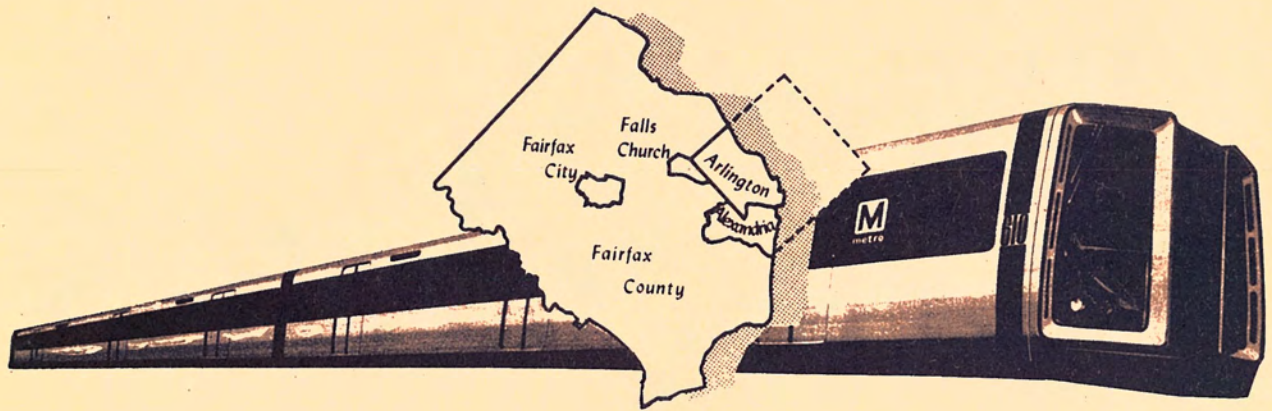


NORTHERN VIRGINIA TRANSPORTATION COMMISSION



STAFF REPORT
ON
COMMUTER RAIL SERVICE

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STAFF REPORT

ON

COMMUTER RAIL SERVICE

Submitted To

Northern Virginia Transportation Commission

September 26, 1969

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INTRODUCTION

The purpose of this document is a general review of the subject of commuter rail service in Northern Virginia as relates to Northern Virginia.

This subject has been one of considerable debate and study over a period of years. It is not a matter that can be weighed briefly. This report has an inter-relationship with the report on the subject of express bus service also submitted on this date. The Commission staff has discussed the matter with WMATA staff members, with WSTC staff, with TPB staff, with NVTC Commissioners, and has studied a series of documents concerning this matter. The staff wishes to express appreciation to these persons for their cooperation and assistance in gathering information for this report.

Among the key documents included in this review were the "Senate Public Works Committee Report on Commuter Rail Service" and the WMATA report "Proposed Commuter Rail Service in the National Capital Region."

This report is submitted in accordance with the Commission's mandate in resolution and motion by Vice-Chairman Alexander, seconded by Commissioner Harris in the September meeting of the Commission and instructions to report to the Commission on this subject prior to the Executive Committee meeting on September 30.

This report does not attempt to equate or compare the technical conclusions of any of the published reports. The service and planning assumptions on which each report was based are different and, as such, do not lend themselves to comparison.

Rather, the purpose of this document is general administrative review with an eye toward recognition of the factors which relate to this Commission in giving policy consideration to this program.

To develop a judgment on just what is the appropriate position for this Commission in the matter of the implementation of commuter rail, involves the consideration of certain definite factors, which are listed in the Table of Contents.

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I. GENERAL CONSIDERATIONS

Some particular points of stress presented in the implementation of this program are outlined in the Senate Public Works Committee Study and other reports. They are: (a) the area of service; (b) the frequency of that service; (c) the equipment to be used (used versus new); (d) cost of implementation; (e) implementation timetable; (f) administrative framework (WMATA or NVTC); and (g) funding sources.

- (a) WMATA recommends service to King Street phased into the rapid transit program.

The Senate Public Works Committee report recommends service to Washington Union Station.

- (b) WMATA recommends half-hour headways during rush hour and one hour headways during the base day.

The Senate Public Works Committee report recommends no particular headways. It said service should be frequent enough to attract passengers. They costed out on the basis of one-hour headways.

- (c) WMATA recommends used RDC's, the Senate Committee recommends Turbotrains.

- (d) The areas to be served, timetable for introducing service and headways must be determined before cost can be defined.

- (e) The Senate Committee report outlines a one-year timetable; WMATA defines a three-and-a-half year timetable for a more limited service.

- (f) Is WMATA or NVTC to be the program's sponsor? The Senate Committee recommends WMATA. The WMATA report recommends NVTC.

- (g) Financing - private, local, or Federal or some combination thereof.

II. MODAL EVALUATION

Historic patterns in modal-split analysis indicate that a service that is to relieve the clogged highways must be modern, frequent, comfortable, efficient, and must deliver passengers to the center of employment at the peak hours competitively from the standpoint of time and cost, when related to other modes of transportation. This fact is directly relevant to the selection of equipment and establishment of headways and service areas.

Another factor which must be considered in evaluation of ridership probabilities is the convenience of modal change. If a commuter service is to be useful, it must not involve inconvenient and frequent transfers from various modes of transportation in order for the average user to complete his peak-hour trip competitively with other methods of transportation. Hence 15-minute headways are virtually a must and any interface with rapid rail and bus must be convenient and fast. Parking must be convenient and modern and stations must be covered to minimize the impact of inclement weather.

III. NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD OF THE COUNCIL OF GOVERNMENTS

The development schedule for implementation of the TPB express bus service from Springfield to the Central Business District and the Southwest Employment Area via Interstate-95 has a direct relation to and probable effect on commuter service in this corridor. Also directly relevant are the commute times and headways for the express service. This calls for close coordination with TPB. Additionally from TPB, a review is needed of: (a) any current figures which may be available in the regional origin and destination studies now being conducted throughout the area; (b) the judgment of TPB on the impact of the widening of the 14th Street Bridge on automobile peak-hour re-distribution and travel time in this corridor; and (c) any innovative alternatives which may realistically be workable.

IV. THREE MAJOR POLICY QUESTIONS

Three questions especially need answering before a policy judgment and final mandate. They are:

A. Service

If implemented, would the commuter lines provide service to Washington Union Station per the Senate Study and possibly interfacing with Central Business District mini-bus system, or would it

be in an interface with an early phase of the Regional Rapid Rail Transit Program, perhaps Phase #3 to King Street Station in accordance with the WMATA report? Or would service be to some altogether new southwest portal possibly interfacing with a Southwest and Central Business District bus distributor terminal, such as that being implemented for the Southwest Employment Center per the Alan M. Voorhees study for the D. C. Government?

(Staff Comment) "In connection with Union Station, a judgment as to whether service to the area is feasible can only be realistically viewed when the following question has been answered:

At what date will construction of the regional and basic systems begin and, consequently, at what point in time will Phase #3 be operational? The lead time in preparation of the proposal and in legislative adoption and general implementation of this program is particularly germane to this question, since it is probable that it would take a minimum of two to three years to implement a commuter program. To implement commuter service to Washington's Union Station at a time when rapid rail transit service will soon be available from King Street to Union Station would seem to be inappropriate. Herein the question is: Are we talking about commuter rail going to Washington's Union Station in a matter of a few months or of a few years prior to rapid rail service in the Southwest and Central Business District? If we are talking in terms of a few months, commuter service to one of the regional transit stations such as King Street or Crystal City is indicated, but if we are talking about a time lag of a year or more, we should possibly direct efforts toward considering implementing commuter service all the way to Union Station.

"The consideration of a southwest commuter rail portal would call for additional knowledge of implementation and construction factors in these projects over and above the data available from earlier reports."

B. Administration

Would the program be developed and implemented with the WMATA as the catalyst or with the suburban Commission (s) as the catalyst?

(Staff Comment) "The judgment as to whether a commuter rail service would have as its catalyst the WMATA or the suburban Commissions is one which can be answered only when three other questions have been answered. The questions are:

1. What will the legal ramifications be concerning utilization of either of these administrative frameworks? In other words,

can WMATA contract for service outside the specific Interstate Compact area or would there need to be an amendment to the Compact?

2. Can a suburban Commission contract for operating service and plan for such service without an amendment to its legislation? It would seem that amendment of the enabling legislation would be a must in this case.

3. Both of these questions evolve around the policy decision as to whether commuter rail service is to be developed as a metropolitan regional program or is to be one that relates primarily to Northern Virginia."

C. Funding and Northern Virginia Transportation District

How would a Commuter Rail Program be financed?

(Staff Comment) "The regional and basic systems have approached a high level of planning sophistication and are set to get underway with specifically earmarked local funds permitting construction to begin 75 days after Federal funds are released.

"It is critical that the Area Transit Authority Rapid Rail Program funds for the regional system be freed by January 1.

"An entire new special and separate commuter financial plan would need to be developed and the appropriate policy developments finalized in order to implement commuter rail. Such a plan would call for the special sub-allocation formulas and possibly the addition of funding from Prince William County plus enlargement of the Northern Virginia Transportation District to include those counties involved in the commuter rail system, but not presently members of this Commission. "

V. ADMINISTRATION AND FINANCE

If NVTC is to be the catalytic agent for commuter rail service, amendment of the enabling legislation is necessary.

A. Administration

As noted above, the enabling legislation does not permit a suburban Commission to contract for operation of transportation service nor does it permit a suburban Commission to implement or prepare a plan for transportation other than the coordination of such service and plan with the Washington Metropolitan Area Transit Authority and/or the National Capital Region Transportation Planning Board and through public hearings.

NVTC could contract for technical consulting services in the development of a proposal and other pertinent analysis. Administratively, this would be beneficial since this approach would enable the staff in the process of program analysis and proposal development to utilize the inter-disciplinary staff of consulting firms. If a mandate is issued to the staff to proceed on this project, certain initial steps necessary in the first 18 months of program development could be taken simultaneously. They are: (1) staff proposal preparation; (2) liaison with railroads and governmental agencies; (3) technical consultant service in proposal preparation and planning analysis; (4) Compact Amendment analysis and preparation.

B. Finance

A proposal for funding of this program may qualify under one of the urban mass transportation programs now available at the Department of Transportation. This could conceivably take the form of a demonstration grant or a technical facilities grant. It should be noted that much current DOT funding calls for one-third funds to come from local, state, or private financial resources and two-thirds Federal funding. Programs that specifically aid the poor are funded on a 90/10 basis and some research, development, and demonstration grants have 100% funding while others are 90/10. All technical facilities grants are on a 1/3 - 2/3 basis. It should also be pointed out that DOT and HUD funding in the demonstration grant field generally follows a policy of directing earliest priority to (in this order): (1) highly innovative projects, or (2) to those projects which are closely related to currently on-going Federally funded mass transportation projects and augment such projects in a creative manner. It is important also to note in projecting this program that the studies conducted concerning commuter rail have indicated that continuing subsidies will be necessary in order to operate this type of service. Thus a detailed review of a specific line and a specific type of facilities is necessary to specifically earmark the cost of commuter service.

VI. SOME PLANNING FACTORS

Staff recommends further review into the following matters:

1. Correlation of commuter plans with the master plans, current zoning, and projected land use at specific stations and in the areas to be served.
2. Will the crossing of the track to accomplish the interface of commuter and rapid transit at King Street present serious difficulties?

3. It would appear that a stop at Fairfax Station would be used extensively if it is programmed to coordinate with the widening of Ox Road to Fairfax City. This needs coordination with highway officials.
4. Rationale seems strongest for the stops at Manassas, Woodbridge, Quantico, Rolling Road, Backlick Road, and Franconia on the service recommended in the WMATA study. The railroad at the Rolling Road crossing is in a very deep cut located in relatively expensive single residence housing that is comparatively new. This is a part of the Pohick Development Plan and a stop at this point would be used extensively. Some sort of tiered parking would probably be necessary to facilitate the needed number of parking spaces and still minimize land impact. Otherwise, extensive land acquisition costs are indicated. Much of the area mentioned in the above is destined for extensive development in the implementation of the Comprehensive Master Plan for the Pohick Watershed Area.
5. Attention could be directed to possible use of ARS advanced land acquisition finances for fringe parking facilities of any commuter service or express bus service and also to reviewing the possibility of grants for fringe parking facilities under the emerging FHWA demonstration fringe parking program per the Federal Highway Act of 1968. (Under this program such facilities must be contiguous to on-going Federal aid projects.) There is also the possibility of utilizing DOT advance land acquisition funds.

VII. GENERAL COMMENT--SENATE STUDY--COMMITTEE ON PUBLIC WORKS

Since the Senate Report directs comments to certain other factors which both directly and indirectly relate to this Commission's transportation role, we should comment briefly on these matters:

A. Service Into the Northwestern Quadrant Including West Virginia

1. Any evaluation of high-speed ground transportation

into this quadrant should be considered in the light of the \$1.5 billion Appalachian Regional Commission Highway Development Program, of which this corridor is a part.

2. The development probabilities of this corridor should be related to realistic travel times, funding, and be correlated with detailed origin and destination studies.

B. Satellite Cities

There is considerable difference of opinion as to the direction satellite city development will take. In general, this debate is directed to:

1. Will such development be on the "new towns" concept of development wherein the communities are self-contained?

2. Will such satellite cities in essence serve as "bedroom communities" to large metropolitan complexes?

3. From what source will funding for satellite cities and new towns be derived? This program was eliminated from the Housing Act of 1968.

4. Particularly relevant, at least at this point in time in Northern Virginia, would seem to be the satellite development at Herndon-Reston and at what point in time high-speed ground transportation would be appropriate in this corridor. Directly related to this point is future usage of the Dulles Access Highway and the impact of the jumbo jets on Dulles, plus the question of the future of rapid rail transit to Dulles. These questions are yet to be fully answered but are now the subject of three different studies.

VIII. STAFF RECOMMENDATIONS

That staff be given mandate to evaluate consultants and funding to implement the following:

- (1) That this Commission retain a consulting firm. The purpose of the contract with the consulting firm to be to develop a detailed plan for commuter railroad service from Fairfax City to a newly-defined portal in the Southwest employment center, (possibly at the Bureau of Engraving or somewhere in the L'Enfant Plaza area) and enabling the commuter service to be coordinated with the new southwest bus terminal re-distribution center in the Southwest area.

- (2) That the basic assumptions in this consultant's review be that stations with appropriate parking be at: Fairfax Station (hopefully synchronized with widening of Ox Road to allow access from Fairfax City to Fairfax Station); Rolling Road; Backlick (at the same location as the rapid transit station); Franconia; King Street; and somewhere in the Crystal City area, if possible.
- (3) That the study will assume that there will be 15-minute headways and that the best available new equipment be used.
- (4) That the consultant have the expertise to recommend a sub-allocation formula including defining the probable deficits taking into consideration both the origin and destination studies of the Council of Governments and WMATA; and evaluate the population projections for the area; current plans per Council of Governments and the Northern Virginia Regional Planning Commission.
- (5) That the consultant develop an implementation timetable and assume DOT funding in establishing a sub-allocation formula; that the consultant consider and in fact evaluate the possibility for technical facilities and/or demonstration grants through the Department of Transportation.
- (6) That this study also shall take into consideration the utilization of fringe parking and advance land acquisition programs in the implementation of any commuter rail program.
- (7) That this study take into consideration the inter-relationship between commuter rail and express bus service and make an evaluation of probable land costs to implement fringe parking at every station except King Street and Crystal City and to implement advance land acquisition at those stations indigenous with the regional rapid rail transit program.
- (8) That the consultant shall also be instructed to evaluate specific problem areas concerning commuter rail and return recommendations with special attention to the following:

- (1) Labor agreement problems
- (2) Union Station charges
- (3) Railroad assistance including physical problems such as crossing of the long bridge and problems of commuter versus freight.
- (4) A review of deteriorating commuter service in other areas of this country versus improving commuter service.
- (5) A technical evaluation of any interface problems between commuter service and rapid rail transit.

The staff has requested legal opinions relating to the legal questions outlined in this staff study through the offices of General Counsel of the WMATA.

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