Report Upon

# AN APPROACH TO THE MASS TRANSPORTATION PROBLEM

for the

DISTRICT OF COLUMBIA

Prepared for NATIONAL CAPITAL PLANNING COMMISSION

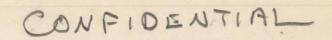
By HARLAND BARTHOLOMEW AND ASSOCIATES CITY PLANNERS SAINT LOUIS, MISSOURI NATIONAL CAPITAL REGIONAL PLANNING COUNCIL

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PUBLICATIONS - FILE COPY PLEASE RETURN Northern Virginia Regional Planning and Economic Development Commission



AN APPROACH TO THE MASS TRANSPORTATION PROBLEM IN WASHINGTON

Washington, D. C.

Prepared for

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The National Capital Planning Commission

By Harland Bartholomew and Associates C i t y Planners Saint Louis, Missouri

October 1952

## HARLAND BARTHOLOMEW AND ASSOCIATES

CITY PLANNERS - CIVIL ENGINEERS - LANDSCAPE ARCHITECTS

317 NORTH ELEVENTH STREET SAINT LOUIS 1. MISSOURI

HARLAND BARTHOLOMEW RUSSELL H. RILEY HARRY W. ALEXANDER ELDRIDGE LOVELACE

DONALD W. HUTTON DONALD W. MCGLASHON DONALD WOLBRINK

October 1952

National Capital Planning Commission Washington, D. C.

#### Gentlemen:

Presented herewith is a statement on an approach to the mass transportation problem in Washington, previously requested by your Commission.

Transportation is a determining factor if shaping the form and character of cities. In Washington, as in other large metropolitan cities, the urbanization process is undergoing a profound change because of the development of individual transportation. There is need for a new and exhaustive study of this matter here, particularly since there is no single agency of government having jurisdiction over the entire new urban area.

This report supplements those recently presented on the District Highway Improvement Program and Future Bridge Crossings of the Potomac River.

Respectfully submitted,

HARLAND BARTHOLOMEW AND ASSOCIATES

By Harland Bartho

The closely inter-related problems of mass transportation, highway traffic and off-street parking in Washington have been under intensive study for a number of years by many public agencies and officials. The street traffic studies culminated in the recently completed recommendations of the Regional Highway Planning Committee for a program of highway improvements. Plans are being formulated for meeting the demands for additional off-street parking space in the central area. There is a definite lack of any comprehensive plan for mass transportation in the Washington Area, however, and until such a plan has been prepared and publicly accepted, no fully effective solution to Washington's traffic problems can be achieved.

This report will be devoted to a brief statement of conditions leading up to the present mass transportation problem in Washington together with recommendations for future procedure in fully meeting the situation.

During the latter half of the last century and the early part of the present century, or until about 1930, population growth and urban expansion in Washington was fairly uniform and steady. Under such conditions the provision of mass transportation facilities presented no unusual problems and a fairly complete system of streetcar lines was built, serving quite well much of the District of Columbia area. A good standard of service was provided at a reasonable fare under regulations established by the Public Utilities Commission of the District government.

### Recent Population Growth

From 1930 to 1950 the population of the District of Columbia increased from 486,869 to 802,178 or 64.9 percent. Of still greater significance, however, is the fact that population in the Washington region\* increased from 672,198 in 1930 to 1,452,349 in 1950, or 116.1 percent. A detailed analysis of the distribution of this population and of its characteristics is contained in the "People and Land" report, which is a portion of the Comprehensive Plnn recently published by the National Capital Park and Planning Commission.

Washington has now become a large metropolitan community both in total population and in the spread of urban development far beyond the boundaries of the federally established District of Columbia. Its population (metropolitan area) approaches 1,500,000 and is exceeded by only eight other metropolitan cities in the United States.

\*District of Columbia, Alexandria, and four counties.

#### Present Mass Transportation Situation

Since 1930 mass transportation facilities have been expanded and improved in several respects. Competitive operating companies in the District were consolidated early in the 1930's and unified service was provided in accordance with various plans prepared by company officials, the Public Utilities Commission staff and the National Capital Park and Planning Commission. Because of the difficulty and cost of expanding the streetcar system with its subsurface electric traction, a comprehensive system of bus lines was established. The additional service thus provided can be judged by the total number of passengers carried during this 20-year period.

#### Total Passengers Carried Capital Transit Company

				Population of
Year	Streetcar	Bus	Total	District
1930	147,829,000	18,738,000	166,567,000	486,869
1935	175,896,000	33,975,000	209,871,000	
1940	164,166,000	86,127,000	250,293,000	663,091
1945	335,214,000	196,649,000	531,863,000	
1950	191,208,000	160,340,000	351,548,000	802,178

Despite the large areal growth beyond the District boundaries and the fact that more than 650,000 persons had established residence beyond the District boundary line in 1950, the operations of the Capital Transit Company have been largely confined to the District of

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Columbia. Except for the Arnold Lines which provide bus service to and from the north portion of Arlington County, Virginia, and the Alexandria, Barcroft and Washington Transit Company which services the southern section of Arlington County and the City of Alexandria, most of the population in the suburban fringe area is dependent for mass transportation service upon a number of small independent companies, operating more or less limited bus service.

The rapid development of the mass-produced individual passenger motor vehicle has virtually transformed the public transportation situation in the Washington metropolitan area as well as, in varying degrees, in all other American cities. Automobile registration increased 22.6 percent from 1940 to 1950 in the District, but in the metropolitan areas of Virginia and Maryland the increase was 178 percent. So widespread has become the use of the automobile that it has become a formidable competitor of the mass transportation facility. As shown by Map 10 of the "Moving People and Goods" report of the Comprehensive Plan, only slightly more than 50 percent of the total federal and private workers in the central business area now use mass transportation facilities.

Federal employment in the District of Columbia is nearly as high as it was during the war. (247,000 in 1952 as compared to 281,000 in 1943.) There are four times as many federal workers now than in 1930. Approximately 74 percent of all federal employment in the District is located in the "old city" or central area of Washington. It is apparent that this situation peculiar to Washington is indeed unique and gives rise to traffic problems that cannot be solved by applying ordinary methods which might be applicable in other cities.

This growth of individual automobile transportation has thrown an enormous new burden on the existing street system, with the result that serious congestion problems have arisen, speed has been reduced, travel time increased correspondingly and saturation is in prospect in the near future.

A system of expressway is now proposed to accommodate increased vehicular traffic flow and to expedite movement by separation of grade and elimination of intersecting streets.

The Problem

Thus arises the question of what to do about mass transportation. Can we anticipate further diminution of service until this facility has been completely eliminated? Will it be possible to provide for all transportation needs by private automobile? If not, what is the most appropriate role of mass transportation in the new metropolitan city and how should we define and establish its field of action?

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#### **Recommended** Procedure

It would not be feasible today to make a study and plan of mass transportation per se, in the manner in which such studies have been made in former years. Any study and plan of mass transportation now must face squarely the fact that many, if not a majority of people, apparently now prefer individual automobile transportation to any form of mass transportation facility, even though improved facilities might attract a goodly percentage of those now using automobiles. Our cities are confronted inevitably with a growing volume of automobile traffic providing a competitive transportation service. The individual passenger automobile is a very definite factor to be considered in any future mass transportation plan.

Any new study and plan which is undertaken should be approached with a broad, fresh, new viewpoint, recognizing the actuality of the National Capital as a great metropolitan area developing in a 15 to 25 mile circle with the established central business district as its focus, recognizing also that this new metropolitan city has basic economic and social unity, that here in this Washington area we can anticipate by 1980 approximately 50 percent expansion of total population, or a total of about 2,000,000 persons by 1980, and an even greater proportionate increase in

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the number of passenger automobiles. Any study and plan also must recognize that its accomplishment can be realized only through some form of unified administrative control. This in turn means special studies of finance, fare structure, and related problems.

An important consideration also to be dealt with is the dynamics of the community, namely the areal limits of urbanization, potential shifts in land use. such as government offices and other important federal activities, suburban subcenters, extensive multifamily developments, zoning and subdivision control and the like. It would be impractical to attempt to make a long range plan for transportation or any other facility requiring substantial structures and investment for a community in which there is pronounced instability. While any plan and program must necessarily have flexibility, its success can only be assured where some agreement has been reached as to area and volume of service and financing as well as some definite regulations for orderly direction of future growth. A Metropolitan Mass Transportation Committee

While there are numerous agencies of District, or even state and local governments, operating companies, and private organizations and associations interested and concerned with mass transportation problems in Washington, there are few with a sufficiently area-wide

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detached viewpoint and sufficiently experienced to undertake the type of study here needed. The scope of any study should comprehend not merely the technical aspects of design and construction of mass transportation facilities, of rate regulation and financing, but certain larger problems of community development and administrative control. Transcending these very practical matters is the fundamental question of the federal interest in this the nation's capital city. Its growth was carefully planned in earlier years. Today growth is scattered and largely unplanned in any effective way. What sort of National Capital do we wish and how can we bring about a higher degree of orderliness and unity? Transportation has always been the lifeblood of cities and will continue to be such even though its form will change from time to time. Since today's transportation reaches wide areas beyond the control of any present agency of government, there is no unified or effective planned control. The situation calls for a new broad guaged look at our Federal City and its transportation requirements.

For these and related reasons, it is suggested that a Washington Area Transportation Committee of seven (7) persons should be created. One member should be a person with wide experience in the design of metropolitan mass transportation systems, their

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construction and operation. A second member should be an executive with experience in the economics of automotive transportation. The third member should be one with wide experience in community planning and familiarity with modern planning needs in metropolitan areas. A fourth member should be a political scientist with extended experience in municipal government and current administrative problems in metropolitan areas. There should be three citizen members having wide knowledge and experience in public affairs. Of the three citizen members, at least one should be resident of the Washington area.

#### Appointment

Appointment should be by the President of the United States in a manner similar to that of the recent Doolittle Committee for study of airport design. Directive

The Washington Area Transportation Committee should be given the widest possible freedom to analyze conditions, to ascertain trends, to determine policy, to prepare a comprehensive plan of mass transportation facilities of whatever kind, to prepare estimates of costs, fare structure and related problems, to recommend needed legislation (federal, state, or local) and to submit a recommended program of action.

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#### Cooperation and Coordination with Existing Agencies

In addition to numerous studies and plans heretofore prepared, there is a vast amount of data available in the files of the state and local public utilities commissions, the Interstate Commerce Commission, the operating compahies, the National Capital Planning Commission, the District Government, and other local governmental agencies. This data should be made available to the committee together with the loan of such staff members as could be made available and which the committee might find useful in its work. Consideration also should be given to the part the newly created Regional Planning Council should play in this undertaking.

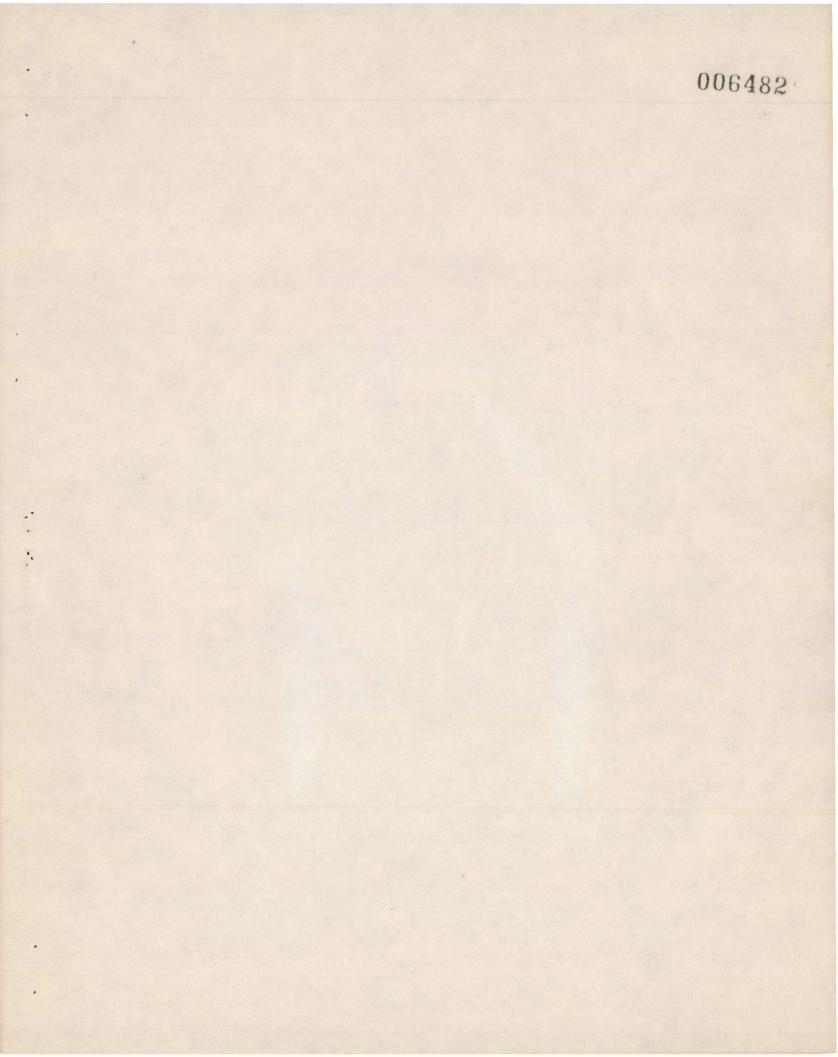
#### Staff and Finances

The committee should be authorized to employ competent technical staff members for satisfactory performance of its duties, also to employ consultants in various fields which the committee would find to be necessary or desirable in its work.

#### Time Required

The committee should be required to present a report with recommendations in from twelve (12) to fifteen (15) months from the date of its appointment.

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