

CHAPTER X

THE WASHINGTON METRO

In the writing of this chapter, I have had the considerable assistance of Arthur Stellhorn (1) and Darwin Stolzenbach (2)

Harland Bartholomew was consultant to the National Capital Planning Commission (1922 to 1952) and chairman (1953 to 1960). He was a great friend of Harry Truman. As president, Truman helped with Washington planning problems while Bartholomew was consultant. While Bartholomew could not be called a close friend of Eisenhower, as the appointed head of an independent federal agency he had numerous contacts with the White House. Sherman Adams was one contact who did not hesitate to intervene to bring federal officials into line with Washington planning objectives when necessary. (3)

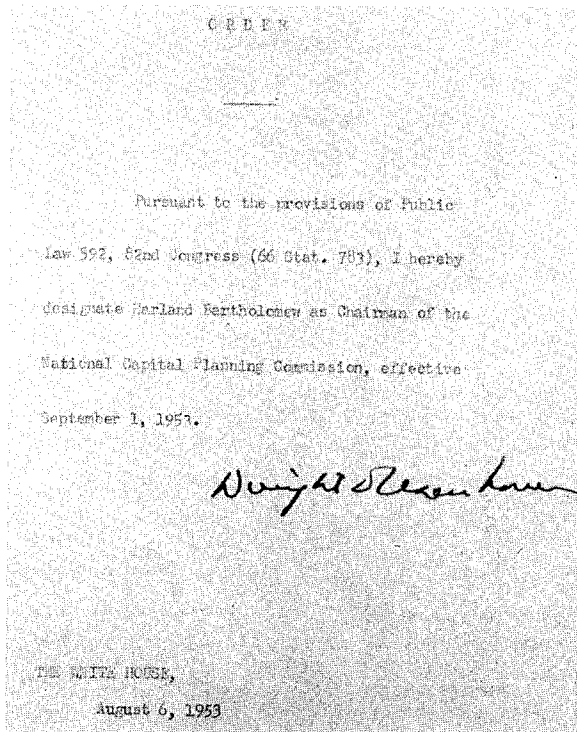
One famous story concerns an instance when Bartholomew was in Hawaii on the island of Maui doing some field work in connection with the new town of Kahului that Harland Bartholomew and Associates was designing. Adams had no hesitancy in sending the Maui police to find him and get him on the telephone in connection with a Washington planning problem. At that time, Hawaii had a much smaller population than it does now. This story was soon spread all over the islands and did much to enhance the firm's prestige.

As evidenced by this story, Harland Bartholomew did some office work during

the period of his chairmanship. However, it was the decision of the then partners (Riley, Alexander, Pollard, Wolbrink, and me) that he devote as much time as needed to the job of chairman of the National Capital Planning Commission (nonpaying assignment), so that his partners provided their government a free, full-time chairman. We did not regret this decision. Bartholomew's acceptance was expedited by a long-time antagonism to Raymond Tucker, the new St. Louis mayor (a "feud" would be a better term) so that the Eisenhower appointment became a welcome excuse for Bartholomew to resign from his position as engineer of the St. Louis City Plan Commission. Their house was sold and Harland Bartholomew and Frances (his second wife) moved to Washington.

All of this was to have a great impact on Harland Bartholomew and Associates. The 1950s were a significant period of expansion, with new offices in Honolulu, Memphis, and San Francisco. With the senior partner diverted to an "outside" assignment, a "power vacuum" developed. But that is another story.

Bartholomew was more of a "doer" or "promoter" than a "planner." He was far more interested in seeing a plan



89 Eisenhower's order appointing Harland Bartholomew Chairman of the National Capital Planning Commission, August 4, 1953.

accomplished than in making a plan. He liked the problem-solving aspect of plan making, but required always a second characteristic of any plan--that it be susceptible to being carried out with either the financial or legislative means at hand, or with those that could be obtained.

PLANNING IN THE DISTRICT OF COLUMBIA

In Washington, because of the unusual nature of its local government (appointed and not elected at that time), there could be no hope of creating an effective citizens' advisory committee such as that in Newark. There was a downtown committee, which included all of the major business interests and the two newspapers, the *Washington*

Post and the *Washington Star*. This group was well organized, had a staff, and was very powerful. In particular, the *Washington Post* liked to oversee any planning going on, a characteristic that could only lead to conflicts with the National Capital Planning Commission and its director.

Proposals for reorganizing the government of the District of Columbia were constantly being put forward. Bartholomew had always been concerned with the Public Administration Service's standard city charter, which relegated planning to a staff function in a city manager's office instead of placing it in a quasi-independent, appointed commission able to go to the general public with its message rather than allowing it to be meekly buried by either the administrator or the politician. When the Public Administration Service proposed a city manager plan, including this provision, for the District of Columbia, President Truman asked Harland Bartholomew for his opinion of the proposal. Bartholomew told the president why he did not like it; Truman killed it. Within hours the downtown group found out all about this, and did not like it one little bit.

When Bartholomew assumed the chairmanship of the National Capital Planning Commission, the Washington situation appeared hopeless. The editor of the *Washington Post* even demanded that John Nolen, Jr., who had been the director of planning for 20 years, be fired as the price for their support. As consultant, Bartholomew had been at loggerheads with the engineer commissioner, a situation that became even worse when Bartholomew became chairman. Despite the replacement of the engineer commissioner at the end of his normal tour of duty, the absence of a concerned public demanding an improved

environment in the District of Columbia was to continue to plague Harland Bartholomew throughout his tenure as chairman. John Nolen, Jr. was a distinguished and well-qualified planner who had studied the planning problems of the district for decades. He could not have helped but view the appointment of his former consultant as chairman with anything but dismay. As consultant, Bartholomew's advice could be accepted or ignored. With Bartholomew as chairman, Nolen's advice was relegated to the same position. Finally, Nolen transferred to the Housing and Urban Development Department.

TRANSPORTATION FOR WASHINGTON

The easy thing for Bartholomew to do was to just go along, take care of the daily activities of zoning changes, plats, and park acquisitions and not rock the boat. This was not satisfactory to Bartholomew, who decided to make a real try at getting one thing done. He considered the various possibilities for some time.

Bartholomew had grown up in Brooklyn and was familiar with the New York transit system, a network of subways and elevated routes supplemented by a bus system. The system was, or had been, self-financing. The fare-box charges were sufficient to pay for it. Such a system is very expensive and it takes many riders or, in planners' jargon, a high density of population to make it economically feasible. In 1950 no one was proposing that such a system be publicly financed (subsidized) and operated as a public service even though the cost per passenger-mile might be substantially less than the automobile-freeway system. Nor was anyone interested in promoting such

an alternative to the automobile.

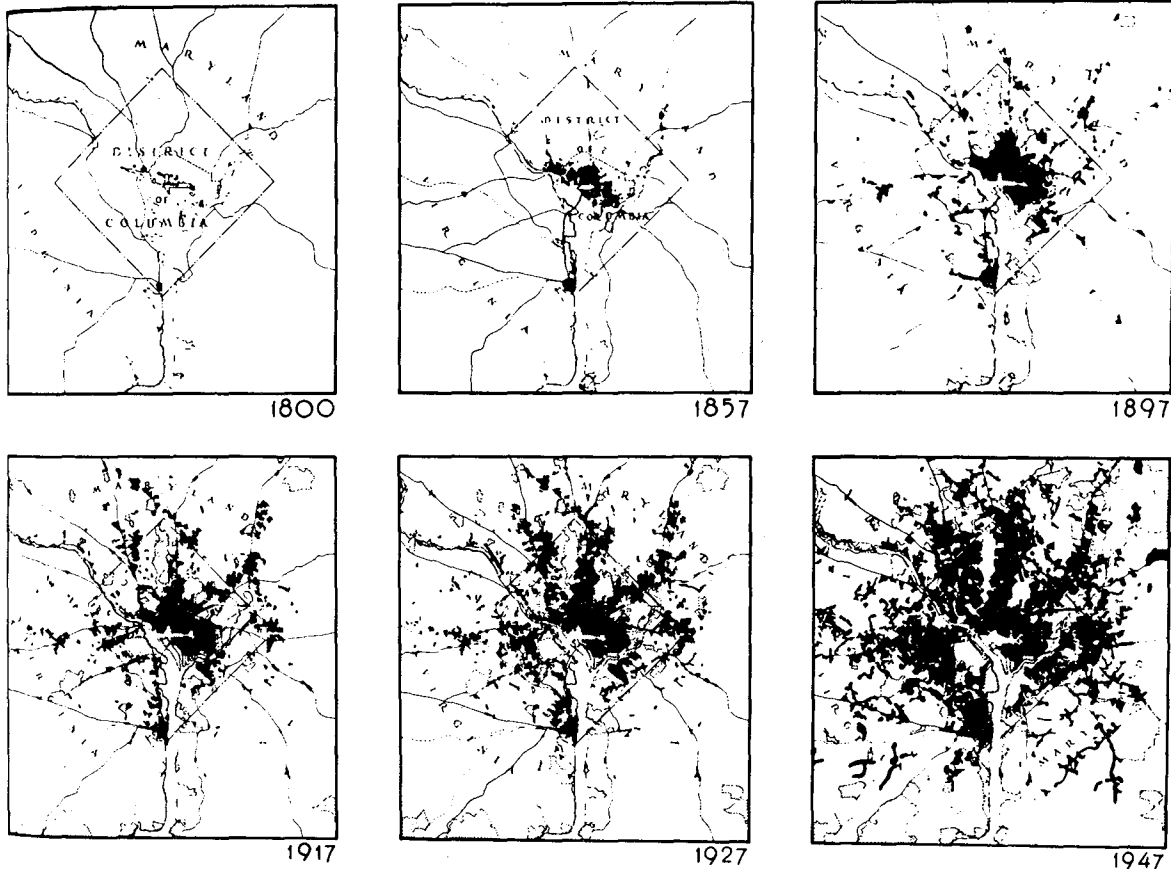
Thus in 1945 when the National Capital Park and Planning Commission was asked its opinion on a rail transit proposal, they referred the matter to Harland Bartholomew, who stated that, "the density of population of the Washington area would never be sufficient to warrant a regional rail transit system." The low density is assured by the District of Columbia's zoning regulations, which limit building height to 100 feet in order to preserve the visual dominance of the major governmental buildings and monuments. This regulation is a major reason why Washington is such a charming and delightful city. To change it would be unthinkable. Thus, a low population density was assured. There would not be enough riders to pay into the fare-box to make a rapid transit system "feasible." There being no other way to pay for it, you could not have it.

Harland Bartholomew repeated these words in the 1950 Comprehensive Plan for the District of Columbia (4) and in the Transportation Plan for the National Capital Region of 1959. Yet as Harland Bartholomew contemplated what one thing he might accomplish during his tenure as chairman of the National Capital Planning Commission, he came to the conclusion that this was the development of an adequate transportation system for the region. And this, in turn, probably involved the construction of some type of rapid transit facility. (5)

There were several reasons for this. L'Enfant, of course, had no anticipation of the vehicular traffic of the 20th century. The street system is more suited to the viewing of monuments from a carriage than to accommodation of traffic. Nor could L'Enfant envisage the urban travel needs of a federal bureaucracy larger in size than the

The Plan of Washington, D. C.

Harland Bartholomew, Chairman
National Capital Planning Commission



EVOLUTION OF THE NATIONAL CAPITAL

■ URBAN DEVELOPMENT ▨ PUBLIC & SEMIPUBLIC PROPERTY ---- BOUNDARY OF ORIGINAL CITY

NATIONAL CAPITAL PARK AND PLANNING COMMISSION



The following article was prepared from a speech made by Mr. Bartholomew on October 28th, 1953, before the Washington Chapter, Institute of Traffic Engineers.—EDITOR.

AS A CITY PLANNER, it is a pleasure to review certain aspects of the comprehensive city plan of Washington; and it is also a pleasure to express appreciation of the work of the traffic engineer in the field of modern city planning. Without your services, the regulation and control of the flood of traffic now surging on city streets would be veritable chaos. You have a most important function to perform, not only in these matters of regulation and control but through your collaboration with city planners in the design of structures for complicated intersections and traffic dispersal.

It is not my purpose to discuss the field of traffic engineer-

ing but to tell you something of the Comprehensive City Plan of Washington. In so doing, it will be the endeavor to set forth some of the thinking of the members of the National Capital Planning Commission in determinations as to the character of the future city we are building today and some of the particular problems that have to be resolved in the planning processes. In this undoubtedly there will be much of significance to your work and your profession as well as to you as a citizen of this fine Capital city.

I. Growth of the American City

It is not necessary to quote figures showing the phenomenal growth of American cities during the past half century or so. This growth has been without precedent at any prior period of history, although we are told that it may be

entire nation that L'Enfant knew. In a speech made in 1952 before his appointment as chairman of the planning commission, Harland Bartholomew had expressed his concern over the "auto-only" approach to the District of Columbia's transportation problems as proposed in the 1950 Comprehensive Plan. (5) It was difficult to see how all of the freeways proposed in the plan and particularly the inner and intermediate loop routes would be financed and built. Should we take a new look, he wondered. The conclusion might be that without rapid transit, our national capital would be ruined aesthetically and demoralized functionally. (4) Here was one thing that he could do. This could be his "one accomplishment."

Appropriations were secured, consultants were hired, and finally a report was submitted to President Eisenhower. (5) Bartholomew got on famously with Eisenhower. Eisenhower was very fond of maps and Bartholomew said later that when he would enter the Oval Office, the President would look up, the famous grin would cover his face, and he would say, "Ah, Mr. Bartholomew, so nice to see you. Have you brought me more maps?" After review and approval by the Bureau of the Budget, the President forwarded the report to Congress, with a request for a \$65 million appropriation to get the work started. However, all of this had taken time, a lot of time.

Darwin Stolzenbach told me what happened next:

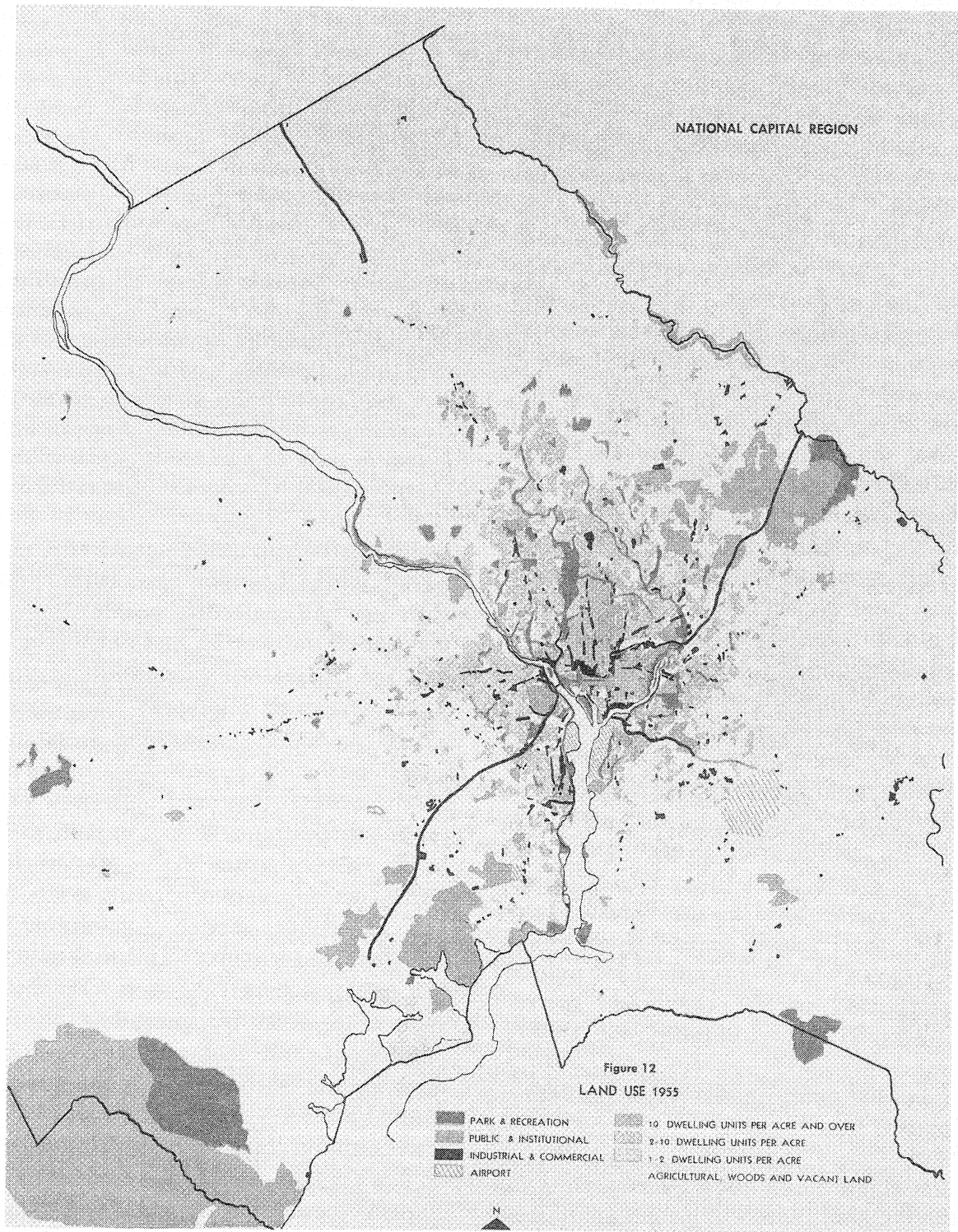
President Kennedy took a great interest in the National Capital Transportation Agency (created by Congress at the urging of the Eisenhower

administration, as a result of the Metropolitan Transportation Study), from the time of his appointing me (March 4, 1961) until his death in 1963. I talked with him for an hour in the Oval Office about the plan for the subway system. He told me: 'Of course, we have to have it.' Later, after having received my report on November 1, 1962, he sent letters to both houses of Congress urging approval of my plan, with no qualifications whatsoever. President Johnson did everything he could to further the progress of Congressional approval and signed the bill approving it in August 1965. Later, Johnson used up valuable prestige with the Congress trying in vain to get the first construction money appropriated. Nixon succeeded in that, by using the fullest powers of his office, in December 1971. Construction began in 1972.

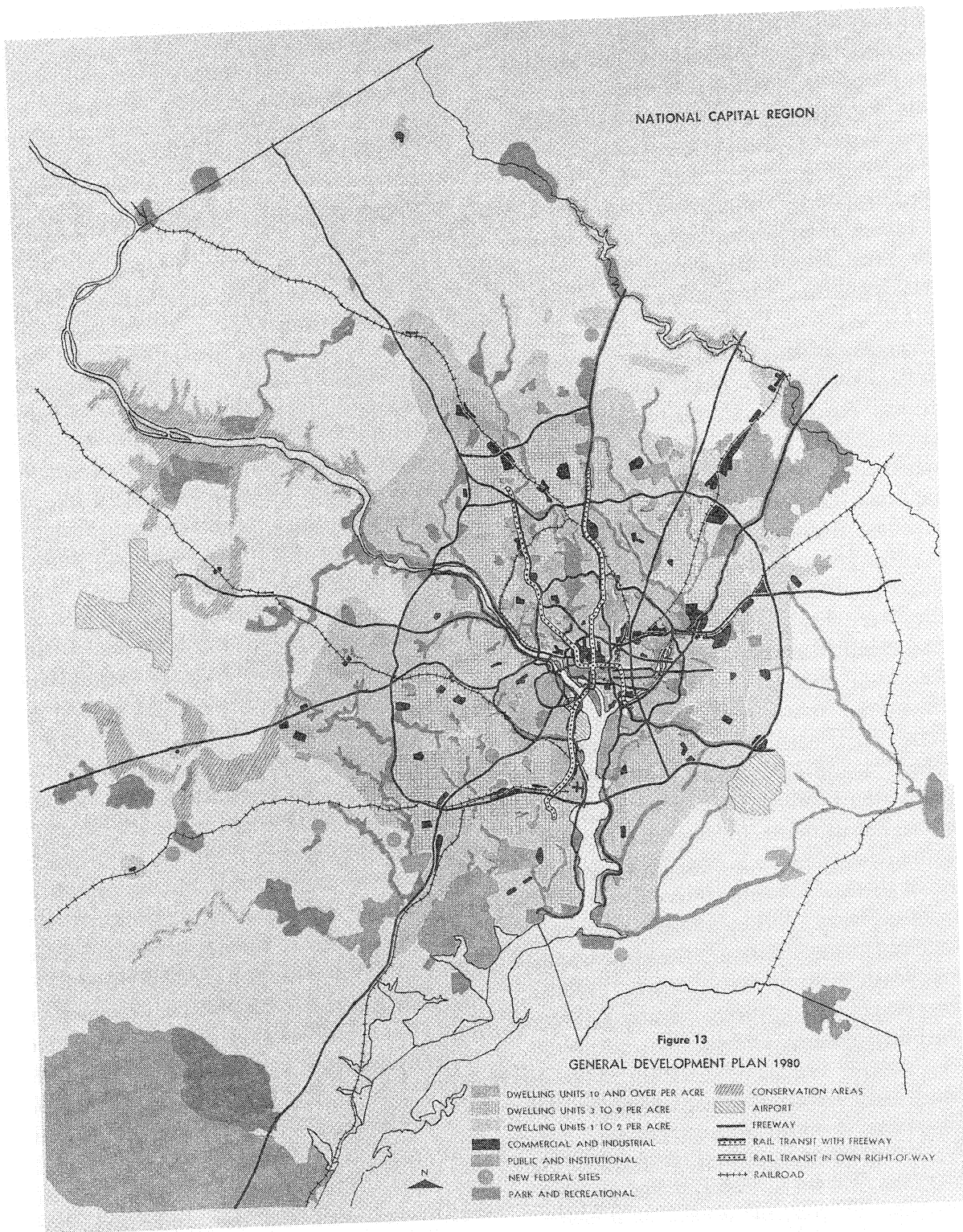
A substantial part (80 percent) of a rapid transit system has now been built. More than one-half of all of the people coming in and out of the District of Columbia do so over the rapid transit system. The system is a truly regional rail rapid transit system, extending out into the suburbs and fully coordinated with the bus routes--also a part of the system--that feed into it. Costs increased spectacularly due, in part, to the long interregnum of preparation. Bartholomew gave much credit to his staff and to public service commissions of Maryland and Virginia. This is despite the fact that the "Expert Advisory Committee" split 2 to 2 on recommending any rail component, and that only five members attended the meeting the day the National Capital Planning Commission approved the transportation study report.

An ironic source of frustration to Bartholomew during his years in Washington was the interstate highway

90 Harland Bartholomew's efforts at education continued after he became Chairman of the National Capital Planning Commission.



91 Planning agencies in the region combined their data to show the haphazard land use pattern of 1955. By zones, this data was related to traffic origins and destinations, a monumental task for so large and complex an area.



92 Part plan and part prediction, this drawing showed a far more orderly urban region by 1980. It formed the basis for estimates of future traffic volumes.

system. The Interstate System, as approved by Congress, was remarkably faithful to the major proposals of the Roosevelt committee on which to Bartholomew had served. The federal highway agencies and the various state highway departments had developed a foolproof system. The states, in keeping with broad standards and principles, would locate and design the system subject to federal approval. Anyone who objected to a route location or design would find himself in a quagmire of state and federal buck-passing. You truly could not fight the system. It was invincible. If too big a stink was raised, the highway money was spent elsewhere. (See Chapter 9.) All of this perhaps was not too much of a problem when rural highways were built in rural areas, but became a significant problem when thousands (instead of dozens) of families were displaced. Dramatic changes in accessibility brought changes in land values and made land speculation a livelihood for many. Despite this, many highway departments, including those of Maryland and Virginia, successfully participated with local planning and highway departments in the location and design of the interstate system. Washington is one of the few exceptions along with San Francisco, New York, Boston, Chicago, Philadelphia, Memphis, New Orleans, and Seattle where citizens' revolts against aspects of the system were partially successful.

Arthur Stellhorn told me:

Much of the highway planning and building in the Washington area took place between 1953 and 1963. During most of that time, I was employed by the Maryland National Capital Park and Planning Commission. We were still working on a master plan for the region. We had good relations with the Maryland Highway Commission and always had opportunity to review the highway plans early enough to be able to get changes made where needed.

These were not just minor changes. Interchanges were moved to a new location. We even employed the Olmsted Boston office to help us advise the Highway Commission on the design of the crossing of Rock Creek Park by the Beltway. It would be my opinion that we were able to get the planned transportation system built pretty much where we wanted it to be.

The approaches to Washington from Maryland in the 1930s were U.S. 1 from Baltimore and Alternate U.S. 40 from the northwest, both dismal in appearance, and with the unfortunate characteristics of early highway building. Congress paid for construction of the Baltimore-Washington Parkway and little pieces of this were built each year. This was incorporated into the Interstate System and, as construction approached the Beltway, it appeared headed for the White House. However, it never got beyond the Beltway.

In Washington proposed routes were never built at all. This was a better solution than to build in the wrong place as was done, for example, in St. Louis. But in Washington, there was an alternative.

Harland Bartholomew had scarcely settled in Washington when representatives of the Maryland Park and Planning Commission came to see him to obtain his support for an interstate highway through Rock Creek Park. Because of the unique nature of the national capital and its monuments, Bartholomew's concept--to build a ring road around Washington and let the rapid transit system carry most of the traffic within the ring road--evolved from the transportation study. Fortunately, there was an enormous outcry over the proposal for a freeway through Rock Creek Park; this battle was won and the attention of the suburban interests was directed to the ring road, which was built, the now famous "Beltway." The inner and intermediate loop routes were never built as proposed in the

1950 Comprehensive Plan.

The Planning Commission was charged with approving all federal purchases and sales of land in the Washington area. Bartholomew remembered some of these as being interesting and controversial. For example, Bartholomew wanted a different location for the CIA headquarters. However, he proved to be no match for Allen (and John Foster) Dulles.

Bartholomew recalls the controversy over the Zeckendorf plan for southwest Washington. Despite "everyone" approving the plan, Bartholomew would not until cost estimates were prepared and approved by the District of Columbia. It took a year to prepare these and when they were put together, the plan was shown to be not feasible. Redevelopment of southwest Washington took place on a much smaller scale, with much better results. However, I always personally preferred the plan Elbert Peets worked out in the later 1940s, which primarily called for rehabilitation of the existing row houses and which would have resulted in a much smaller displacement of the residents, and a better residential quality and scale for southwest Washington. Peets was truly one of the great and talented urban planners and landscape architects--one of the "unsung heroes."

The seven years that Bartholomew was chairman were a continuous series of battles. Yet, during those seven years, he got the National Capital Regional Planning Council working and prepared the foundation for the rapid transit system. The rapid transit system has saved our nation's capital, and thus preserved one of the loveliest cities in the world.

THE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

This brief account of Bartholomew's experiences as Chairman of the National Capital Planning Commission is almost the concluding episode of his long career. For two years after his term ended, he ran the Harland Bartholomew and Associates' office in Washington and participated actively in affairs of the firm. Then, almost in his mid-70s, he decided that retirement was more appropriate. A long series of negotiations, occasionally acrimonious, ensued culminating in a buy-out agreement and his detachment from active management of the firm. Because the Washington experience was his final major professional involvement, we can find in it a source of his last conclusions on how we should approach the solutions to urban problems.

The National Capital Planning Act of 1952 and the Appropriation Act of 1955 authorized preparation of a "Mass Transportation Survey" of the nation's capital by the National Capital Planning Commission and the National Capital Regional Planning Council. To these groups were added the public utility commissions of Maryland, Virginia, and the District of Columbia. The survey and plan formed the basis for the Washington Metro System. They also provide us with an example of Harland Bartholomew's "scientific approach" to planning carried just about as far as it could go. Perhaps even further some would say. The "survey and plan" is worth examining for its approach and because of the extraordinary results that it produced.

Transmitting the report to President Eisenhower, Harland Bartholomew said:

We believe the Survey is one of the most

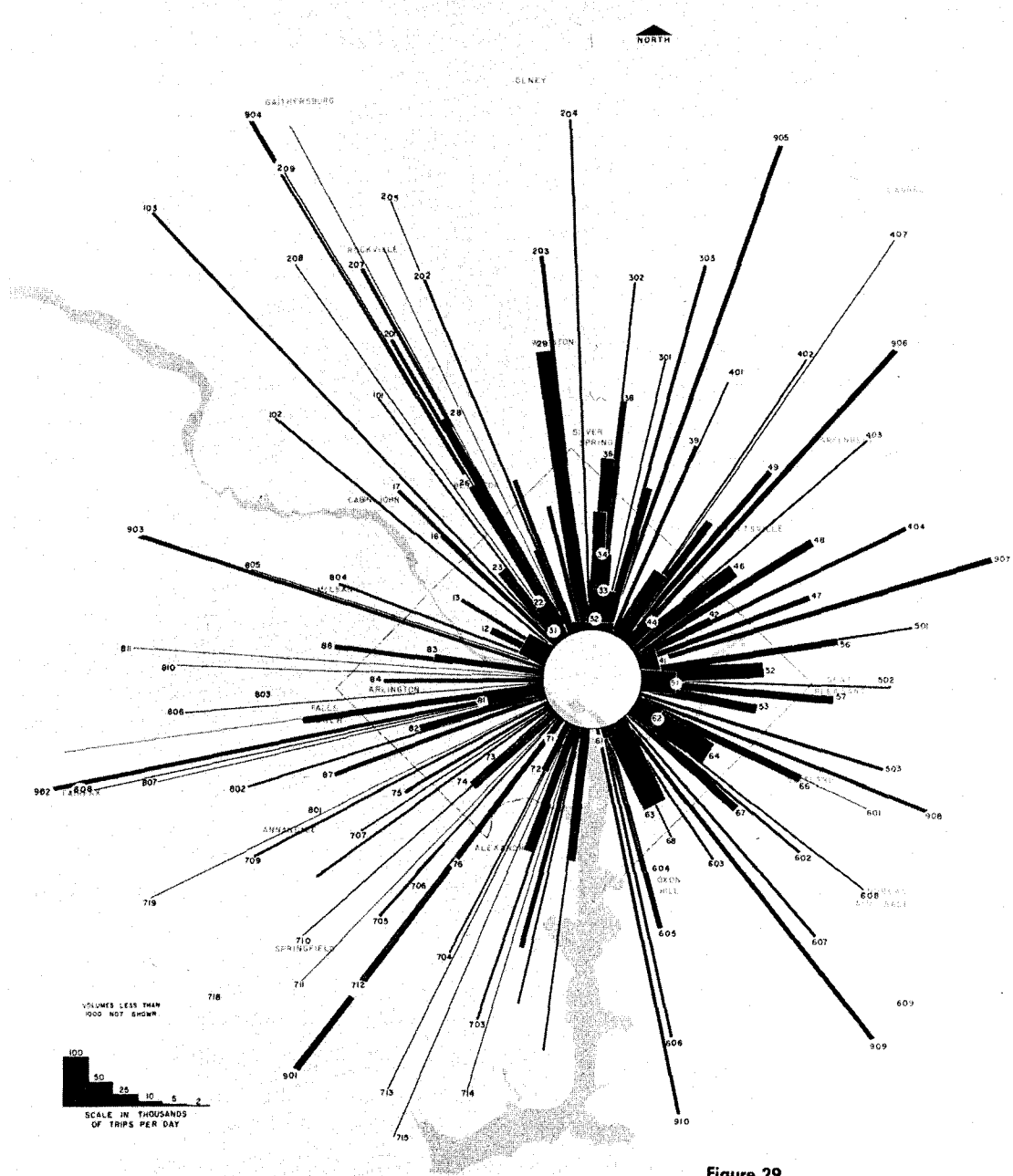


Figure 29
1980 DESIRE LINES FOR ALL MODES OF TRAVEL
Trips to and from Sector Zero

MASS TRANSPORTATION SURVEY ● NATIONAL CAPITAL REGION

93 The Origin and Destination Surveys of 1948 and 1955 were related to existing land use and then, through use of many hypotheses, extended to represent the traffic to be generated by the 1980 land use plan, and then routed on each of the hypothetical plans to see how each alternative would "work."

thorough transportation analyses ever completed in any American city.

It is also one of the early examples of the use of the computer to handle the incredible amount of data (and projections) developed in the course of such a study.

The organization for the work was formidable in itself. The two primary organizations, the National Capital Planning Commission and the National Capital Regional Planning Council, created a "Joint Steering Committee" which, in turn, created an "Expert Advisory Group" of five distinguished persons in the transportation field. The steering committee employed a professional staff. The eight local planning agencies contributed advice and data. (See front cover.) There was a highway coordinating committee and a joint commission to look into "passenger facilities and services." The District of Columbia Motor Vehicle Parking Agency and the Bureau of the Census participated. Ten consultants made in-depth analyses of key aspects of the program.

The first step was to prepare estimates of future growth of the region from the present (1955) to the future (1980). An economic analysis formed the basis of the estimates of both the amount and distributions of employment and thus of population. A land use plan was then made. (See back cover.) The land use plan was actually part "prediction" and part "plan." The report stated:

It is assumed that the local governments will not be willing or able to significantly change this rate of growth. It is further assumed that the local governments will be able to exercise only a limited influence on the pattern of development and the direction of growth.

These two assumptions lead to the conclusion

that the transportation system must be designed to serve a rapidly growing metropolitan region whose broad lines of development will continue to follow the trends of the recent past . . .

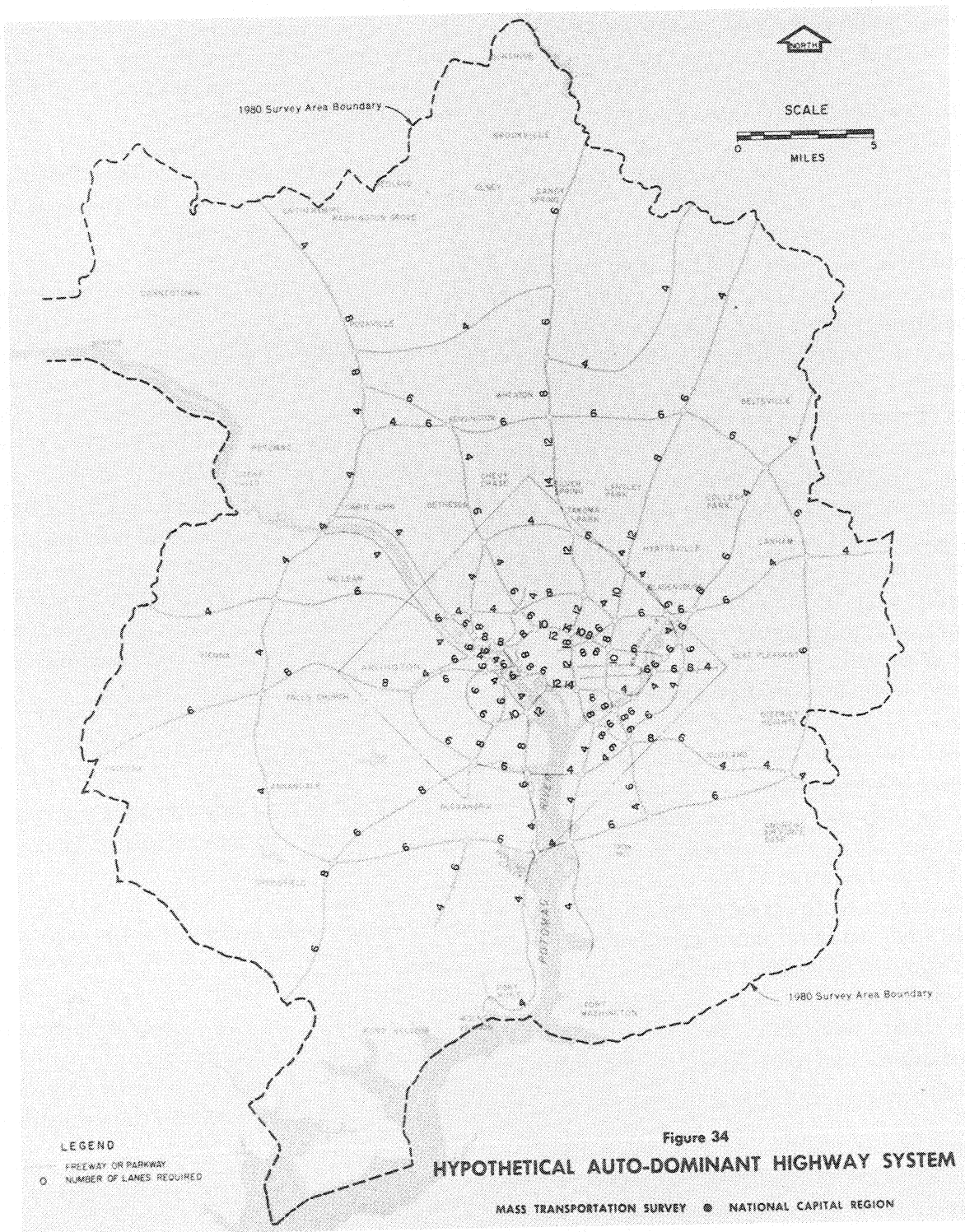
Future development, however, will be influenced significantly by the decisions and policies of the region's governmental jurisdictions.

While the land use "plan" would affect the transportation plan, the report recognized that the opposite was true also and that the land use plan would be subject to modification once the details of the transportation plan were known. It was the methodology of the report and its approach that you would not go back and forth from one to the other adjusting and refining until both were in harmony and mutually reinforcing. Because of the traffic projection systems to be used, it was not really too practical to try to design both land use and transportation at the same time.

Fortunately the program had origin and destination surveys of 1948 and 1955 as well as other traffic analyses available to it. From these data it was possible to relate traffic volumes and movements to land use and the location and size of employment centers, and from these mountains of information, make estimates of the type and character of traffic flows that would be generated by the land use plan for 1980 (and 1965). All of these calculations required an incredible number of hypotheses and estimates all developed with care and judgment and most based on the projection of past trends into the future.

Alternative Systems

Having been able to construct a statistical picture of how a Washington region of three million persons would look on the ground, and of pretty much where



94 Actually, the highway lobby's plan for freeways (1959) and parkways for the Washington region. Only a part of these have been built, as of 1992.

and how many of the three million would be traveling every day (and their trucks, taxis, etc.), the report then prepared three alternate schemes to enable these functions ("travel desires") to get about in the 1980 region. The first scheme continued the trend toward the increasing use of the automobile with use of transit (buses) continuing its steady decline. This scheme relied on freeways and parkways to handle the heavy volumes of auto traffic generated by these trends. The second scheme featured a system of 12 radial express bus routes on selected freeways. The final scheme did not use the buses on the freeways but a system of nine radial fixed-rail transit routes. Then the hypothetical 1980 traffic flows were routed on the three systems. From this you could see, for example, how many lanes a freeway would "need" at a given location. And then the three systems were evaluated and compared.

The all-automobile (or almost all) scheme would not work. The volumes of traffic became so high that the number of lanes to accommodate them caused the right-of-way to be so wide that there was no place to put them without tearing down great parts of the city. The resultant destruction and displacement would be so great as to make the scheme unacceptable. No one would propose to tear down the nation's capital city and pave it for the automobile, much as everyone loved the automobile. Furthermore, when the parking spaces needed in the central area by this approach were provided, they preempted far too much of the central area's space even when multi-level garages were used.

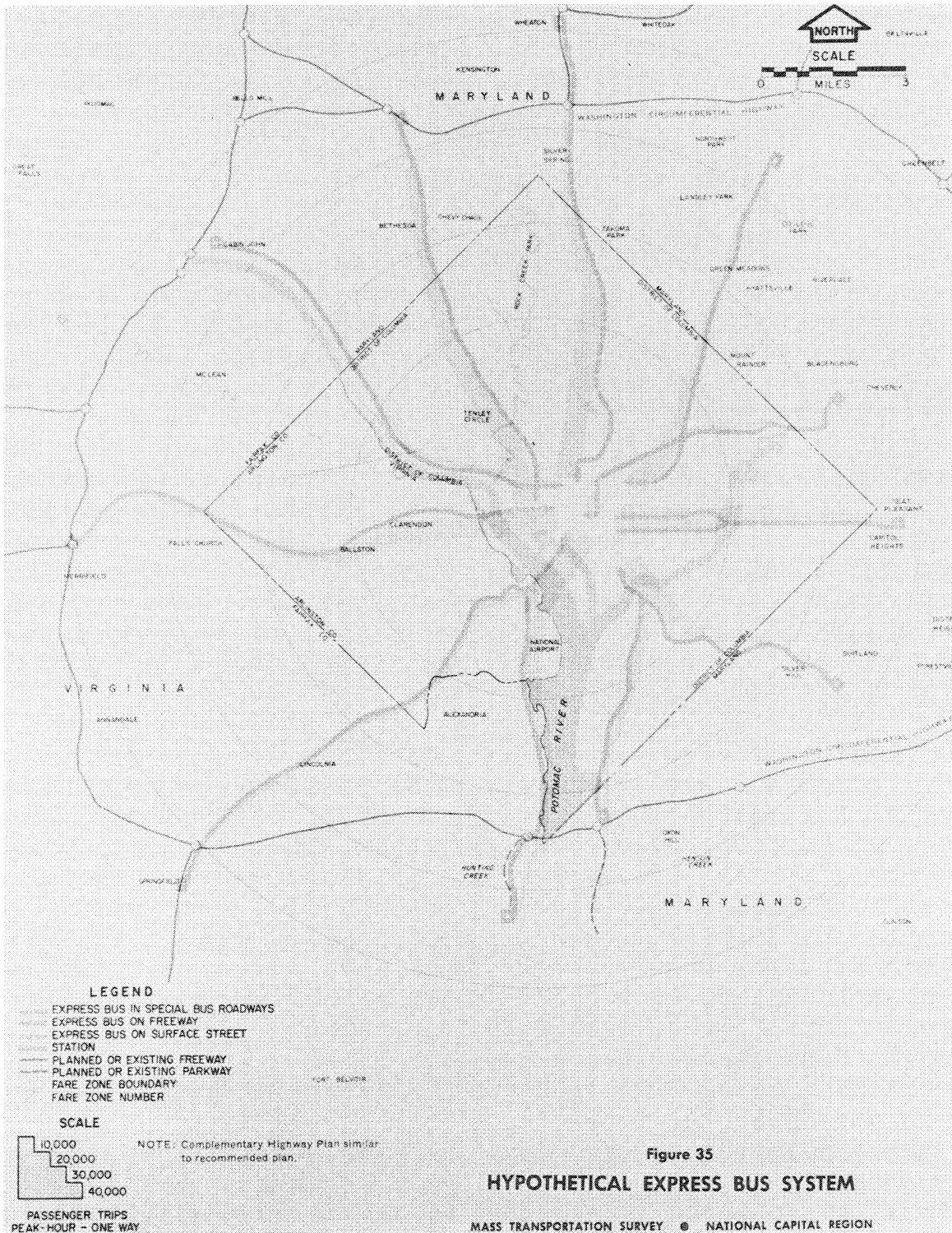
The second scheme with the express buses on the freeways was appealing because the costs to add the bus service were reasonable. It was appealing, that is, until the central area was examined. The

Washington Central Area is not like a typical big city downtown; it is huge. This is true because of the 100 foot height limit for buildings required to preserve the dominance of the capitol. Functions needing space cannot go "up"; they have to go "out." This is what makes the city so charming. In Washington you cannot take a bus to a single terminal and walk to all of the major destinations as you can in most downtowns of cities of similar size. When the express buses got to the central area, they had to use the surface streets to take passengers where they wanted to go. To carry the enormous estimated traffic of 1980, the 1959 planners found that they needed so many express buses that there would not be room for any other vehicles on the central area streets. The express bus plan would not work either. Even a central area "people mover" system was investigated to rescue this appealing plan but this too did not seem to work.

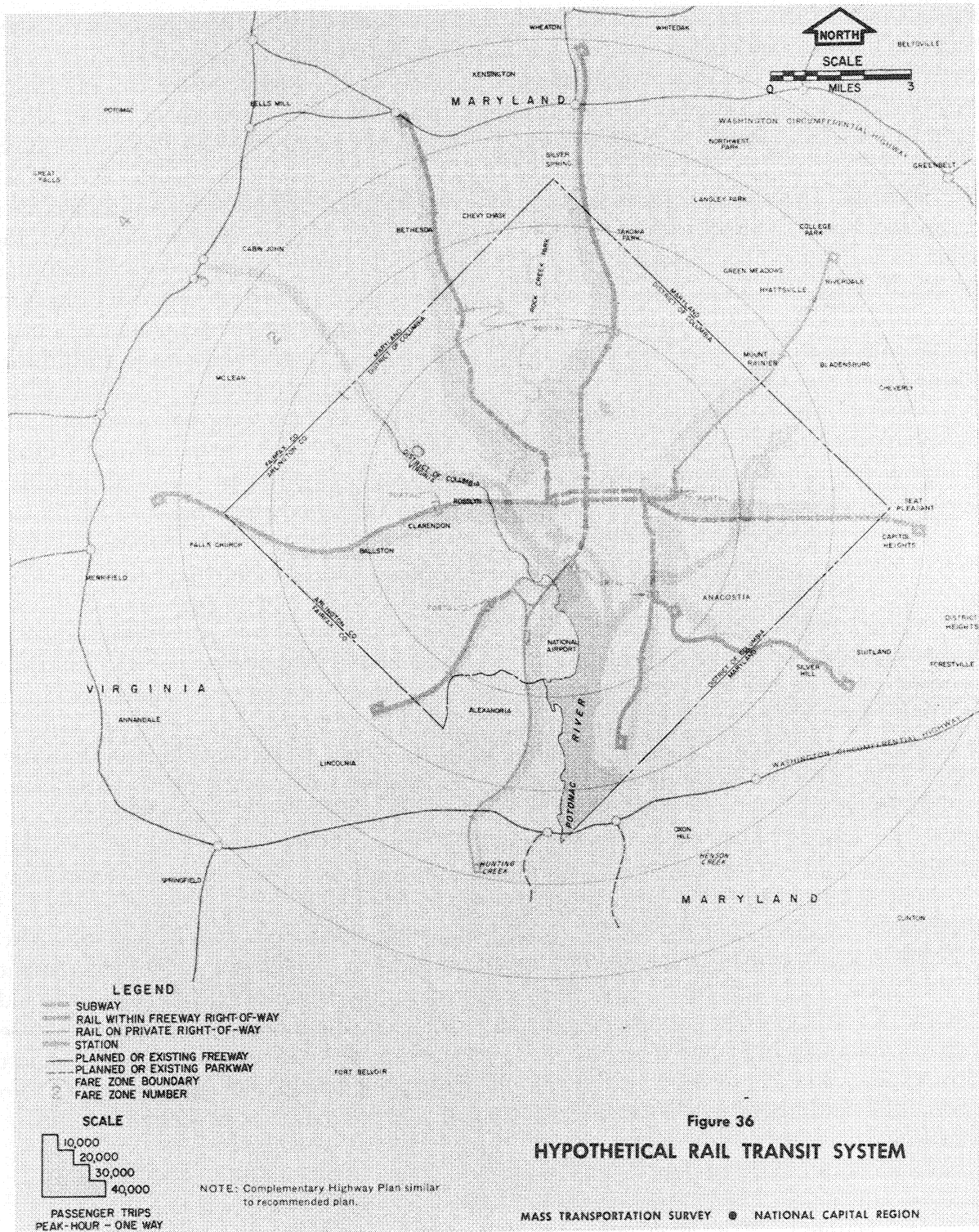
The rail transit scheme did work. It reduced the need for express highways and central area parking. But it was hideously expensive (or so it seemed), and many of the routes did not carry sufficient volumes of estimated passengers to make them appear "feasible." Further, rail rapid transit systems in Chicago, Philadelphia, and New York were losing patronage and maybe not enough people would ride even if the system were to be built.

The Recommended Plan

Harland Bartholomew, his survey group, and its consultants and experts had created a problem for themselves. The solution was a compromise, a fourth plan, incorporating the most "desirable" elements of each of the three alternate plans, each of which had been deemed to be fatally flawed. The



95 The "Hypothetical Express Bus System" wouldn't work. The traffic volumes required so many buses that the central area streets could not accommodate them.



96 In 1959, the all-rail system was deemed too expensive - "not feasible," but it worked. The system studied is not too different in concept from that being built.

recommended plan proposed four rapid transit rail routes, two serving the populous north and northwest sectors, one to Virginia and one to Anacostia. Then there would be eight express bus routes, two to Virginia suburbs and six into the Maryland suburbs. All freeways heretofore proposed were incorporated into the plan with last minute additions including a controversial route to the northwest. The future traffic volumes were projected to reveal bottlenecks in this system. By a series of steps, the plan was adjusted (and the traffic re-routed) until the plan "worked," that is, the hypothetical plan could carry the hypothetical traffic and each estimated trip, at the peak hours, could reach its destination with reasonable ease.

One final test remained. Cost estimates were made and compared with probable resources available. The plan could be financed, it would appear. The legal mechanisms were examined. New laws and agencies would be needed, particularly for the rail rapid transit. Drafts of such legislation were written. The plan would work. The plan could be built. The scientific approach had been followed to its logical conclusion. The whole thing was bundled up into an incredibly awkward report and taken off to be given to Dwight Eisenhower.

There is no question but that preparation of this plan and report was a great professional achievement and particularly when the many agencies and interests, the many experts and consultants, the many personalities and theories are considered. Many would consider it a miracle for anyone to have produced a report that made any sense at all under these circumstances. Without Harland Bartholomew's vast experience, ability and personality, and his deep conviction of the validity of the scientific approach to planning, it could

have been done. The report was finished shortly before his 70th birthday.

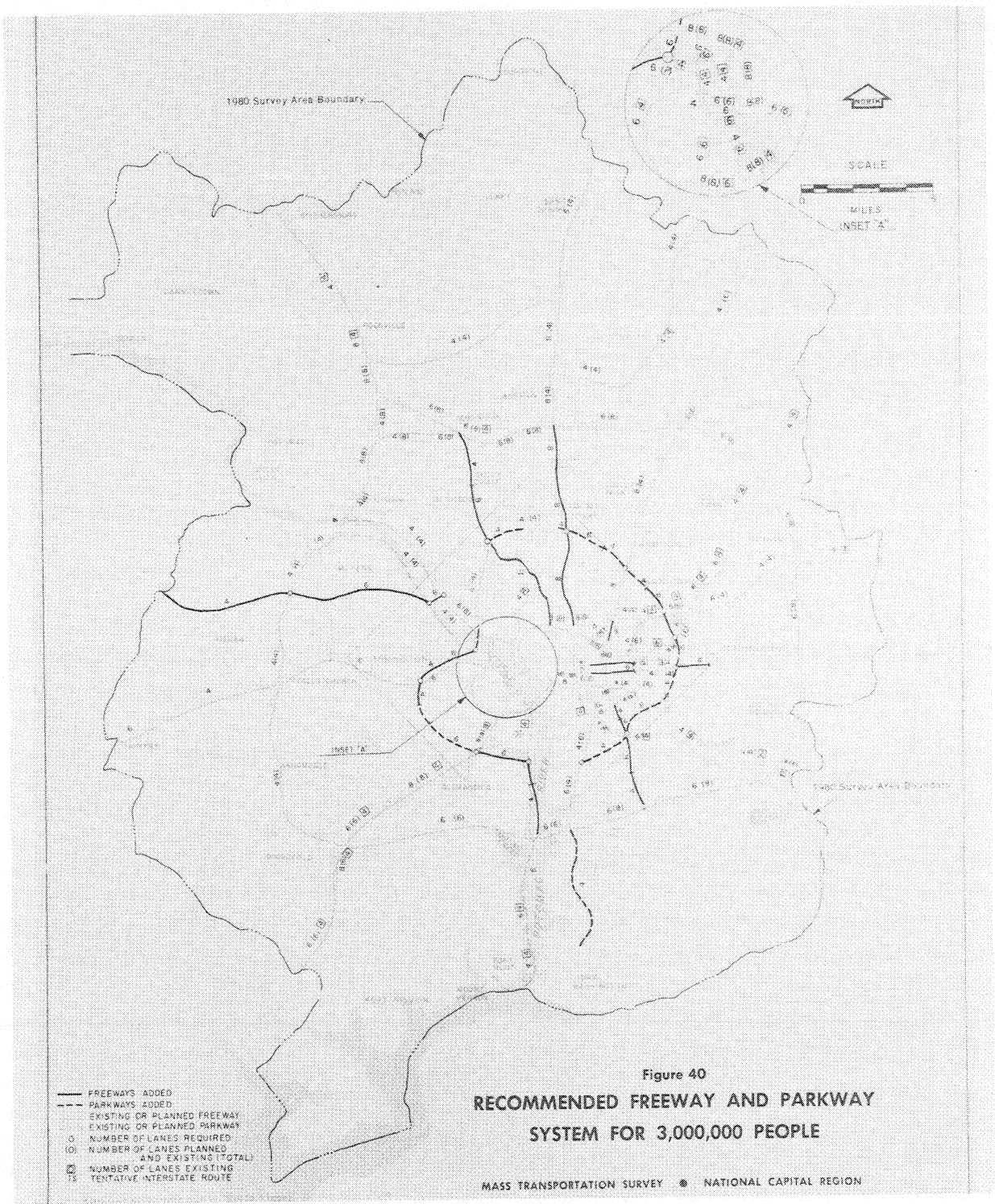
Now, 30 years later, we can see things that could not be seen then. After all we must have learned a lot in 30 years; we have even learned from this report. We can see now that much more attention should have been paid to the demographics and the population shifts within the metropolitan area. The population estimate was very accurate but where the population was to go was quite in error. We have learned things from our exploration of "no action alternatives" that were unknown in 1955. We have also experienced urban decentralization so vast as to make the fears of the 1950s seem amusing.

The major flaw in the "Survey and Plan" is its lack of recognition of the impact of rapid transit on land use and the opportunity rapid transit provides to enable us to build high density centers at outlying stations. More trips to London, Stockholm and Paris would have helped Harland Bartholomew and other authors of the study. This is one federal program where more "junkets" would have been worthwhile.

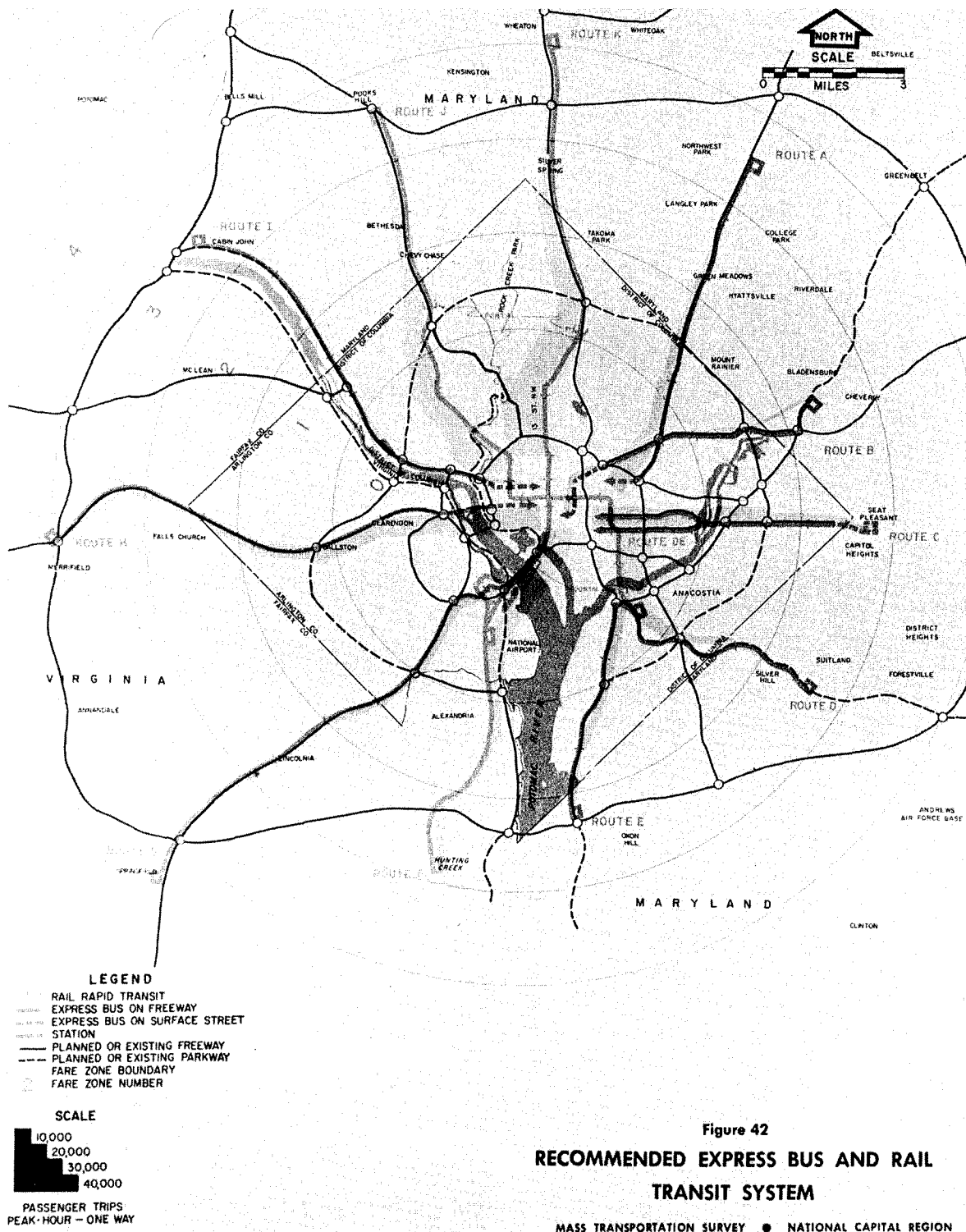
What the report and plan of 1959 did, however, was to provide convincing evidence that a rail rapid transit system had to be provided if our national capital was to function in the future. The form, extent and arrangement of such a system could vary, but there was no longer the basic question. We had to have one. The report convinced four American presidents! No other report has ever done such a thing.

THE SCIENTIFIC APPROACH

When Eisenhower appointed Harland Bartholomew as Chairman of the National Capital Planning Commission in 1953, he asked Bartholomew to recommend persons



97 The freeway, parkway, (and major street) plan included all of the highway plans of the various jurisdictions, even the controversial northwest freeway. All of these together would not carry the estimated 1980 traffic and systems of express buses and fixed-rail which had to be added to make the plan "work."



98 The express bus and rail-transit routes that were added were shown on a separate drawing. Of course, a freeway, and a specially designed one at that, is necessary before an express bus route is possible.

to serve on the Commission who would be helpful to Bartholomew's program. Bartholomew did so and they were appointed. It is evident that Bartholomew and Eisenhower agreed on major objectives for the Commission, and that as Bartholomew carried these out he would have the full support of the White House. This is a considerably changed position from that of being a planning consultant or head of a planning staff. While it was a tiny agency in the federal bureaucracy, it was very much in the public eye in Washington, and the National Capital Planning Commission was an integral and important part of the Eisenhower administration.

At the end of his distinguished career, Bartholomew brought to the job a tremendous professional prestige. In the preparation of the Mass Transportation Survey, he was chairman of the Planning Commission, member of the Regional Planning Council, member of the Joint Steering Committee, and the de facto recruiter and employer of the staffs and the consultants. He was there to carry out the orders of a popular and dynamic president. He was treated by his colleagues and staff with a mixture of respect and intimidation. The report was truly "his baby." His task was to get it prepared and approved.

To do this required actions well beyond that of a "scientific approach." The highway lobby thought construction of a fixed rail transit system a folly. With the passage of the 1956 highway act and its 90 percent federal funding of the Interstate System, they were powerful and arrogant. Contradicting the "scientific" approach, Bartholomew insisted on "balance" in the Expert Advisory Board with representatives of each point-of-view. The highway people had the money to build their system and were certain that their freeways and

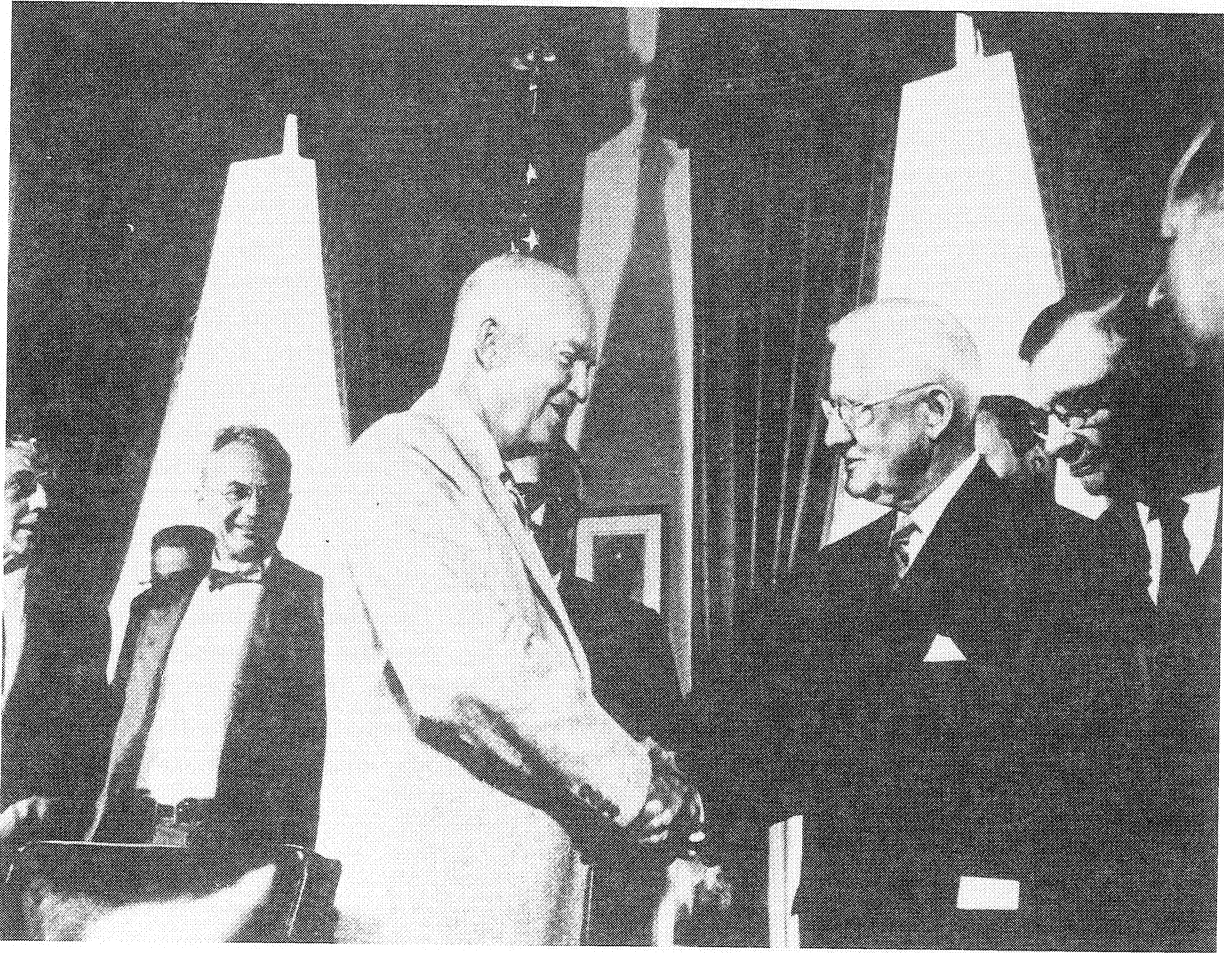
parkways would take care of all future transportation needs. To get three alternates studied at all was a great achievement.

Toward the end of the work on the survey, more serious disagreements arose. Planning Commission members Norton and Robinson corresponded with Bartholomew. They not only opposed any rail transit system but questioned the entire approach used in making the traffic estimates. When persuasion did not work, Bartholomew asked them to stay home on the day the final vote was taken, which they did.

The Institute of Public Administration, which had done the financial and organizational parts of the study, sent in a report implying that the data developed did not justify the rail transit recommendation. Finally, at the last minute, the Bureau of Public Roads insisted that the northwest interstate highway, the most controversial of the freeways proposed in the area, be shown going down the Wisconsin Avenue corridor. It was added to the system.

As published, the report included disclaimers from Norton and Robinson on the rail transit and many disclaimers on the northwest interstate route. The report accepted all of the freeways and parkways proposed by the "highway lobby"! It included an express bus system operating on the freeways. It had a rail rapid transit system, part of which was to traverse the medians of certain of the interstate highways.

The report was not a scientific exercise worked out in an ivory tower but a political compromise between Bartholomew (and Eisenhower) and the powerful highway lobby. Enough of the scientific approach came through to show that the highway lobby was wrong; highways alone would not do the job.



99 Harland Bartholomew presents the "Transportation Survey" to President Eisenhower in the White House, July 1, 1959.

The Transportation Plan and the logic leading up to it had a number of curious features. One was the heavy traffic in and out of the central area. This was the cause of almost all of the difficulty in the development of the plan--the provision of the traffic capacity to accomplish this movement. Yet the adopted 1950 Comprehensive Plan for the District of Columbia (for which Harland Bartholomew and Associates had been consultants) called for a massive decentralization of federal employment in the metropolitan area, recommending but a few new federal office

buildings in the central area while calling for elimination of all temporary and rented federal office space. The federal government had the authority to carry out any rational program of employment dispersion. Yet the Transportation Plan continued the then current level of federal employment in the central area and based its estimates on an extension of the "trends of the past." It would have been possible to prepare a transportation plan based on aesthetic considerations alone (what can we do without upsetting the charm and character of the capital?), then calculating the

capacity of such a system and then saying to the President and Congress, "To make the capital work, you will have to limit (or reduce) the number of federal employees in the central area." This would have been an equally "scientific" approach. However, all such approaches could not be looked into. There was neither time nor money, and the whole approach used was so novel and untried that it is more surprising that they were able to "test" all of the alternate plans that they did.

REACTION TO THE PLAN

The Eisenhower administration had had its differences with the highway lobby. (See previous chapter.) Their view of the report was to "stress the importance of giving the highest priority to development of the proposed rail transit facilities."

In November of 1959, the Joint Committee on Washington Metropolitan Problems held six days of hearings on the report. Generally, the people from the Washington area who testified did not like most of the highway proposals but wanted an early start on the construction of the rail rapid transit system. The auto clubs were the only voice in favor of the freeways; the bus operators, the only voice opposed to the rail rapid transit.

All this led to passage of the National Capital Transportation Act of 1960 and the appointment of Darwin Stolzenbach as the first Administrator of the National Capital Transportation Agency by President Kennedy. A number of further studies, plans, and investigations were prepared, various financing formulas advanced and rejected until construction money would be appropriated and work could be started in 1972.

WHAT HAPPENED?

Bartholomew's strong recommendation that the Maryland and Virginia Highway Departments concentrate on the Washington Beltway had been approved. With funds available from the 1956 highway act and with the route not too controversial, the 60 mile Beltway was completed in 1963. With this construction and with the normal need for space, units of the federal government started to decentralize pretty much along the lines recommended in the 1950 District of Columbia Comprehensive Plan report. Others, such as the Bureau of Standards and the Atomic Energy Commission, had decentralized earlier as a defensive measure against the atomic bomb threat of the "cold war."

The Beltway was supposed to relieve traffic in the central area by the removal of through traffic. Any such relief was short-lived as traffic continued to increase. Highway departments in the District of Columbia, Maryland, and Virginia continued to propose construction of freeways on radial routes as shown in the Transportation Plan. However, the suburban areas of Maryland and Virginia were being rapidly built up with new subdivisions. Each area quickly organized a citizens' association. None wanted an interstate highway in or near its neighborhood. "Not in my back yard" was the universal cry. Organized and with politically ambitious attorneys on their payroll, they received great attention in the newspapers and generally got their way even in the District of Columbia where the local officials then were appointed and not elected. They could point to the rail rapid transit system as an alternative. With incredible lack of foresight, the highway departments did not acquire rights-of-way in advance. Much of the great proposed

100 Train at Judiciary Square Station.

freeway-parkway system disappeared into thin air, made politically and practically impossible. The auto-based alternative transportation system had gone out the window within 10 years of the date of the report. The "highway lobby" was not so powerful after all, perhaps.

The Rail Rapid Transit--The Metro

As the Transportation Plan was being completed, the five American cities that had subway systems were experiencing declines in riders. Street cars were being supplanted by buses. In 1949 Washington had an extensive streetcar system. If people would not ride a streetcar above ground, how could they be expected to ride a subway underground? The subways were not attractive, the one in New York particularly. And the new systems in Toronto, Montreal, and San Francisco were not yet available to look at. Few people had ridden foreign systems such as those in Tokyo or Moscow. With construction of the system of radial freeways stopped by the citizens and neighborhood groups, getting from the Virginia and Maryland suburbs to the Washington central area became increasingly difficult. Parking in the central area became more and more expensive.

Slowly and gradually the idea of a subway system that would be underground, would consequently not disturb any neighborhood too much, and would provide a quick and comfortable trip downtown at a fare less than the cost of all-day parking began to take hold. Bartholomew's original idea of serving the area inside the Beltway with rail rapid transit and not freeways, an idea badly compromised in the Transportation Plan, began to have a wide appeal. (The other two circumferential freeway routes, the inner and intermediate loops were even more disruptive and were not even considered.)

Then began the job of selling the Metro idea to Congress. The funding process had a rocky course. First money for engineering studies was secured in order that definitive cost estimates could be made. Then a formula for dividing the costs with the local governments had to be worked out. The bonds were sold and construction begun. The system has been a great success. It is still being enlarged and extended. Today it is difficult to imagine the nation's capital being able to function without it.

Without Harland Bartholomew and Darwin Stolzenbach, the metro system might not have been built. Harland Bartholomew's contribution was critical to its success. As Chairman of the National Capital Planning Commission, he was able to get the 1959 Transportation Plan with its rail rapid transit system approved. To accomplish this, it must be admitted that he used methods of persuasion both political and professional and sometimes much more political than professional! The stature that he brought to the job was considerable. The backing of the White House was important. A lesser known and more lightly regarded person could not have gotten the job done. Without the 1959 plan as a foundation and support, Darwin



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FOOTNOTES



101 Train on "Red Line" heading north from Union Station

Stolzenbach and his successors would not have been able to secure the support for the almost decade of further studies, plans, cost estimates, financing schemes, meetings, and hearings that were required.

While many played crucial roles in a rocky history, without Harland Bartholomew, the Metro would not have been built. Without Darwin Stolzenbach, it would not have been built, and Harland Bartholomew would have been first to say so. In appraising Bartholomew's contribution, Stolzenbach told me:

Harland Bartholomew pushed the idea of rail transit well across the threshold dividing a vague and unformed concept and a realizable policy. It was the latter that the Eisenhower Administration seized upon when it sent Elmer Staats to Congress to advocate the creation of the National Capital Transportation Agency. If Harland Bartholomew had not handled the Mass Transportation Survey in the way he did, the all-highway solution would have gone forward with no realistic alternative on the table for consideration. There would have been no NCTA . . . and, very likely no rapid transit--certainly no regional rapid transit system . . . which in fact was built and is operating.

It was a fitting climax to Harland Bartholomew's career.

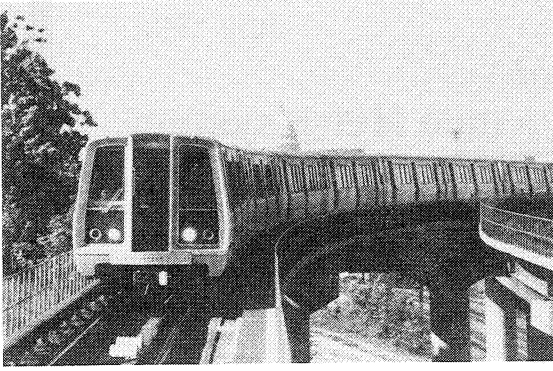
X-1 Arthur Stellhorn was Director of the Maryland National Capital Planning Commission during the time the Transportation Plan for the National Capital Region was being prepared. Subsequently he was a planner on the staff of the Washington office of Harland Bartholomew and Associates. Now retired, he lives in Silver Spring, Maryland.

X-2 Darwin Stolzenbach (now Darwin Fairweather) was appointed Administrator of the National Capital Transportation Agency by President Kennedy on March 4, 1961. Previously he had been active in civic affairs in the Washington area. He is now officially referred to as the first General Manager of the Washington Metropolitan Area Transit Authority. After resigning this position, he was Director of the Metro History Project. Of particular value to this account were his report to President Kennedy of November 2, 1962 and his "History of the Mass Transportation Survey" of March 30, 1983. His reviews of drafts of the chapter have been positive and helpful, and generated correspondence now on file at the University of Illinois. The evaluation of Stolzenbach's contribution to the Washington Metro is entirely my own and is concurred in by Arthur Stellhorn. Nor, is there any implication that Stolzenbach agrees with statements made herein. He was simply extraordinarily helpful to me in the writing of the chapter.

X-3 Much of the early part of this chapter is based on an interview with Harland Bartholomew in June of 1982.

X-4 See: "Washington Present and Future; A General Summary of the Comprehensive Plan for the National Capital and Its Environs" Monograph No. 1 - April 1950. U.S. Government Printing Office.

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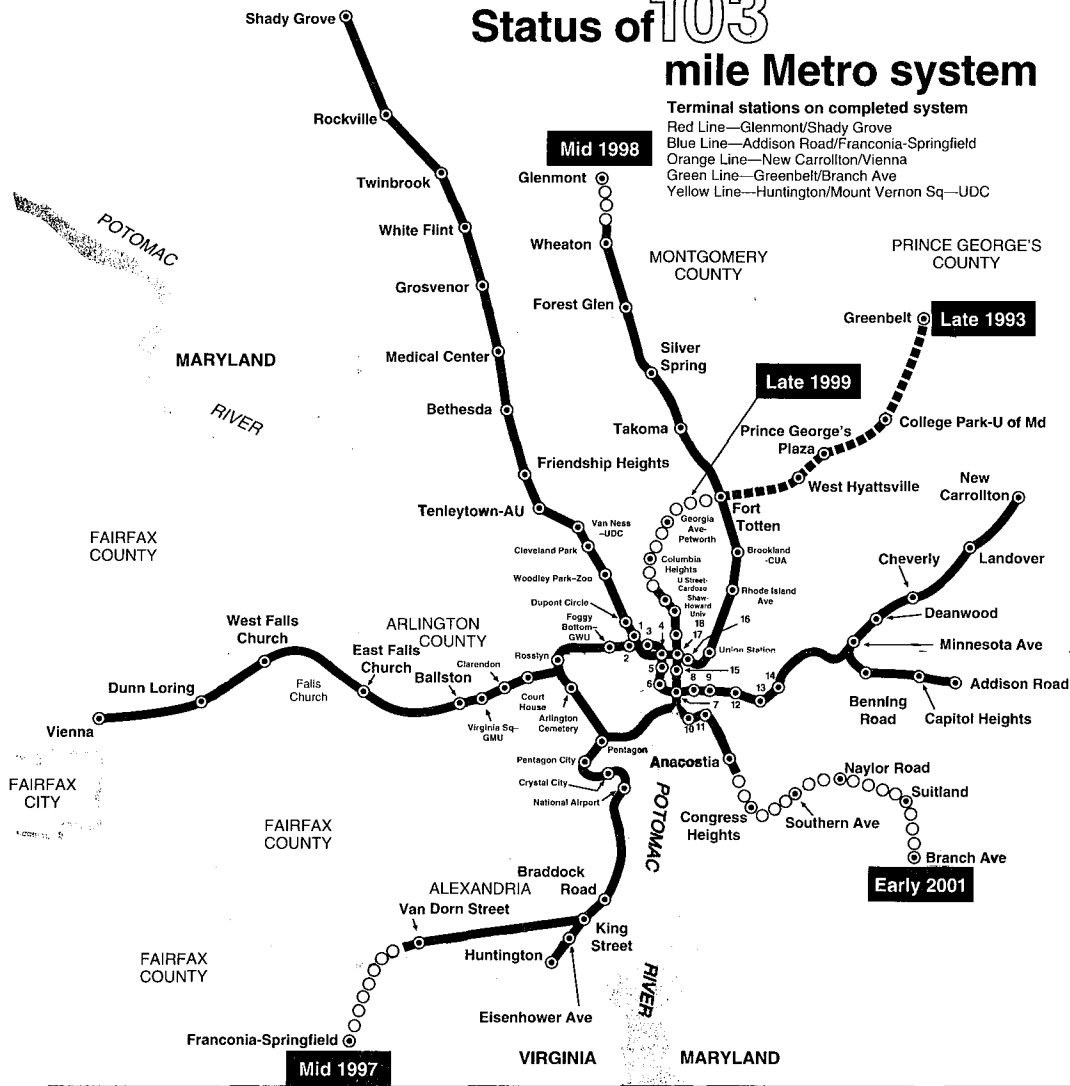
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July 1992

Status of 103 mile Metro system



LEGEND

	Operating Lines	81.05 miles	70 stations
	Under Construction	7.97 miles	4 stations*
	Fast Track Program for System Completion	14.0 miles	9 stations

Total Mileage—103.02
Total Stations—83

- | | |
|----------------------|--------------------------|
| 1. Farragut North | 10. Waterfront |
| 2. Farragut West | 11. Navy Yard |
| 3. McPherson Sq | 12. Eastern Market |
| 4. Metro Center | 13. Potomac Ave |
| 5. Federal Triangle | 14. Stadium-Armory |
| 6. Smithsonian | 15. Archives-Navy Mem'l |
| 7. L'Enfant Plaza | 16. Judiciary Sq |
| 8. Federal Center SW | 17. Gallery Pl-Chinatown |
| 9. Capitol South | 18. Mt Vernon Sq-UDC |

DATE Projected start of operations for this segment based on approved schedule. Applies to all stations inbound from this point.

*Not including lower level of Fort Totten Station which is under construction as part of the northern Green Line.

M Washington Metropolitan Area Transit Authority
metro
600 Fifth Street, NW, Washington, D.C. 20001

Office of Communications

102 This drawing indicates the status of the Washington Metro System in 1992. Note similarity to Illustration 98.