consider the bill. All five members of the Chapman subcommittee took the tour along with Chairman Grant; Captain Whitehurst; Superintendent Irving C. Root of National Capital Parks and his assistant, Harry T. Thompson; and PRA's H. E. Hilts, C. E. Swain, and E. H. (Ted) Holmes. The group did not ascend the Washington Monument, but did tour the approaches to the Highway Bridge on both sides of the river and inspected the site of the proposed Alexandria-Shepherds Landing bridge. The subcommittee members did not express their views, but according to the *Star*, "asked many questions." ["House Group to Press For Action on Bridges After Tour of Sites," *The Evening Star*, May 14, 1946]

On June 6, with the Randolph bill still in committee, the White House let the District and other parties to the debate know the President's views. Matthew J. Connelly, Secretary to the President, wrote to John Russell Young, president of the District Board of Commissioners:

The President has directed that I advise you that he favors the two-bridge plan for replacement of the present Highway Bridge across the Potomac River.

He has also directed that a copy of this letter be sent to the National Park and Planning Commission and the Bureau of Public Roads. [Authorizing the Construction of Two Four-Lane Free Highway Bridges Across the Potomac River to Replace Existing Highway Bridge at or Near Fourteenth Street, page 2-3]

The brief letter did not explain the basis for his decision, but the *Star* hoped that "the President's candid indorsement of the plan to build twin bridges . . . will produce some action from the subcommittee" on the Randolph bill:

The President's support of the two-bridge plan shows that he is in agreement with the Public Roads Administration, the District Highway Department, the Commission of Fine Arts and others who have taken the view that within a few years one bridge would be incapable of handling the growing volume of traffic and that long-range economy and sound traffic engineering make two one-way structures advisable. ["Get It Started," *The Evening Star*, June 8, 1946]

The President's decision did prompt House action. On June 14, members of the Chapman subcommittee ascended the Washington Monument to survey the area. Chairman Chapman and two other committee members were accompanied by General Grant, Demaray, Whitehurst, and Hilts. As the *Star* explained, the accompanying officials were split among one-bridge and two-bridge men (in contrast to the all one-bridge officials accompanying the President).

The officials were at the top of the monument for an hour, with each side citing familiar arguments. General Grant and Demaray argued that a single bridge would enhance the view of the Jefferson Memorial for tourists approaching the city. If needed, a second, smaller bridge could be built at some future date, but the likelihood of congestion was a long way off. General Grant predicted that completion of the one-bridge project would take 6 years from approval of authorizing legislation.

Captain Whitehurst and Hilts said construction of the twin spans would take half that time. Captain Whitehurst said the northbound span would give tourists a fine view of the Jefferson Memorial. The Highway Bridge was in such poor condition that it could not be used for long as one of the twin spans.

Chairman Chapman said he thought the Alexandria-Shepherds Landing bridge would be needed as a bypass before long. He said it would “divert more traffic from downtown Washington than we think.” Hilts replied that the new bridge at Morgantown, West Virginia, carrying U.S. 19-119, combined with new roads connecting it to the U.S. numbered system would provide a direct bypass for north-south traffic.

General Grant and Demaray questioned whether the economy-minded Congress would go along with the higher cost for the two-bridge solution; perhaps Congress would approve the two spans, but not appropriate funds for the second span. Captain Whitehurst and Hilts pointed out that the financing had been worked out on a 50-50 Federal-District basis under the Federal-aid highway program.

After descending from the Washington Monument, the group crossed the Highway Bridge into Virginia and returned to the city on Arlington Memorial Bridge to compare views. [Kauffman, Rudolph II, “Committee Visits Monument for New Span Study,” *The Evening Star*, June 14, 1946]

On June 26, the House Committee on Interstate and Foreign Commerce reported the Randolph bill authorizing \$7 million for two four-lane bridges to replace the Highway Bridge. The committee report included extensive correspondence from officials arguing both sides of the long debate. The House approved the bill unanimously on July 3, with limited debate.

The Senate District Committee approved the bill on July 5 without amendment. The committee’s acting chairman, Senator Clyde R. Hoey (D-NC), introduced the bill on the Senate floor on July 7. He requested unanimous consent for consideration of the bill. It then passed unanimously without debate, and was sent to the President for signature. [“\$450 School Pay Raise And Bridge Measure Approved by Senate,” *The Evening Star*, July 10, 1946]

President Truman approved the legislation on July 17, 1946 [P.L. 79-516]. As soon as the President signed the law, Captain Whitehurst said, he “pulled the trigger” to approve a contract with the engineering firm of Howard, Needles, Tammen and Bergendoff, which had previously been selected to prepare plans and specifications. He predicted that the first span would be ready in a year and a half. At that point, all traffic would be shifted to the new span, which would carry two lanes of traffic in both directions until the second span was completed. [“Signing of Bill Launches Plans To Build Spans,” *The Evening Star*, July 17, 1946]

On May 9, 1950, officials dedicated the first span of the new 14<sup>th</sup> Street Bridge. Miss Mary Jane Hayes, Miss Washington of 1949, snipped the red ribbon before a crowd of about 300 people. After the ceremony, an official motorcade crossed the bridge into Virginia, then returned to the District along with the vehicles that had been waiting in Virginia for the opening.

On October 19, 1958, an Act of Congress officially named the span the Rochambeau Memorial Bridge to honor the Comte de Rochambeau, of France. The *Star* explained, “Last year was the 175<sup>th</sup> anniversary of the time when Gen. Rochambeau crossed the Potomac near the site of the present bridge on the way to aid Gen. Washington’s forces in the Battle of Yorktown,” which essentially ended the Revolutionary War. During the bridge ceremony, “French Ambassador Herve Alphanand declared the dedication bound more closely the historic ties of friendship between his country and the United States.”

Contrary to Captain Whitehurst’s original plan, the new bridge, with a double-leaf draw span for openings, would carry four lanes of District-bound traffic while the Highway Bridge would carry traffic from the District to Virginia until January 27, 1962, when the four-lane George Mason Memorial Bridge opened and became the southbound roadway. District, Virginia, and Federal officials gathered for the ceremony, which included unveiling a plaque honoring Mason, a Virginia plantation owner and politician, friend of George Washington, and an influential participant in the Constitutional Convention who refused to sign the document because it lacked a Bill of Rights similar to one he had drafted for Virginia. The Highway Bridge could finally be removed.

In 1983, Air Florida Flight 90 crashed while taking off from Washington National Airport in a snowstorm, damaging the Rochambeau Memorial Bridge. The bridge was renamed as a posthumous honor for Arland Williams, Jr., a heroic passenger who lost his life helping others escape the airplane. The original name was shifted to a bridge opened in 1972 to carry high occupancy vehicles.

Today, the 14<sup>th</sup> Street Bridge or Bridges carrying I-395 across the Potomac River consists of (west to east):

- George Mason Memorial Bridge (1962),
- Rochambeau Memorial Bridge (1972), carrying express lanes for high occupancy vehicles.
- Arland D. Williams Jr Bridge (1950).
- Charles R. Fenwick Bridge carrying Metro rapid transit trains (1983, named for a Virginia State legislator), and
- The 1904 Long Bridge, which was restored during World War II, continues in railroad service.

As the *Post* pointed out in its *Weekend* article on District bridges, the structures comprising the 14<sup>th</sup> Street Bridge “possess no visual distinction.” [Bisbort, page 9]

### **Postwar Thinking**

World War II had a major impact on Washington, as the District highway department’s 24-year history explained:

After five years in the role of the world’s war-time capital, Washington was bursting at the seams under the pressure of its swollen population. New groups of military and

civilian personnel, engaged in the accelerated functions of a Government waging war on a global scale, had, by 1946, overflowed into the adjoining counties of Maryland and Virginia in such numbers that transportation problems were no longer limited to the city of Washington. A metropolitan area, composed of vast new housing developments, had sprung up to form a populous and exceedingly active fringe on all sides of the District of Columbia. [*Twenty-Four Years of Progress*, page 74]

With morning and afternoon peak periods “filled with danger and delay to the shuttling motorist,” the Department of Highways decided that “a revision of long-range highway programs to include expressways” was essential.

Once again, the department called in J. E. Greiner Company and De Leuw, Cather and Company to conduct the study and submit recommendations. Their December 1946 report contained:

. . . broad recommendations which emphasized the necessity of consolidating and enlarging past proposals for improvements in the District of Columbia’s highway system, to include a system of expressways serving all parts of the District and connecting with existing and proposed highways of this type in Maryland and Virginia. A network of arterials, improved at irregular, multiple and high volume intersections through the construction of grade separation structures, channelization, and the use of effective signalization and other control measures were also recommended. [*Twenty-Four Years of Progress*, pages 74-75]

In 1946, Engineer Commissioner Young presented a plan for post-war highway improvements to take the District to the threshold of the 21<sup>st</sup> century. The plan, an update of the 1941 pre-war plan, included several expressways serving all parts of the District and linking with Maryland and Virginia proposals. These included:

Mid-City Expressway was “designed to relieve the shopping district of through traffic destined for the Federal Triangle, the Southwest Mall and other points beyond the Central Area.” The expressway “would extend from Canal Street in the vicinity of Independence Avenue across the Mall, along Third Street as a depressed highway, west of Griffith Stadium [located at Georgia Avenue and 5th Street, and between W Street and Florida Avenue NW.], under the hill north of Howard University, along the west edge of the Soldier’s Home, through a hill east of Rock Creek Cemetery and thence northeast to the District line.”

Capitol Hill Expressway would involve “two one-way drives depressed east of Capitol Hill, through which they would be carried in tunnels, and merging in the Mall east of Third Street, from which point they would be carried at-grade, on the approximate alignment of the present Madison and Jefferson Drives.” This expressway would connect with the proposed Baltimore-Washington Parkway, the Anacostia River highway crossings, and 17<sup>th</sup> Street, NW.

The consultants suggested that mass transportation vehicles could operate on the expressways on express schedules “to attract and induce a greater portion of the population to use public transportation.” [*Twenty-Four Years of Progress*, page 75-77]

In addition, the plan included “somewhat lesser scale” improvements, such as a road through Rock Creek Park to connect with U.S. 240 to Frederick in Maryland, the K Street Elevated Highway, widening of Canal Road, the Whitehaven Parkway serving densely populated areas west of Wisconsin Avenue, the Anacostia-Kenilworth Freeway as part of a circumferential, and “the opening of the valley along Arizona Avenue as a parkway to connect Canal Road with Wisconsin Avenue.” The 1946 plan was consistent in many ways with the 1941 plan, but studies since then had “changed the plan to some extent, in that the Arizona Avenue Parkway has been approved as a substitute for the formerly proposed improvement of Foxhall Road as the ‘major arterial highway’ to serve the area west of Connecticut Avenue . . . .” [*Twenty-Four Years of Progress in Highway Development*, pages 74-76]

The District Highway Department released a draft of its highway development program in March 1947. The plan included depressed expressways through congested areas connecting with existing and proposed highways in surrounding jurisdictions; an inner loop around the central business district and one just within the city limits known as Fort Drive; and additional bridges across the Potomac River at Alexandria and across the Anacostia River at Massachusetts Avenue. The plan also called for subsurface streetcar tracks along downtown sections of F and 14<sup>th</sup> Streets and Pennsylvania Avenue. [Mustin, Henry A., “Commissioners Slate Hearing March 26 on Vast Highway Plan,” *The Evening Star*, March 16, 1947]

At a public hearing on the plan, the National Capital Park and Planning Commissioners attacked the city’s draft. General Grant called for a “go slow” attitude toward the expressways and underground streetcars. The commission’s director of planning, John Nolen, Jr., criticized the plan for not taking into account other phases of city development. He suggested that the city should be working with its adjacent jurisdictions on a regional plan.

The commission’s major criticism focused on the expressway plan. First, traffic expected by 1965 would not justify the cost. Second, the expressways, which were far in excess of traffic needs, would make it easier to get to downtown from the suburbs, thereby hastening the shift of taxpayers to the Maryland suburbs. However, Nolen’s statement said, “It should be borne in mind that the opposite effect may well be produced on residential areas in the District which supply three-fourths of the District’s real estate tax income.”

The commission also was highly critical of plans for underground streetcars, except where doing so would relieve congestion as in Dupont Circle. Creating a rigid system of tracks that could not be easily changed with population and employment shifts was an old-fashioned way of thinking about transit. The trend around the country was to abandon streetcars in favor of streamlined bus systems that could easily adjust to such changes.

In addition to criticizing the city’s plan, the commission offered its own ideas on overhauling the District’s street system. The plan was the latest version of the thoroughfare plan the commission

had been promoting, without success, since 1927. [Kauffman, Rudolph II, "Planners Blast Road Program, Urge Substitute," *The Evening Star*, March 26, 1947]

### **The Interstate System for the District**

On August 2, 1947, the Federal Works Agency and PRA designated the rural mileage of the National System of Interstate Highways plus extensions to carry each route through the cities in its path. According to a press release:

This network, comprising 37,681 miles of the 40,000-mile eventual extent of the entire system, includes 2,892 miles in cities, forming the principal extensions into and through the connected cities. The remainder of 2,319 miles has been reserved to permit addition in the larger cities of distribution and circumferential routes, essential as terminal connections of the system; designation of this further mileage in cities, now under way, requires the close cooperation of city, State, and Federal authorities.

At the time, the rural designations were widely understood to refer to the existing U.S. numbered highway in each corridor rather than to a new freeway that would be built parallel to the inadequate existing road.

In the District, which did not have rural segments, the principal extensions into the District of Columbia totaled about 22 miles and involved extensions of U.S. Routes 1, 50, 211, and 240. The *Star* listed the street extensions of those routes included in the new network:

- Wisconsin avenue from Georgetown to the District line;
- Massachusetts avenue from Wisconsin avenue to Twenty-second street;
- Twenty-second and Twenty-third streets from Massachusetts avenue to K street N.W.;
- K street from Wisconsin avenue to West Virginia avenue N.E. plus sections of New York avenue and Bladensburg road extending north from West Virginia avenue;
- Constitution avenue from Third street to Twenty-third street N.W.;
- Virginia avenue from Constitution avenue to Twenty-third street;
- Fourteenth street from Constitution avenue to Highway Bridge;
- Third street N.W. from K street south to Maryland avenue;
- C and D streets S.W. from Maryland avenue to Fourteenth street, and Key, Arlington and Highway Bridges and their approaches.

The newspaper speculated that several District routes would likely be approved later:

A bypass route using such streets as Nebraska avenue, Military road, Missouri avenue, Riggs road, South Dakota avenue, Benning road and Minnesota avenue, plus the proposed Arizona avenue Expressway, Fort Drive and Anacostia Expressway, if they are built, is likely to be approved later.

The first grouping, from Nebraska Avenue to Minnesota Avenue would serve as a bypass for the downtown business district. ["New U.S. Highway Net To Speed City Traffic, Aid Defense



Centers,” *The Evening Star*, August 3, 1947; “22 Miles in District in U.S. Highway Plan,” *The Washington Post*, August 3, 1947]

PRA had been working with State and local officials to determine the location of the metropolitan segments based on the concepts outlined in *Interregional Highways*, but more work was needed. To determine rural interstate road needs, officials had used origin-and-destination surveys in the mid to late 1930s to gather traffic data by stopping vehicles and questioning drivers. Such surveys were impractical in large metropolitan areas with heavy traffic volumes. Therefore, PRA worked with the Census Bureau to develop a sampling technique that was similar to the methods employed by polling organizations. After the August 1947 designation of rural segments, PRA/BPR continued to work with State and local officials to develop an express highway network in each metropolitan area.

The District Highway Department’s 24-year history concluded with a section on “Plans for the Future” that included a discussion of expressways. Traffic engineers were “turning to this admittedly [sic] expensive measure as the only one capable of achieving the desired results” of congestion relief. Washington was particularly suited to limited-access expressways because the predominant traffic flow in the morning is toward the central business and government districts, with comparable exit traffic in the evening:

[The department] has reached the conclusion in consultation with several engineering firms, which were retained to study the traffic problem in Washington’s Metropolitan Area, that a system of expressways will probably become necessary in the not too distant future. These high-speed traffic channels should be depressed in order to preserve as much of the remaining pavement area, which is already at a premium, at grade level to serve local movements. Further studies and investigations are being made in this field.

While congestion relief and safety were the primary concerns in considering expressways, they would have other benefits:

It has been the experience of other large metropolitan centers, plagued with the same troubles, that expressways have had a revitalizing effect on run-down residential neighborhoods which usually form an exceedingly unattractive ring around the business area. It is a well known fact that rehabilitated slum areas have a tax potential far beyond the values which are placed upon them in their present condition.

Suitably interconnected with the street system at grade, expressways would also serve as protection for the valuable properties which occupy the retail business district by opening up new connecting arteries and speeding up the circulation of local surface traffic. Although it is extremely doubtful for example [sic], that F Street will ever be abandoned while the major federal installations with their thousands of highly-paid workers remain within walking distance of its shops, it is nevertheless essential and prudent to adopt measures which will forestall any further encroachment of the “downtown disease” upon its high tax-yield properties in the heart of the city. The slums can and should be eradicated before reaching unmanageable proportions. Highway facilities of the expressway type can very well mean the restoration of arteries through which new blood,

in the form of healthier commercial activities, could be pumped to revive the stagnant neighborhoods. [*Twenty-Four Years of Progress in Highway Development*, pages 125-127]

*Toll Roads and Free Roads* and *Interregional Highways* made the same points about the urban segments of what became the Interstate System. In practice, building urban Interstates, even through “slums,” proved very difficult. In Washington, the main example was in the southwest quadrant, as will be discussed later.

### **Washington Present and Future**

Harland Bartholomew, born in 1889, had long been influential in highway planning for the District of Columbia. He had developed Washington’s zoning ordinance of 1920 and proposed a planning commission to coordinate zoning with changes in the city’s land use. When the National Capital Park and Planning Commission was established in 1926, Bartholomew served as a consultant on highways. He would continue in this role until President Eisenhower appointed him to chair the commission, effective September 1, 1953 (term to expire on April 30, 1959). He continued to live at 6228 Westminister Place in St. Louis where his consulting business was based. He was the third of the four most recent chairmen who did not live in the Washington area. [“Eisenhower Appoints Harland Bartholomew To Planning Body,” *The Evening Star*, August 6, 1953]

For the initial plan developed in the 1920s, Bartholomew studied the evolution of roads in the Washington area as the basis for a concept that Gutheim and Lee described in their history of planning in the District of Columbia:

Outside the District’s boundaries, Bartholomew studied the commuting zones within Prince George’s, Montgomery, Arlington, and Fairfax counties. Because of the limited construction of county highways and heavy use of streetcar and railroad lines, the commuting zone resembled spokes about the hub of the L’Enfant federal city. Bartholomew recommended the strengthening of radial highways already largely defined by preautomobile transportation routes. To adapt these radials to the automobile, the routes were to be dramatically widened. To connect these radials and fill in the spokes, Bartholomew drew up a series of bypass routes resembling many belt roads encircling the District. The intersection of the radials with the belt roads was intended to be located at extant county towns to maintain the already developed points of concentration. Thus the configuration of highways outside the District would resemble a vast built spiderweb. [Gutheim and Lee, page 198]

When the District of Columbia Redevelopment Act of 1945 called for a new comprehensive plan for the Washington area over a 25-year period, Bartholomew would again take the lead in projecting the area’s highway network. He coordinated with the area’s State and local officials, but also with PRA’s origin-and-destination and sampling surveys of the metropolitan area, which began in 1948.

Developing such a plan was not unusual. With the data collected during the PRA surveys and the work of consultants such as New York's Robert Moses, many cities established boards or commissions to develop an expressway network. Many of those cities hired Harland Bartholomew and Associates as a consultant in the work. In the case of the National Capital Park and Planning Commission, Bartholomew was already on board.

*Washington Present and Future*, which Commission Chairman William W. Wurster transmitted to President Truman on April 3, 1950, found that jobs were too concentrated in the city:

The present pattern of job locations is highly concentrated. In 1947, 84 percent of *all* jobs were inside the District, 9 percent in Virginia, and 7 percent in Maryland. This means that, while practically all those living in the District work there too, most of those living in Maryland and Virginia must travel considerable distances to jobs in the District.

This lack of balance and excessive distances between home and work is a tremendous force for traffic congestion, overloading transit facilities, and requiring great expense for new bridges and superhighways. There should be a definite policy to locate as many as possible of the required new employment places away from the center, and actually to remove most of the existing temporary workplaces. Since the Federal Government itself is the major employer, it holds the key to the solution to this problem.

To the greatest extent possible, "basic employment centers should be distributed throughout the metropolitan area in balance with existing and potential residential areas and transportation facilities." The soundness of the proposed comprehensive highway plan depended on "the new balance of work places." [*Washington Present and Future: A General Summary of the Comprehensive Plan for the National Capital and Its Environs*, Monograph No. 1, National Capital Park and Planning Commission, April 1950, page 10]

Bartholomew believed, as did MacDonald and Fairbank, in using the new freeways to direct metropolitan growth patterns. The solution he devised to serve the Washington area's shifting population involved a network of radials and circumferentials:

A major aim of the comprehensive plan is moving 2 million people, their supplies and other goods, wherever they need to go—quickly, safely, and economically . . . . There are three attacks on the problem, which must all be used at once. Most basic: Cut down on the amount of travel needed, by getting home and work closer together. This is one of the major purposes of the comprehensive plan, to be attained by spreading Federal employment centers throughout the metropolitan region. Second, and cheapest, but possibly only as the third step is undertaken: Make public transportation so quick and convenient that more people will use it to go to work and fewer will drive. Third, most costly, but also necessary in spite of what can be done through the first and second: Create a system of collector and distributor roads, both radial and circumferential in function, that will redistribute traffic through the region and diminish the volume demand within the central area. This will entail cutting through modern highways, widening certain old ones, building some new bridges, and providing new parking facilities. [*Washington Present and Future*, page 27]

The thoroughfare portion of the plan called for “an integrated network of radial and circumferential routes designed to function in combination and to serve all major movements of traffic—now and in the future.” The thoroughfares must be carefully designed:

These new and improved main highways must be modern—at least divided highways, and preferably freeways for all types of traffic, or parkways for passenger cars only and in certain cases express busses [sic, here and throughout the report], with no cross traffic, no driveways or parking, no traffic lights, and only a few designated points of access.

The thoroughfare plan was based on concepts of desirable future land use, and the location of government facilities and employment centers:

They must be laid out in line with land use plans—serving residential areas, but not smashing through home neighborhoods. For maximum traffic capacity and safety, they must be built to high standards of curves, grades, and pavement width. Main routes in the metropolitan area, inside the District and outside, must be coordinated into a single network of arteries, for trucks as well as passenger cars and busses. [*Washington Present and Future*, page 27]

The goal was an “integrated network of radial and circumferential routes designed to function in combination and to serve all major movements of traffic—now and in the future.” The plan recognized the role of circumferentials “that will arise in the future when employment is more widely distributed and when a larger city is spread over a far greater land area.” The plan described the circumferentials:

There would be three complete circumferential routes in the plan. The first of these would be located about 1 mile from the White House; its most important function would be to carry traffic around and through the central area, relieving this congested section of unnecessary volumes. The second would be between 3 and 5 miles from the White House, following the route of Fort Drive through much of its length. The third, an outer bypass route, would follow new alignment; it would be between 6 and 10 miles from the White House. [*Washington Present and Future*, page 29]

The Fort Drive concept can be traced to the early 20<sup>th</sup> century, but after World War I it was seen as a key part of a plan to convert Civil War forts into parks linked by a ring road just inside the city boundaries. In the 1920s, the National Capital Park and Planning Commission asked Congress for funds for construction of Fort Drive as a “single and unified project,” but funding never materialized. Gutheim and Lee explained that the idea “never captured the imagination of Congress”:

By 1926 the land required for the drive lay too close to the built-up city, so that the cost of this land would be much inflated over possible parkland farther out. Additional inertia in realizing the Fort Drive dream may be attributed to the circular drive’s being unique to Washington and not an element of City Beautiful prescriptions. In the next forty years

. . . planning issues related to the city's fort system gradually shifted away from circulation to open space and recreational uses extending through residential neighborhoods.

Congress provided funds for some fort revitalization, but Fort Drive was still on the drawing board at the time of the 1950 plan and survived in planners' thinking into the 1960s without being constructed. "Yet, however reinterpreted, even as a circumferential highway, Fort Drive failed to win sufficient support to be realized." [*Worthy of a Nation*, page 205]

Linking the circumferentials would be a network of radial routes including expressways, express highways, express parkways, and "dominant thoroughfares," defined as, "Wide major streets or highways with divided directional roadways and with grades separated at major intersections when volumes warrant such treatment." The report identified many of the radial routes:

Important among these would be: The Northwest Freeway and George Washington Memorial Parkway to the northwest, the Northern Freeway to the north, the Baltimore-Washington Parkway to the northeast, the Annapolis Freeway and Suitland Parkway to the east, the Indian Head Highway and Mount Vernon Memorial Highway to the south, Shirley Memorial Highway to the southwest, and Lee Boulevard to the west. These routes would not just give direct access to the central area but, by means of the ring routes, provide for distribution to outer and inner residential areas and dispersed employment centers.

A map showed the existing, planned, and proposed express highways and parkways, including the proposed inner loop around the central area and an outer circumferential. Radials included:

- Annapolis Freeway – Parallels U.S. 50.
- Suitland Parkway – an existing parkway linking Bolling Field in Washington and Andrews Field in Maryland. An expressway extension would carry travelers to U.S. 301 in the vicinity of Upper Marlboro, Maryland.
- Baltimore-Washington Parkway – a planned parkway to Fort Meade; Maryland would provide an expressway extension into Baltimore as the city's link to the new Friendship International Airport. The map shows the parkway extending into the District along the New York Avenue corridor.
- Columbia Freeway – north of the Prince George's/Montgomery County line, this route appears to be the equivalent of today's I-95 between Washington and Baltimore. It begins at the outer circumferential.
- Northern Freeway – The freeway begins at the circumferential a short distance west of the Columbia Freeway, just beyond the northern tip of Washington. The map does not show the northern destination, but the next significant city on a straight line to the north would be Harrisburg, Pennsylvania.
- Northwest Freeway – Joins the outer circumferential near the Potomac River beyond the city limits in Montgomery County. It would circle around to U.S. 240 and follow that road to Frederick, Maryland. Construction on U.S. 240 was underway, having begun in the Frederick area while decisions were made on connections in the Washington area. As the *Star* pointed out, this roundabout route was selected because a direct route via reconstructed U.S. 240 "would have gone through the Landon school property and many

estates in which much money had been invested.” Landon School is a private school on 75 acres in Bethesda, Maryland. [Kennedy, George, “Frederick Superhighway Goes Nowhere and Most Motorists Don’t Know It Exists,” *The Evening Star*, November 14, 1951]

- George Washington Memorial Parkway – The parkway was planned for both sides of the Potomac River. On the Maryland side, the parkway connected with the District’s inner loop.
- Virginia’s circumferential was unclear on the thoroughfare map, but it appears to loosely follow the current alignment.
- Lee Boulevard – From a small inner loop surrounding Arlington National Cemetery and Fort Myer across the Potomac River from the District, this boulevard carried the U.S. 50 designation at the time (since shifted to Arlington Boulevard). In today’s configuration, it would be the equivalent of I-66 between Washington and the Shenandoah Valley.
- Shirley Memorial Highway – Built to serve the new Pentagon, this route (today’s I-95/I-395) continued north of the Arlington Cemetery loop to connect with the inner loop in the District.
- Mount Vernon Memorial Highway – This route extended from the Arlington National Cemetery loop along the Potomac River to connect with U.S. 1 south of Mount Vernon (in the vicinity of I-95 on today’s map). It was eventually incorporated into the George Washington Memorial Parkway.
- Fort Foote Parkway – This parkway would carry traffic on the eastern side of the Potomac River between Fort Drive and Fort Foote, built in 1862-1863 during the Civil War in Maryland along the river south of the city. The parkway linked with Indian Head Highway.
- Indian Head Highway – This existing highway, Maryland Route 224 at the time (now Maryland Route 210), connected with Suitland Parkway. The road ends at Indian Head, Maryland, on the Potomac River near Indian Head Naval Surface Warfare Center. This appears to be an extension of Fort Drive.

Within the city, radial routes would carry traffic between the Fort Drive circumferential and the inner loop:

- Potomac and Arizona Drive Expressways to connect with K Street.
- Massachusetts Avenue would be a dominant thoroughfare.
- Rock Creek and Potomac Parkway would be extended to Connecticut Avenue at about Quebec Street and to 16<sup>th</sup> Street at Colorado Avenue.
- 13<sup>th</sup> Street would be a dominant thoroughfare serving residential areas between Rock Creek Park and Soldiers’ Home.
- North Capitol Street would be extended north on the east side of Soldiers’ Home and Park Place would be extended on the west side.
- Rhode Island Avenue would be developed as a dominant thoroughfare.
- K Street would be connected with the New York Avenue extension to meet the Baltimore-Washington Parkway and the Annapolis Freeway.
- Constitution Avenue and Independence Avenue would become expressways east of the Capitol to connect with the parkway to Baltimore.

- Massachusetts Avenue would be a dominant thoroughfare extended through the grounds of Gallinger Hospital (District of Columbia General Hospital) and a new bridge over the Anacostia River.
- South Capitol Street would connect with the Third Street side of the inner loop and with Suitland Parkway. On the Anacostia side, the road would be an expressway link to Indian Head Highway. [*Washington Present and Future*, pages 27-31; *Moving People and Goods: A Portion of the Comprehensive Plan for the National Capital and Its Environs*, Monograph No. 5, National Capital Park and Planning Commission, March 1951, page 24]

The Comprehensive Plan recognized that expressways and other improved roads cannot solve the congestion problem by themselves. The city required places for vehicles to park at the end of a trip:

A few expressways cannot solve the problem, nor can a system limited to radial routes or circumferential routes. The individual will make many trips involving many combinations of types and kinds of routes.

To keep the streets open for moving traffic and to assure cars a place to stop at the end of the trip, more offstreet parking must be created. New zoning regulations should see to it, in areas where such regulations are equitable, that all new buildings, whether apartments, stores, or offices, provide their own parking. The Federal Government should do as much as is practical to take the lead. Every new Federal building should have parking space for its own employees and official visitors, varying with the type of activity and location.

The change was vital to congestion relief because the streets could not be freed of parked vehicles unless off-street parking was provided. [*Washington Present and Future*, pages 31-32]

Public transportation at the time consisted of streetcars and buses, but the report pointed out that their passengers “suffer most from traffic congestion” since both types of vehicles depended on the same roads as automobiles:

If more people used public transit, there would be fewer private cars using the streets and therefore less congestion. Transit itself would become quicker and more comfortable, and the public would not be required to spend so heavily for new street and bridge improvements to handle such volumes of automobiles. The problem is to persuade people, by transit improvements, to reverse or at least check the trend away from transit riding toward use of private autos.

A subway or elevated rail line would offer the “quickest mass transportation” because they would not be dependent on surface streets, but such facilities did not seem feasible in the Washington area “because sound operation demands much heavier mass riding to support subways than present and future population densities would produce.” The plan’s short section on public transit concluded:

Bus traffic would benefit from a well-planned thoroughfare system. Freeways and parkways would make possible express bus service to suburban areas almost as fast as rail rapid transit. Within the central area, however, bus operation is sure to be slowed down by auto traffic. The Commission nevertheless recommends gradual replacement of streetcars with busses. It urges study of traffic rules, to speed up bus movements downtown—perhaps setting aside certain lanes for busses only, or even prohibiting private cars and delivery trucks entirely on certain streets in the rush hours. Since a bus carries about 30 times as many people as an auto, it is fair and reasonable to delay as many as 30 autos in order to speed up each bus. The goal is to move people, not vehicles. [*Washington Present and Future*, page 32]

A monograph released on March 21, 1951, as a supplement to the report elaborated on the transit question. *Moving People and Goods* explained that:

To effectively compete with the private automobile the transit system must offer fast service. This will be possible through the general amelioration of traffic conditions that will come about through the street improvements heretofore proposed and through use of the expressways and express parkways. A system of rush hour limited-stop “express” service should be established on these routes. In some cases all-day express service might be justified.

The need for fast service did not mean rail rapid transit:

Neither the existing nor the probable future population pattern contains sufficiently high population densities over a large enough area to warrant the extremely high cost involved in the development of a rapid transit system.

Streetcars were “the backbone of the transit system here,” but were likely to disappear in coming decades. “Any transit plan should provide for substitution of busses for streetcars.” [*Moving People and Goods*, pages 25-26]

The plan had only a limited impact, in part because of changes in the commission. Wurster, who was chairman for only about a year, returned to the University of California. The new chairman would be Bartholomew, who was, as Gutheim and Lee noted, “a long-time Truman associate” in Missouri:

Harland Bartholomew . . . began immediately to show that association with the commission and the city since 1920 did not prevent him from reaching independent judgments. Bartholomew’s most immediate past service to the commission was in directing the development of the 1950 Comprehensive Plan, and this, too, he was willing to jettison in tune with the times.

The city was evolving beyond its status as a Federal city:

The federal government also represented a diminishing share of the total employment in the area because a large private sector had developed separate from, if not independent of the federal establishment. [*Worthy of a Nation*, page 243]



The National Capital Planning Act of 1952, approved July 19, 1952, resulted in additional changes. It reorganized the commission and changed its name to the National Capital Planning Commission (NCPC), dropping the park component. It became a Federal Agency receiving funds through congressional appropriations acts. Given the importance of highway development, BPR was designated an *ex officio* member.

The new commission was responsible for the “appropriate and orderly development and redevelopment of the National Capital and the conservation of the important natural and historical features thereof.” It was to “correlate the efforts among the various agencies” and prepare a comprehensive plan, including a new regional thoroughfare plan. When agencies proposed new development or construction, they were to consult with the commission on how it would affect the Comprehensive Plan. The commission could then “take action in accordance with its legal responsibilities and authority.”

The 1952 Act also established the National Capital Regional Planning Council as the central planning agency for the Federal Government in the capital region. Each jurisdiction in the area appointed a member of the council, but NCPC provided technical and clerical staff. The legislation charged the council to periodically adopt “a general plan for the development of the region, to serve as a general framework or guide of development within which each part of the region may be more precisely planned by the appropriate planning agency or agencies.” The general plan was to include a land-use plan for regional development, other elements “to provide for the proposed major movements of people and goods throughout the region,” and the development and conservation of natural resources.

Bartholomew, after becoming NCPC chairman, recommended that NCPC and the National Capital Regional Planning Council, on which he also served, conduct a transportation study to supplement the 1950 plan, but Congress did not provide the funds until 1955. The Second Supplemental Appropriations Act of 1955 provided \$200,000 for the two agencies to “jointly conduct a survey of the present and future mass transportation needs of the National Capital region . . . and to report their findings and recommendations to the President.”