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## WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

600 Fifth Street, N.W., Washington, D. C. 20001 (202) 637-1234

May 20, 1975

## SUMMARY OF METRO STATUS

## CONSTRUCTION AND DESIGN

Forty-one Metro stations and 43 miles of line are under construction. Another 24 stations and 27.5 miles of line are under final design. Construction is underway for 16.9 miles from north of Silver Spring to south of Bethesda on the Glenmont/Rockville Routes; for 19.9 miles from south of National Airport to the New Carrollton service and inspection facility on the Huntington/New Carrollton Routes; for 2.2 miles from Gallery Place station to Waterfront station on the Greenbelt/Branch Routes; for 2.9 miles from Rosslyn to west of Glebe Road station on the Vienna Route; and for 1.1 miles between the Pentagon and East Potomac Park on the L'Enfant Plaza/Pentagon Route across the Potomac River.

## FINANCIAL

Capital funds from all sources through May 19, 1975 total \$2,387.0 million. Of these funds, \$2,033.6 million have been contractually obligated through May 19, 1975. Commitments, which include obligations, are distributed as follows:

Design and Engineering	\$ 164.7 million
Construction	2,020.8
Real Estate and Rights of Way	124.9
Project Management	36.0
Preliminary Operations	15.7
Uncommitted	24.9
	\$2,387,0 million

The \$2,228.5 million has been made available as follows:

Federal Funds	\$ 986.5 million
District of Columbia	218.6
Maryland	179.2
Virginia	138.1
Net Bond Proceeds and Interest	864.5
	\$2,387.0 million

## MANPOWER

WMATA Staff	5,248
General Consultants	843
Other Consulting Firms	1,012
Construction Contractors	6,849



### Board of Directors

JOSEPH ALFXANDER
Virginia
Chairman

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ROYT DOD E Chief of Des in and Construction

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## Washington Star-News

## Saturday **Morning**

122nd Year. No. 362

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15 Cents On newsstand

## Metrobus: Why Losses Pile Up And Why Nothing Can Be Done

**By Thomas Crosby** 

Star-News Staff Writer Out of every \$5 Metro paid its bus drivers during the 1974 fiscal year, \$1 was for time spent somewhere

saken aben behind abe subset

caught in the same crunch as Metro - soaring labor costs and a crush-

ing demand during rush hours only. Neither problem is likely to disap-

Arlington County Board, suggested exactly that to Graham at a recent

meeting. Metro tried it last May, Graham pointed out, and ended up with a IN EIGCAL 1074 04 2 manual of five-day strike Well Wholey

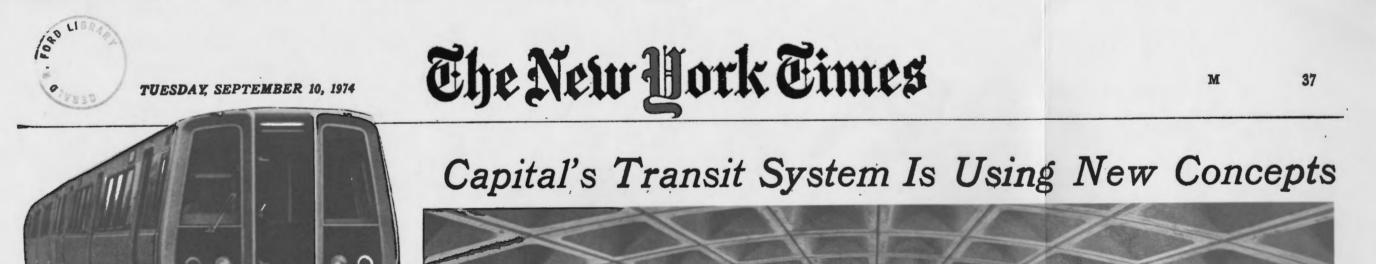
morning and evening rush hours. (More than two-thirds of all Metrobus passengers board during rush hours when Metro presses 1.795 buses into service. During the rest of the day. Metro operates only

Drivers can also volunteer for charter service if they have a good record and a sightseeing license. By working overtime and charter, one Metrobus driver earned \$28,000 in

eight hours of work. The beginning driver with no experience gets \$11,-143 a year without any overtime. An experienced driver (two years) will

make \$13,250 without overtime. The 2.75 percent wage-and-cost-

Metro officials said this is the only way to get the extra runs needed during rush hours. Graham pointed out that Washington is a "one-industry town - the federal government"-and that Metro's



# INSIDE METROMINSIDE METROMINSID

VOL. 3 NO. 6 JUNE 1975

# Theriag to YG

AUSTIN WOODROW (Old Crow) McROBIE.

There is a story circulating at the Bladensburg division that is supposed to have taken place during the administration of Franklin D. Roosevelt. During the hard times following the Depression, some children raised a pignamed Eleanor. When the pig was fully grown, the father was persuaded by a close friend to prepare the old girl for the table. Exactly what happened is not clear, but the story goes that Mac, the persuasive friend, wound up with Eleanor because the family didn't want to see their pet on the dinner table. His persuasion has been bringing home the bacon ever since.

Born in Oakland, Maryland, in 1915, Austin Woodrow McRobie came to Washington, D. C., 19 years later aboard a bus. Exaggerating his age by two years to meet the minimum age requirement, the 6'2" western Marylander was hired by "Pop" Elliott to be a streetcar conductor for the Capital Transit Company.

The following year he met Marie, who is also from western Maryland, and two years later they were married. According to Marie, "It was pretty rough at first," with Mac working irregular hours and rearing their family of four—three daughters and a son, Wayne, who later worked for Capital Transit. "But," she adds, "We've led a good life together."

For the past 10 years, Mac has been an operator training and safety instructor and is responsible for the assignment and record keeping of operator candidates in passenger service training.

Earlier in his career, Mac has served as a streetcar conductor, an inspector, a street supervisor and a safety training supervisor.

In all, Mac estimates 10,000 operators have gone through training during the 27 years he has been in it.

An early riser, Mac is up at 2:00 a.m. every morning and by 3:30 a.m. he is at the training division office in Bladensburg and has the coffee perking.

With a story for every occasion and a fondness for practical Jokes, Mac is the resident

(continued on page 2)

## McRobie Celebrates 40 Years



A few of the people who dropped in for Mec's 40th Anniversary colebration. Pictured from the left are instructors: JOHN H. ADAMS, AUSTIN W. McROBIE, JIMMY C. FARMER, ROBERT L. FORD (Assistant Superintendent Operator Training), EDWIN J. KLOPFER, JOSEPH R. WALLACE, BILLY F. HENDERSON, DARNELL WATTS, MONTE W. MONTEITH and MARK A. GIBSON (Utility Clerk).



## Metro Spotlight

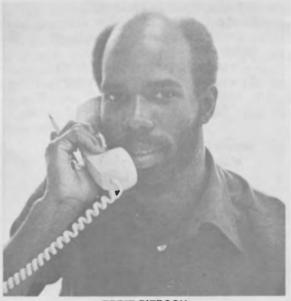
by Claude Swanson

The purpose of the Metro SPOTLIGHT is to focus on an employee who is behind the scenes at Metro serving a vital function for the Authority. It is not intended as a merit award but merely

to highlight employees who are not ordinarily in the forefront of the Authority's activities.

The June SPOTLIGHT captures a very diligent and dedicated employee in the Office of Construction, Plans Section. Eddle Pierson sits in his office across the hall from Construction surrounded by many plans and specifications of the Metro system. Supervisor for the construction plans room is a very busy and challenging position. Even though it is not often in the center of attention, it involves just about every aspect of WMATA operations.

Eddie is originally from Fort Worth, Texas. He attended Arkansas AM&N College in Pine Bluff, Arkansas, and Federal City College here in Washington, D. C., where he studied sociology and psychology. Eddie previously worked for OEO, Vista and Job Corps.



EDDIE PIERSON

Eddie spends a great deal of his social time with the Boys Clubs, the Mayor's Youth Program and various youth organizations. He also runs track in his spare time and has coached at several high schools in the Texas area. Eddie is also a member of the American Legion and enjoys working with kids and helping them develop their potential.

Eddie Pierson, Inside Metro SPOTLIGHT salutes you for being such an interesting subject as well as a dedicated employee. Although you are not in the center of attention, we know you are always there because without plans, where would we begin?

## McRobie Celebrates 40 Years

humorist. One co-worker known as "Motor Mouth" is both easy prey and a frequent target. Once, while smoking his pipe with Mac's special blend of tobacco and cut up rubber bands, "Motor Mouth" was heard to mumble, damnedest tobacco I ever tasted." To everyone's delight (and to no one's surprise) he continued smoking it.

It is not uncommon at the training office for an instructor to open his lunch and find a large mouth-shaped chunk missing from his sandwich, or to pull out that apple he's been saving for later and feel his fingers sink to the core on one side. While the culprit remains at-large, there are suspicions.

Mac enjoys reading books on wildlife, crabbing and weekend visits to his friends in the countryside surrounding Laurel, Maryland. Both he and Marie enjoy cooking and bring delicious cakes to the numerous celebrations held in the training division.

In May, Mac celebrated his 40th anniversary with Metro and its predecessors, then he and Marie celebrated their 37th wedding anniversary on June 1. The McRobies plan to retire to western Maryland in 2½ years, and according to Mac, "Just loaf."

Some say he suspects it will rain the day after he retires and as his head is gently sprinkled with water, a jocular voice will descend from the clouds and say, "Yesterday you were an instructor, today you are an 'Old Crow'.

## WMATA Retirees

**JUNE 1, 1975** 

Fermon Childs, Trackman Maintenance - Northern James W. Lewis, Operator Transportation, Northern Frank E. Roat, Mechanic A Maintenance - Western Clarence S. Neel, Mechanic AA Maintenance - Western Martin E. Kane, Operator Transportation - Southeastern LeRoy T. Broyles, Operator Transportation - Bladensburg Emmett C. Gunter, Supervisor Maintenance - Arlington

**MAY 1, 1975** 

James O. Tacey, Mechanic A. Maintenance - Alexandria

**MARCH 1, 1975** 

David H. Herndon, Jr., Operator Transportation - Alexandria



John L. Norris, Street Supervisor Transportation - Southeastern May 10, 1975 Richard Keys, Operator
Transportation - Southeastern May 18, 1975 James L. Wood, Shop Maintenance Supervisor Maintenance - Bladensburg June 4, 1975

## "A Tailor in our Midst"

The Office of Accounting is very fashionable lately, with Wayne McKinnon in the lead. Wayne has taken up the art of sewing where his creativity seems to have blossomed. Taking a pattern and designing it to his liking is what Wayne does and he is quite successful at it. He says that he is just a "beginner" but his "threads" tell the real truth of his accomplishments.

It all began in October of 1974, when he was tired of television. He said it was his "curiosity" that made him begin to sew. With his wife showing him the basics of sewing, Wayne completed two vests and four pairs of pants. The picture of Wayne shows his latest outfit. Bought in a store it would cost approximately \$30 - \$40, but Wayne made it for \$8. It took about six hours off and on to complete.

Wayne and his wife are presently designing and tailoring drapes for their new home in Kettering, Upper Marlboro. His future endeavors will be an African dashiki and a sports coat, with the ultimate goal being a dress suit for work.



Wayne McKinnon attired in the new vest and pants he made

Wayne has been an accountant for Metro since May 1974. Along with sewing he says he is a "tennis freak", enjoys basketball and is a member of Toastmasters. For those of you who have thought of sewing but haven't ventured out, Wayne says, "Sewing is a simple pastime that is very relaxing. All you have to do is get a machine and a simple pattern and you're in business.

Watch for new fashions on the horizon!

## A GREAT OPPORTUNITY!!! FREE ADMISSION!!! FREE REFRESHMENTS!!!

WHEN: July 23, 1975

10:00 a.m. to 3:00 p.m.

**WHERE: Lobby Level Meeting Room** 

WHY: You Might Save a Life

RSVP: **Complete your Pledge Card** 

and return it to your Red **Cross Recruiter** 

## **Metro Toastmistress Club Sponsors Blood Drive**

GIVE TO THE

## **AMERICAN** RED **CROSS**



BLOODMOBILE JULY 23, 1975

As most of you already know, there will be a blood donor's station set up in the Meeting Room(lobby level) from 10:00 a.m. to 3:00 p.m. on July 23, 1975. All Metro employees and Consultant staff members in the OCCB are invited to participate.

Life is our most precious gift. One unit of your blood will help an average of four people, while making you and any member of your family eligible for Red Cross benefits. These benefits will also apply to the entire staff of any company whose participation is 20% In this way, your donation will help your co-workers, especially those who are ineligible to be donors but who might themselves need blood some day.

If you have not already filled out your pledge card, please do so today and return it to your Red Cross recruiter. Beginning July 1, 1975, should any employee or member of their family have a need for blood, there will be a designated representative to whom claims may be made regarding hospital expenses for blood.

Be thankful for your good health... why not share a little of it? Give the "Gift of

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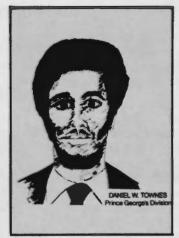
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Anne Conover Shea, Edito
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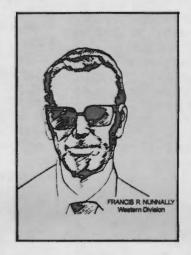














## Stan Scannell and his Relaxing Challenge — Soccer

by Lee Champagne

Seventeen years ago (Feb. 1958) Stan Scannell came to the United States straight from England to pursue the duties he had left back home...to manage a grocery store. But! the roadblock of being not a citizen of the United States ruptured his plans and he came to the Arlington Division of Metro. Stan has been one of us... but like none of us... ever since.

Stan understands the excited kid whose face lights up for the promise of Saturdays, hot dogs and baseball. A native of Dagenheim, Essex, England, Scannell has been deeply involved in soccer for all of the 17 years he has been in America.

Remembering that in 1958 soccer was no more than a word in the Eastern Seaboard area, we can be proud of our co-worker for all

of soccer's interested fans and participants of the game in this same area today.

In 1967 Mr. Scannell approached Mr. Hale of the Arlington County Recreation Departkment and started a league of five teams (11 players each) and interest grew until the ranks rose from 60 to 200 in 1970.

Mr. Scannell's dream was beginning to materialize. It seemed as though every boy and girl in America wanted to participate. With new-found fuel for motivation, Stan called to arms all interested persons whom he thought would fight to further the cause of soccer. 1970 was the year! Stan, the grand-daddy of soccer in America, held a meeting in the basement of his home and, at this first mass meeting of sponsors, the Arlington Soccer Association was founded with Stan, of course, becoming its first President.

Soccer America (America's foremost soccer weekly), Vol. 4, No. 5, published January 30, 1973, proclaimed Stan "Coach of the North." That first group of 60 youngsters has grown to a present day figure (a conservative figure) of 30,000 in the Washington, Virginia and Maryland area alone.

Gwen (Mrs. Scannell) formed a girl's team (Chapter Two) in American soccer in 1973 and managed the winners of championships in the Fall games of 1973, and the Spring and Fall games of 1975. The Regents (Stanspride and Joy) won the D.C. and Virginia state cup this year and went on to play St. Elizabeth's (which is the reigning All-American Youth champ) in the quarter finals, losing 3-2

The Regents are now in contention for the 1975 championship cup and Stan is confident that they will win this one.

Kevin, Stan's son, is a graduate of Washington Lee High School, was captain of that school's team in his senior year and led his team to victory with a 2-1 win with Kevin scoring both goals, a great feeling for the finish of his Washington Lee years Picked as Northern Virginia and metropolitan All-Star, Kevin has had scholarship offers from most of our local colleges with one still open at George Washington University Offers have come from other colleges all over America, but Kevin preferred to pursue a trade and is now in his second year as an apprentice electrician with a local firm in Merrifield Virginia. At the time of this writing America beat Bermuda 2-0 in the first round in World Olympics. Stan has retired from the sponsorship, but not from the job of coaching soccer and Americans by the millions are saluting a man who had a dream!

Read the sports pages and you will know why Stan has been a celebrity in the pages of the Washington Post, the Star the Globe Soccer America, etc., etc. etc. He loves soccer and kids.



STAN SCANNELL, Coach, with son, Kevin, holding trophy.

Good show, Stan.



Smokey Glen Farm Gaithersburg, Maryland

Sunday, July 27, 1975 from 11:00 a.m. - 6:30 p.m.

RECREATIONAL

**ACTIVITIES** Softball

Chicken

served at

1:30

**Hog Dogs** 

served at

4:30

Volleyball Card Games **Horseshoes Ping Pong** 

OR THE KIDS **Pony Rides** Merry-Go-Round

IN ADDITION **Competitive Events** Live Music Martial Arts Demonstration Free Tour of Museum

Ticker Representative No tickets will be no refunds and ar the

Barbeguer Chicken. Chicken for Adult

Fiee SOF DINKS & Bee

DON'T FORGET TO BUY YOUR METRO PICNIC TICKET Deadline - Monday, July 21

# Division Arlington Division by Mary Brown

This month I had the great pleasure of meeting and speaking with Operator E. L. Jackson. Operator Jackson submitted the following:

## "Be Proud of Metro"

Metro has provided many job opportunities for a wide scope of people. Over the years Metro has improved its service, not to everyone's satisfaction, due to the fact that you can't please everyone. There has been a definite improvement. Routes have branched out into areas which have never had a mass transportation system, providing people with ample public means of moving from one place to another in a quick, safe manner at a reasonable cost.

Transportation has been a problem to people for years, but Metro is on the job maintaining its fleet of buses and to the best of its ability, dispatching enough buses to accommodate as many areas as possible.

No one will ever completely solve the transportation problem because new developments are forever going up and when they do, transportation will have to be available. But rest assured when those new areas emerge, Metro is never far behind.

The community that Metro serves, as well as we operators, should be proud of Metro, for without it there would be many transportation inconveniences.

## OCCB

by Claude Swanson & Liz McMahon

Joe Muldoon of the Office of Real Estate finally landed a big one. While fishing in Maryland at the Urieville State Pond on the Eastern Shore, Joe caught

maryland at the

Eastern Shore, Joe caught a six pound, 12 ounce bass, which measured 24" long and 17" in diameter. To verify this fantastic catch, Joe received a certificate of award from Anglers Sporting Goods, located near Urieville. After more

than 20 years of fishing, Joe finally caught what he considers a big catch.



JOE MULDOON'S son, Mark, with father's big catch

Even though the Pond is only 35 acres in size, the big ones are there. Holding this big catch is Joe's son, Mark.

The Office of Personnel would like to welcome back Mrs. Lena Young and Mrs. Eva Thomas. Lena was absent due to illness and Eva is back after giving birth to a baby.

Well, it's almost that time again when we get ready to go out and picnic with our fellow employees. Again plans are being imple-



mented to put on the annual Metro picnic. This affair, as you remember from last year and the previous year, was held at Smokey Glen Farm in Gaithersburg, Maryland, where everyone enjoyed themselves immensely. This event will take place July 27, 1975.

## **BOWLING BANQUET**

The annual banquet of the Metro Mixed Bowling League was held Friday, May 16, at the Hampshire Motor Inn, Langley Park, Maryland. The prizes awarded were silver bowls or silver trays. The League Champions were the "Duffies-5", consisting of Joan McDuffie as Captain, Frank Brennan, Ralph Sheldon, Fran Luhrs, and Ed Bowman. The 2nd Place Team, the "Loose-Ends", consisted of Bob Totillo, Dee Allison, Randy Randolph, Hilda Fried, and George Hall. Individual accomplishment awards were given to Ralph Wood and Paulette Wellington for High Average; Bob Totillo and Rose Remund for High Series; Art Luhrs and Gloria Downs for High Game; George Hall and Kathy Hall for High Series with Handicap; Dempsey Ventress and Tillye Ehrlich for High Game with Handicap; and Tom O'Donnell and Sandy Brock for the most improved.

The League officers for the 1975-76 season are Guy Brock, President; Charlie Walker, Vice President; and Rose Remund, Secretary-Treasurer.

The winner of the Metro Toastmistress Club 50/50 raffle was Jerry Franklin, Jr., of Bechtel. He was awarded the prize on Monday, June 2. Not a bad way to start out the week, right?

A special thanks to William Campbell, utility clerk at Southeastern, he was a real help during an emergency for the Rices. Thanks again for your efforts, Mr. Campbell.—Johnnie Rice/DATA



This rugged sourdough is HAL WRIGHT, transit graphics specialist in the Office of Architecture on active duty in Alaska with the Air Force for two weeks last February.

## OFFICE OF MARKETING by Patricia Ashton

Congratulations are in order for several people of the Transit Information Office this month. Having been nominated two previous months for the award, the April Operator of the Month honor was bestowed upon Myra Dickens. Ms. Dickens, residing in Silver Spring with her two-year-old son, Milan, joined Metro July 1, 1974. Congratulations Myra for a job well done. Other nominees deserving congratulations were: Margaret Scarano, Ora Peyton, Doris Caraway, Theresa Moore, Cathy Ball, Gloria Holland, Linda Goetchius, Teresa Smith, Alicia Raffeningo, Anne O'Brien, Mary Kay, Curtis Mitchell and June Meredith.

We would also like to congratulate Mrs. Meredith for becoming the newest member on our supervisory staff. June started working with the company in May, 1968. She lives in Alexandria, Virginia, with her husband and two daughters. June replaced Mr. Willam Payne, a former supervisor. Mr. Payne decided to resume his position as a bus operator. Good luck, Mr. Payne.



General Manager JACKSON GRAHAM presents the information Operator of the Month Award for April to MYRA DICKENS while JOHN WARRINGTON, CARMEN MACK, AL WILLIAMSON and FRANCES GRAY look on.

## SCHEDULE DEPARTMENT

by Pete Ogden and Allison Mooney

You certainly can tell that better weather is here to stay despite all the rain. And during this time we tend to lose a few employees as they begin vacationing to all sections of the U.S. and Canada.

Irene Adams and husband Eddie made a trip to the sunny coast of California. Irene said they shot enough movie film and pictures



to make a small documentary. Needless to say, their vacation was a busy, funfilled event, which brought a reluctant Irene back to work at the keyboard with lots of memories stashed away. Lew Potter made his vacation debut to Atlanta, Georgia, to visith is brother's

family. The event started out with a brokendown automobile but Lew said, "It didn't spoil a thing." He made a side trip to the famed underground city of Atlanta, which was a magnificent sight. He also came back with a



warm smile and a great tan.

Della Smith was off to dandy
Delaware in which she had
her first experience with the
camping set. She visited her
sister and family who just
happened to be veterans at
the camping sport. She told
us that hearing the ocean
waves at night made it quite

difficult to sleep at first, but she soon made the adjustment to the peaceful lull. Right now, Mr. Hewitt and wife are traveling in Canada and we hope it proves to be as enjoyable as it did to others who had their vacation there.

We have others using their weekend time planting, fixing up the homestead and just getting ready for that well-earned vacation.

We would like to wish two of our employees the best of luck in their new jobs. Bobbi Broadt begins her new job in ACCT and is a real loss to our department, especially after 28 years association with scheduling. Here's to another 28, Bobbi! Chuck Schoenfeldt has returned to the operators slot and we wish him luck and safe driving ahead.

Roland Boran has been off sick for several weeks and does not know when he'll return to work. We hope to hear some good news and until then we wish him a speedy recovery.

We would like to introduce Queenie McKinney, a new clerk-typist to our office. Queenie has been with us for well over a month now and has been practically glued to her typewriter. Despite all the recent rush work. Queenie continually greets everyone with her bright personality. "Welcome Queenie!"



We would like to thank Bobbi Broadt and Lois Bryant for their 1950 Bathing Suit Picture of the Year. The gals in the office were elected to demonstrate the new bus washing equipment that had just been installed. Good way to cool off for summer but this just happened to be in early Spring — at any rate they certainly did show their enthusiasm and stylish suits. Thanks gals.

## **Northern Division**

BUILDING MAINTENANCE DEPARTMENT by William J. Shields

"Ah love! could you and I with him conspire to grasp this Sorry Scheme of Things entire Would we not shatter it to bits and then remould it to the heart's desire?"

- Omar Khayyam



Remoulding may be essential under certain circumstances for some people but not for one who is to retire from the world of forty-hour labor. It was Fermon Childs' earnest desire to complete another forty, not hours, but forty years. The long wait came

to its climax June 17, 1975, (his starting date May 17, 1935,—the year that the social security act was passed by Congress). The people throughout the department will miss your words of wisdom which you acquired from the long years of unbroken service to Capital Transit, D.C. Transit and now Metro. Personally, I feel the need of regrouping my thoughts to say "Goodbye Childs" for the employees; May God bless your retirement days equally with happiness and tranquility.



MR. BEACH and MR. MELLINGTON present FERMON CHILDS (center) with a Golden Forty-Year Plaque.

Bon Voyage to W. R. Lynott, a professional photographer who left us to further his educational studies. He has demonstrated his painting skill on many walls, covering unattractive child-like graffiti.

E. M. Cotton comes to us from the Schedule Department. J. Burrggraff, E. B. Goloring and E. Peckman also bring versatile abilities which will be rewarding to the department. Welcome aboard.

In 1911, Carrier invented the first air conditioning unit in the U.S.A. Since then, many people have been employed to maintain the thousands and thousands of new models purchased for private and business use throughout the world. Some of these skillful persons are G. H. Glading, T. Royce and J. J. Kadjeski. We congratulate T. Royce in his recent marriage to the beautiful Nancy R. Everett. The best man was J. J. Kadjeski. Wedding bells were played at the Church of the Brethren on April 26, 1975. "May this new institution forward the pace of family dignity, thus reaping a wholesome harvest of joy and strength."



Left to right: G. H. GLADING, T. ROYCE and J. J. KADJESKI.

A department has been revised to spearhead trouble which occurs on Metro properties. It's the welding division, serviced by the following: J. McKinzie, F. Childs, A. Valentine, Q. T. Childress, leadman, and C. White.



J. McKINZIE, F. CHILDS, A. VALENTINE, Q. T. CHILDRESS and C. WHITE.

## **Southeastern Division**

by Bernard D. O'Mahony

Welcome to our new assistant superintendent, Mr. L. Shands. A fine administrator, he is admired and respected over the entire system. We look forward to a long and happy association.



We extend our deepest sympathy to the family of street supervisor. John L. Norris on their sad bereavement. A gentleman of the old school, "Bucky" as he was familiarly known, was noted for his justice and fairness. His sudden passing was a tragic blow to all.

Operator Leo Henderson retires after slightly over a decade of public service. He plans to devote more time to his thriving landscape gardening business and also to fulfill an ambition to visit the Antipodes.

Our Courtesy Award for this issue is extended to J. Coperson, J. Farley and J. Grandstaff. Fine outstanding drivers, they are a credit to our organization.

Persons receiving awards in the mechanical department for meritorious service include: C. J. Boyd, E. P. Yarrington, G. Washington and C. L. Smith.

As we go to press, we received word of the untimely passing of operator **Richard Keys**. We join with his many friends in extending our condolences to his family.

Divisional supervisor A. J. Shumate arrived back to work after an enjoyable vacation surf fishing off the rugged coast of Peru. Sporting a deep tan, he looked the picture of vibrant health and vitality.

Had the pleasure of working a major sightseeing move with top charter operators F. Curtin, J. Ryan, J. Sanchek, R. L. Smith and "Robbie" Roberts. Was amazed by their versatility and immense knowledge.

On a recent social visit to the office of our affable superintendent Mr. Sutphin, I was fascinated by the photograph of a huge sail fish. My boss informed me that the monster was captured off the Maryland shore several years ago.

This month we salute street supervisor C. Hobbs who does a terrific job of helping and advising our daily operation. Always on the job and always smiling, he certainly renders yeoman service.

Our softball team was strengthened by the addition of new pitcher John Hipp. He will be a welcome addition to current star C. Chestang. The genial manager, J. F., is looking forward to a good season. Players include B. Cobb, A. Barnes, J. Stratton, K. Pye, K. Rhames, L. Dowdell and C. Dunlop.



## INSIDE METROM

**VOL. 3 NO. 5** 

**MAY 1975** 

## EVER TALK TO A T-I-C?

What's a T-I-C? A T-I-C is a Transit Information Clerk, a vital link with the public who are patrons of WMATA. One reaches a Transit Information Clerk by dialing 637-2437. A clerk answers questions regarding fares and time schedules of Metrobuses with the "shortest routes and best possible service". There are some customers who want alternate routes because they do not wish to ride through certain areas of town. The clerk assists the customer in this information. When a call comes in regarding valuables left on a bus such as purses, eye glasses, prescriptions or food, the clerk will try to assist. Other problems are left to the consumer representatives.

To assist the clerk there are huge maps on the wall, maps at their desks, and enormous books on stands that keep up-to-date route descriptions of all bus headways or schedules. When the rail system begins, clerks will also give out similar information on the trains.

The Transit Information Clerks are located in the Office of Marketing but are often known to venture out into the greater metropolitan area to assist the consumer face—to—face. Information booths have been set up on a day basis at places such as Landmark, Tysons Corner, Prince George's Plaza, Landover, Springfield Mall and the FBI Identification Building. The clerks assist the public in giving out Metrobus information as well as helping private/public employees with bus schedules when their offices are being relocated. A friendly smile and helping schedule give Metro the "personal touch."



MRS. FRANCIS GRAY, Supervisor for the Customer Information Service, shows the huge directory of "info."

## LUHRS AND VOGEL TAKE ON ADDITIONAL RESPONSIBILITIES



ARTHUR G. LUHRS
Superintendent, Systems Maintenance



W. ERICH VOGEL.
General Superintendent, Car Equipment

On March 29, 1975, Arthur G. Luhrs and W. Erich Vogel were promoted in the train operations area.

Arthur G. Luhrs was promoted from Power Engineer to Superintedent of Systems Maintenance. Since July, 1974, he has acted as start-up manager. Systems Maintenance is one of the four major areas which is responsible for the operations of the train. Mr. Luhrs now oversees train control, fare collection communications and tractor power.

Prior to Mr. Juhr's five years with Metro, he was with T. F. Jacison Inc., New York and Port Authroity Trans-Hudson Corp., New York.

Erich Vogel was promoted from Equipment Engineer to General Superintendent for Car Equipment. Mr. Vogel oversees all aspects of the cars for the train operations, including, inspection of cars, equipment and subassemblies during the manufacturing cycle, monitors transit car track performance testing and coordinates with various contractors to insure vehicle availability for train control track testing.

Mr. Vogel has been with Metro for three and one-half years. His vast experience came to us after being employed with Port Authority Trans-Hudson Corp., New York; Consolidated Diesel Electric Company in Conn. and various other firms.

Good luck to both of these men in their new appointments.



Maps all over and huge books on stands help information clerks answer calls through their tiny straw-like phones.





The Training Board

ATTEND TRAINING **OPEN HOUSE** 

**OVER 200** 

SEVEN COLLEGES REPRESENTED + MORE THAN 200 METRO EMPLOYEES = A LOT OF ACTION!

prepared by: Anne Conover Shea, Editor

That's what transpired on April 23 in the OCCB Training Room. Metro employees learned about all kinds of courses from a transportation program at George Washington University to in-house management courses. Hundreds of brochures were distributed on courses such as accounting, business, electrical, law enforcement, fire science and many more. Information was available on how an employee could receive tuition reimbursement and what degree areas were needed by Metro. If you missed the action and need to know more, contact the Training and Employee Development Branch at 637-1069.

## **NEXT IN-HOUSE CLERICAL** SKILLS COURSE OFFERED

Brought back by popular demand is the In-House Clerical Skills Course. To be presented June 9, 11, 13 and 16 from 9-2 A.M. and June 18 and 20 from 9-4 P.M., this course will cover the topics presented in the last course with more English review.

Designed for clerk typists and first level secretaries, the in-house clerical skills course will

**Enalish review** 

Human relations

Proper clerical attitudes

Effective communication

Proper use of the telephone

All sessions will be held in the Personnel Training Room, OCCB, Room 305. Those employees interested should submit a Training Form to the Training and Employee Development Branch as soon as possible. Training Forms may be obtained from Laura Casadevall at 637-1069. Any questions regarding this course may be addressed to Anne Shea at 637-1069

## INSIDE METRO Published by WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

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Chief of Operations and Maintenance

Warren Quenstedt Deputy Gen. Manager Deimer Ison Secretary-Treasurer Roy T. Dodge Chief of Design and Construction

Office of Personnel on ald Dewey, Director ne Conover Shea, Editor



**ROBERT WILLIAMS, Washington Technical Insti** te, talks with a Metro employee



PROFESSOR DOUBLEDAY, George Washingto University, gives information on Business at Transportation Programs

## **EVER TALK TO A T-I-C?**

Fifty-six transit information clerks cover the hours from 6 A.M. to midnight handling an average of 5,000 to 6,000 calls a day! The busiest times of the day for calls are 7 A.M. to 10:30 A.M. and from 2:30 P.M. to 7:00 P.M. When the majority of people are starting and finishing their day, transit clerks are rapidly giving vital mass transit information.

Coming from all walks of life, the Transit Information Clerks deal with all kinds of individuals. Some clerks are ex-bus operators, three are Spanish speaking clerks, etc. Their talents blend with the key quality needed for this kind of work. "Patience is the key word", says Mrs. Francis Gray, Supervisor for the Customer Information Service. "We call this the nerve center after dealing with the public for eight hours."

Can you imagine calling three or four telephone numbers to get information on how to get a bus from one jurisdiction to another? That's the way it used to be before Metro. Training the clerks to be familiar with all routes was quite extensive, a long process, but a successful undertaking. Additional training in helping the public is an additional focus recently for Transit Information Clerks. Information clerks will begin to take a new approach to calls, to give that "personal feeling". They will offer their name as well as additional information regarding service if the customer so desires. The object is to "have a satisfied customer and that we are really here to help," says Mrs. Gray. "By offering them additional information that isn't asked for we may help more people keep their car keys on their dresser and use mass transit." To make it more enticing to use Metro, the clerks will offer sights along the route the customer requests such as shopping centers, museums, libraries and on and on. The new concept will be to give a "feeling of helping people—not just putting them on a bus."

The Transit Information Clerk, The T-I-C, is a vital link in the bloodstream of Metro's operation.

## **WMATA Retirees**

Retirees April 1, 1975

Robert O. Evans-Operator-Transportation -Arlington

William Alston-Helper-Transportation-Arlington

Dennis J. McCarthy-Auditor-Audit-OCCB

## Retirees-May 1, 1975

Virden E. Bolton-Depot Clerk-Transportation -Western

Spencer Pendleton-Helper A-Maintenance -Northern

James S. Graham — Operator—Transportation -Western

Edgar L. Webb-Mechanic AA-Maintenance -Bladensburg

Lewis A. Webster -- Operator - Transportation -Western

Raiph J. Parnell — Operator — Transportation -Bladensburg

Howard T. Davis-Mechanic AA-Maintenance -Bladensburg

Joseph F. Simms -- Operator — Transportation -Bladensburg

Leo N. Henderon — Operator — Transportation -Southeastern

Charles W. Dwiggins - Operator - Transportation-Bladensburg

Burton C. Rogers — Operator — Transportation -Southeastern



Charles E. Wolfrey - Operator -- Alexandria -Transportation-April 5, 1975

## **Scout Day at Metro**

Scout Day at Metro on Sunday, April 27 brought 3,000 persons including scouts, scout leaders and parents. From noon to 4:30 P.M. they saw a ten minute slide presentation about the history and progress of Metro, inspected a Metrobus and toured Gallery Place. Pictured above is a group waiting to board the Omnibus, which visits sites throughout the city carrying information regarding services of Metro.

## WELLMAN WINS METRO GOLF TOURNAMENT



Leading a field of 73 golfers, largest in Metro history, Herb Wellman, an operator from P. G. Division, fired a 79 at Lakewood Country Club on May 2, 1975 to win the Metro Spring Golf Tournament. Wellman registered 7 pars and 3 birdies on the way to his winning score. Close behind was Jim Locke, who shot a fine 81, with Jim Kim and Mike Panos four strokes

off the pace at 83

Overall there were 11 golfers who shot 90 or below and another 7 at 95 or better. There were other fine performances during the tournament which also deserve recognition.

On the "Closest to the Pin" ninth hole, a treacherous 155 yard shot over a large water hazard, John Warrington walked off with the honors. The "Longest Drive" went to John Swanson for his feat on the eighteenth.

Following play, the golfers enjoyed an "All You Can Eat" seafood buffet with many faltering before the dessert.

After dinner, the winners received their awards and a drawing for the door prizes was held. Some of the door prizes were packages of golf balls, happily received to replace those "misdirected" during the day's play.

The "Caboose Award" for the best score in reverse went to Jack Kennedy. Making the presentation to Mr. Kennedy was Don O'Hearn, the recipient of the award at the Fall Tournament. Special recognition goes to Al Williamson and Chuck Fizer for their continued endurance during the round. Although not among the top finishers, they managed to set a record for using four golf carts to complete play.

It was a fine outing and we look forward to the Fall Tournament with great expectation.

The list of winners were:

## LOW GROSS 1. H. Wellman 2. J. Locke 3. J. Kim 4. M. Panos 5. J. Walden 2. L. Ritchie 3. J. Brill 4. T. Arehart 5. D. Menter

## LOW TEAM SCORES

- 1. Kim, Brill, Fileatreau, McMahon
- 2. Gant, Burgess, Locke, Ray
- 3. Walden, Ratliff, Orrell, Lloyd





## **Metro Spotlight**



by Claude Swanson

In the spotlight for the month of May is a lovely lady in the Office of Contract Administration—Mrs. Joan McDuffie. Recently promoted to the position of Procurement Technician through the Upward Mobility Program, Joan finds her new job very interesting and challenging. The basic duties involve handling non-standard procurements, but realistically, anything

the Contract Administrators think she can handle. Joan, a native of Norristown, Pa., and a graduate of Norristown High School, came to this area in 1970 and joined Metro in 1973 as secretary to the Assistant Director of CONT. Prior to being employed with WMATA, Joan worked for the U. S. Army Quartermaster Depot in Philadelphia, Pa.; Western Electric Company in King of Prussia, Pa.; and Public Housing Administration and Department of Labor in Washington, D.C.

Joan spends her social time reading, sewing, cooking and is presently team captain of the "Duffie Five"



JOAN McDUFFIE

Bowling team in the Metro Mixed Bowling League. Joan is also a member of the Metro Toastmistress Club and she recently won the honor to represent the club in the annual council speech contest.

The future plans of Mrs. McDuffie are to pursue a degree in procurement and public contracts at Federal City College beginning in September. Joan is married to Mr. Edward McDuffie and they are the proud parents of a son, Daryl, 13 years old.

Joan McDuffie, hats are off to you for being an outstanding example of diligence, and an interesting spotlight subject.



















## **Division**

## Happenings

## **Arlington Division**

by Lee Champagne and Mary Brown

In the October 1974 issue of Inside Metro we spoke of the discontent in our ranks and wondered—why the confusion!



Today, although we still have a long way to go, we can look around us and see the results of those long months of hard work and appreciate the efforts and problems that Metro weathered through that stormy period of time in our past.

We have shouldered up to the responsibilities of becoming

a proud (striving to better ourselves) division, where confusion and discontent no longer reign.

Much credit for our determination to become one of, if not, the best division of Metro (unanimously agreed), goes to *Mr. H. H. Jackson, Arl Div. Supt.* who, with the help and loyalty of Mr. G. Johnson, Act. Assist. Supt. and Mr. Duncan, Div. Supervisor, has turned the growing pains of change and progress into a challenge.

Mr. Jackson, by the way, has asked that I convey to those transferring into or leaving the Arl. Div., his wishes for rewarding and satisfying results in their work efforts and search for job satisfaction.

He relates also that some in our ranks are still confused about the safety awards. He states that some of us may have already received an award without knowing it. Symbol #4 on pay stub depicts amount paid for an award.

Mr. Jackson suggests that we remain mindful of the benefits of the safety meetings and although they are sometimes disrupted by construction or change of location...they are held periodically and he urges all to attend. Mr. Jackson is confident that we have the potential for becoming the best division of Metro and isn't about to give up.

## W. E. Jones, Street Supervisor

Well, fellow operators, we finally caught up to Mr. Jones with our camera and guess what? That pipe does take a good picture. The day was one of those rain-filled days with a fog mist prevalent but the camera cut through it all and we even came up with a bonus... Mr. Hoover Bowling was present.

Now, Mr. Jones needs no introduction to the old hands in our division but we'd like to state the following for the benefit of the newcomers who would like to know a little about Mr. W. E. Jones.



W. E. JONES—standing

Mr. Walter E. Jones was born in Herndon, West Virginia (E'ons ago, says he) and is a native of Mercer County, having lived most of his years in that state, in Princeton.

He is married to the former Wilma Stike of Mercer County and Mr. & Mrs. W. E. Jones are the proud parents of three children—one boy and two girls.

Mr. Jones says that his hobbies are a wee-bit of beer drinking while off duty and watching two-legged "dears", but actually his hobbies are fishing, mostly, and deer hunting and sometimes just sitting back in the old easy chair with a fragrant tobacco'd pipe, remembering the times he's had in those good ole West (by gosh) Va. hills.

Mr. Jones cautions (me too) that he writes up only those who are his friends and (take it from me) he has no enemies.



MR. H. H. JACKSON: A reasonable man who can always be reached with a reasonable request or suggestions.



## Thanks.



## You REALLY made it work.

United Way of the National Capital Area

There is much more that could be said about Mr. Jones but this is about all he cares to have said about him. This much many would say... Mr. Jones is a man who likes seeing "things kept straight" but he will bend to help a new-comer who is struggling to find-the-way.

A Quiet Friend—Gone, but not forgotten.

April 25, 1975 was the last day in which (Jimmy) James E. Miller was one of the Arl. drivers. Jimmy made a permanent move back to Charleston, West Va.

An Army veteran of 3 years, James served in Vietnam and Germany, was discharged Nov. 1970 and came to work for Metro less than two years ago. Far from being anti-social or withdrawn in a crowd, Jimmy was, however, a quiet person who made many friends. Many have expressed that they were sorry to see him go. Well, I had a little chat with Jimmy and he wants to have it known that he intends to keep in touch and for those who wish to write him—the address is: James E. Miller, 217 D Knollwood Dr., Charleston, W. Va. 25301.

The Arl. Div. of Inside Metro will take a seat to no other div., due to the fact that we now have a professional top-notcher in the field of photography. It is through the courtesy of Mr. John W. Melvin that we submit such fine photos of Mr. H. H. Jackson, Mr. G. Johnson, Mr. Duncan and himself for this month's issue.



MR. JOHN W. MELVIN

Depot Clerk and New Papa:

Mr. A. T. Zampeze hails from Douglas County, Omaha, Nebraska and his wife Mert is a native of Blant County, Townsend, Tennessee. Now those are nice states to refer to as 'back home' but the Zampeze family remain content in our area.

Robin—12. Tony Jr.—11, and Janet—10, the Zampeze children, serve as reason for contentment anywhere, but the house must have begun to become too quiet...! Congratulations are in order, once again, for this family. On March 21, 1975 Mr. and Mrs. Zampeze were blessed with little Amy, an addition to the family.

No doubt, pop's hobby (fishing) will suffer, but I don't think he will mind too much. Congratulations, A. T.!

No, he doesn't work only 3 days a week. He picked it that way. Three days a week at Arl. and two at Royal. He is a Royal original and dates back to May, 1960, AB&W.

We would like to congratulate these men for making operators of the month from the Arl. Div.: Mr. David Price for operator for the month of January; Mr. Reed Lovett for the month of February and Mr. Gary Bartley for the month of March.

Operator Reed Lovett is also quite a remarkable man. He is a native of Tellico, Tennessee. He has been married for 23 years to his lovely wife, Jo and have a 21 year old son, Doug.

He now resides in Maryland. Operator Lovett has worked out of just about all of the divisions, he has 21 years of service with the company and 18 of those years were without a chargeable accident.

From 1950 thru 1954 he was employed in Communications at the White House, where he received letters of recommendations from President Truman and President Eisenhower.

Stop and Think About It

Starting this month we would like to write briefly an article on things that we feel are of great importance to us all. Something just to get everyone to stop for a moment to think about it! The name of course will be "Stop and think about it." For an example!

Although we are all working out of different divisions, some of us drive different color buses, on different routes carrying different people, we all are trying to accomplish the same goal, which is getting the people home safe and getting ourselves back safe. So wouldn't it make more sense for us all to stop and consider the feelings of each other. Try to work together as much as we can. Driving to me seems to bring out the true personality in one. No one would really feel good about themselves if they stopped and realized they weren't really giving their co-workers the same respect they demand. Think about it!

In November 1973 as the only female operator in the Arlington Div. I, Mary Brown, found myself surrounded by over 300 male operators. Then gradually, some more female operators were hired and it gives me great pleasure to introduce two of our lady operators.

Ms. Ernestine Weaver—Operator Weaver's astrological sign is Cancer. Those of you who are interested in astrology can appreciate the fact that the sign Cancer signifies warmth and strength.

Operator Weaver is a native of Wilson, North Carolina. At the age of six her family moved to Norfolk, Virginia where she resided until the year of 1967, at which time she moved to Washington, D.C.

Operator Weaver attended Virginia State College for two years. She is a great writer of poetry. Her hobbies are singing, dancing and cooking and a very good cook, I might add. Operator Weaver is single and expresses no immediate plans for marriage.

Marva Banks is a native of Mullens, West Virginia. She was raised in Knoxville, Tennessee. After graduating from high school she moved to Chicago, where she became deputy sheriff.

She came to Alexandria, Va. in 1974 where she began as operator. She was transferred to the Arl. Div. and now is happily working. The outdoors is where operator Banks is happiest. Her astrological sign is Aries and, look out fellow, she's single and available.

## **Bladensburg**

by Felton Price, Jr.

Congratulation! W. H. (Poppy) Saunders. Mr. Saunders was the operator who made Metro's 1st subwayrun.



SUMMER SAFETY—the crew at Bladensburg would like to remind everyone that we are approaching the school's summer vacation and great care is required to maintain safe operation. This is the time of year when you will find children playing in the streets, rushing through the streets for the playgrounds, swimming pools and parks.

In order to avoid freak accidents, full time and attention should be given to children making attempts to enter the buses through the rear doors or climbing in through the windows. Some smaller children will even step upon the rear wheels of the bus in order to gain access through a window.

J. L. Jackson is planning a traveling vacation during the month of June. Jackson will attend his youngest sister's graduation at Alabama State University. Mr. Jackson will tour New Orleans and then travel to North Carolina for a Marine Corp re-union. Have fun, Mr. Jackson.

L. E. Pruitt just returned from a fishing vacation. Pruitt carried his family to Scotts Cove, Md. The fishes must have gone on vacation also, because Mr. Pruitt didn't get a bite. After returning to Washington he carried the family to the circus where he was almost blown away by the high winds. Better luck next time, Mr. Pruitt.

We would like to congratulate our Credit Union personnel: S. F. Leaks, W. R. James, J. E. Jenkins, K. R. Davis, J. A. Arrington, J. H. Gillespie and R. Elliott for their ability to always keep things going smooth. Especially through the pay day rushes.

The personnel in the Training Division are busy implementing the Intern Program and training operators for their new divisions. They are also in the process of re-doing the charter book.

It is a grandson for D. D. Fluharty, born 30 March 1975. Mr. Fluharty is now the proud grandfather of two grandchildren. The first being a granddaughter.

G. Enoch is recovering successfully at his home in Alexandria, Virginia after a seven hour major operation. We hope Mr. Enoch will continue to improve and be back with us soon.

J. Farmer, W. C. Weeks have just returned from a wonderful vacation. Welcome back!

If you see something unusual around training, it is Mr. A. McRobie sporting his new uniform.

## **Northern Division**

by Ronnie Baxter and Randolph Bowman



In this month's article we would like to congratulate the outstanding operator of the month for March. The operator's name is Robert Tensley and, unlike the past operators of the month this one was chosen by the customers who ride the bus and, not by the fellow operators. We think that this method of picking the operators of the month is a very good and fair

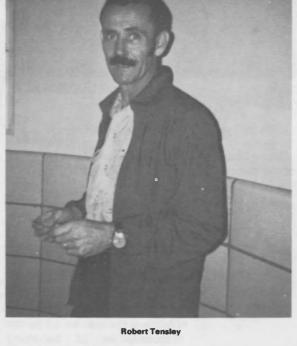
way. This way the operator is not chosen because he has a good driving record or gets along well with his

fellow operators. He is chosen because he is courteous to his customers and he is a smooth operator.

Operator Tensley came to the company in 1961 and he has done an outstanding job operating the bus.

Born and raised in Kentucky, he has five children. He also spent five years in the Air Force. Operator Tensley also received

praise from division supervisors and his fellow operators.



"The System Pick"

As everyone knows, during the months of March and early April we were having a system pick that went into effect the 20th of April. The object of the pick was to give the operators a chance to pick in the different divisions and not just their own. Some operators had been looking forward for this day to come so they could pick runs in the Virginia and Maryland divisions which they were not able to do before. As a result of this pick, some operators have left this division for others and some others came here. We would like to say to the operators who left this division. "good luck at your new home divisions and that we enjoyed working with you." We also would like to say to the operators reporting to Northern for the first time that we welcome you and that we hope that you will enjoy your stay at this division as we will try our best to make you feel at home and part of the Northern family.

## **Division Notes**

As most of us can see, Division Superintendent, R. E. Lyles, has been absent from the supervisor's office. Mr. Lyles went on vacation in February and upon his return to work the system pick was going into effect. Mr. Lyles was called over to Bladensburg to oversee the pick. Being chosen to oversee the pick shows Mr. Lyles' knowledge of the system.

We guess most of you have noticed the fine art work that has been done on the Operators of the Month posters that are displayed on the Metrobuses and in the divisions. The art work is done by another talented Northern operator. His name is Freddy Larkin and we think he should be congratulated on his fine work. Operator Larkin has done many fine portraits in and around Northern division and we think he is a fine artist.

Line on Sports

With the baseball season coming on, the softball teams are starting to practice and, this year the sports program will have a new dimension with the installation of a women's softball team. Due to the number of women at certain divisions there will be just one team composed of women from each division. The women's team will practice twice a week at Turkey Thicket playground at 7:30 P.M. For more information contact Francine Brown, Northern Division team president.

Northern's basketball team is having a very good season again this year. With five straight victories in the Mount Rainier league, the team captured the championship dethroning last year's winner Mount Rainier Recreation Center. The team ended the regular season with a 12-1 record and lost to the Style Shop Trotters 76-72 in the Prince George's County playoffs.

Showing their competitiveness, the team ran the whole game with the Style Shop. Northern's team, as you know, is composed of all bus operators and it is hard for them to find time and a place to practice. On the other hand, the Style Shop is a team composed

of ex-pros Johnny Jones, Manny Leakes and ex-Maryland University player Howard White and they practice everyday in a regulation gyml!!

Notes from the Basketball Coach: Coach James C. Drayton states that Northern has a fine basketball team. The Style Shop team is a very good team Drayton states, but don't forget they also beat another very good team. "I'm happy to be a part of this team," Drayton added. Northern's team has lost only 2 games this season. Its largest life came from its two guards "Reds" Bowman and Conway Smith who drove the lanes, then passed off to center John Smith and forwards Charles Hicks and Robert Brown.



ROBERT BROWN shoots free throw as REGGIE JOHNSON





CHARLES HICKS takes off on a fast break.



ROBERT BROWN (#5) goes up for jump ball as "REDS" BOWMAN (left corner) and JAMES BRISCOE (#42) get into position.

Northern also got help from its bench Jeff Jeffers, Phillip Mayo and James Brisco. Coach Drayton had nothing but praise for his team and says he has really enjoyed working with them on and off the basketball court. Coach Drayton says that his team has competed so well that they have been invited to play in tournaments in Harrisburg, Penn. and Glen, Md.

## **Northern Division**

**Building Maintenance Department** 

by William J. Shields



"Every man's work, whether it be literature or music or pictures or architecture or anything else, is always a portrait of himself."

Samuel Butler

The brothers of 689 extend a hardy welcome to five new employees: G. H. Glading, Bill Hillhimer, A. Thomes Jr., W. Alexander and R. Bostic. They

bring versatile work abilities, which will be rewarding to the department

Members of WMATA Condolence Fund of Building Maintenance Dept met on April 19, 1975 to reform old laws, not with the bullet, but the ballot; therefore the officers wish to thank all who responded to the emergency meeting. The manner by which the voting was held due to short notice was quite effective—thanks to your cooperation. The officers said "We wish to serve all with dignity and punctuality whenever the occasion arises." We welcome back to work M. Rice, J. E. Rezeszut, and J. J. Kradjeski. The pleasant face of R. Sykes will be absent for a short time for he is having an operation. "Get your thing together, Sykes, and come back soon; we miss your driving truck #966."

Mothers Day is a day of honor, it is not a chief legal or public holiday but a day set aside to pay respect to our mothers throughout the country—a time to give expressions to the affection our lives hold. The originator of Mothers Day was Miss Anna Jarvis of Philadelphia. Her name will always be treasured.

We pay homage to the mother of our faithful bus stop div. employee Leroy Copeland. She is Mrs. Minnie Copeland, age 78. She has one son, one daughter, eight grandchildren and twenty-one greatgrandchildren. She's a native of the state whose motto is 'Sic Semper T-yrannis' (Thus Always to Tyrants)—Virginia. She attends Mt. Joy Baptist Church on 1st St., S.W.

Last month we observed National Secretaries Week. The businesses, churches, clubs, courts, lawyers, secret orders, social functions and unions would be in chaos without them. We salute Mrs. Irene Baker who is very reliable and clerk typist Mrs. Barbara Rust whose work is very outstanding.



KIMBERLY BRADFORD

The smiling face of little Kimberly Bradford expresses joy and wishes her mother a happy Mothers Day. She is the daughter of A. H. Bradford of the electrical division. (pic.)



MRS. MINNIE COPELAND

## OCCB

by Claude Swanson



April 20 thru 26 was designated National Secretary Week. Anyone forgetting to honor a well-deserving secretary should try and make it up during the course of the year. Inside Metro would like to salute all of the secretaries of WMATA and its consultants for their diligence and dedication to duty.

The Office of Minority Development would like to again

salute Mrs Saundra Stevenson and Mrs. Virginia Green during National Secretary Week for their dedication, diligence, understanding, compassion, charm and beautiful personalities.

The Metro Milestone Toastmasters are soliciting

The Metro Milestone Toastmasters are soliciting new members. Congratulations are in order for Leonard Nassau, Office of Marketing, for his recent inducation into the Toastmasters. Toastmasters meet every Tuesday at 12 o'clock noon in the meeting room next to the Board Room. For any of you ladies interested in joining the Metro Toastmistress Club, meetings are held every Monday, same time, same place.

The Office of Audit would like to welcome Charles Simpson to the team of Auditors.

Ms. Lois Thomas, former employee of the Office of Community Services, has rejoined Metro in the Office of Planning. Lois, it is a pleasure to have you back with us, you do not know how we have longed for your return.

The Office of Community Services would like to welcome their new photographer, Phil Portlock to the team. Welcome aboard, Phil.

Inside Metro is always looking for things to write about, if you know of some news that may be of interest, contact Claude Swanson or anyone on the staff of reporters. Maybe some of you would like to become writers.

Looking forward to a great summer.

## Office of Marketing

By Patricia Ashton

by t dillola riotton

Information Operator of the Month
The winner for the month of March is Mrs. Alicia
Raffinengo. The newly organized incentive program
in the Office of Marketing has selected its second
monthly winner. Alicia was presented her \$25 dinner
certificate for two by General Manager, Jackson
Graham on April 3, 1975

Graham on April 3, 1975.

Alicia Roffinengo, a native of South America, has been living in this country for about three years. She joined Metro in January of 1974. Prior to working for WMATA, Alicia was employed by the Spanish Speaking Committee in Fairfax, Virginia. Alicia, like our last winner, thinks this incentive program is very inspiring to the workers and was really excited and surprised at being selected the winner among so many diligent operators. This award came at a very opportune time, in as much as Alicia and her husband were celebrating their seventh wedding anniversary. The mother of three boys, one 6 year old and twins, 2 years old, Alicia resides in Fairfax, Va.

## Division Happenings



General Manager Jackson Graham presents certificate to ALICIA RAFFINENGO, Information Operator of the Month—March.

Mrs. Alicia Roffinengo, Inside Metro salutes you for an outstanding performance and your co-workers for an outstanding choice. Congratulations are also in order for the following operators who were nominated:

Margaret Scarano Lydia Johnson Ora Peyton Mary Jackson Myra Dickens Gloria Holland Linda Goetchius Darlene Gorman Fannie Cubbage
Anne O'Brien
James Witherspoon
Theresa Moore
Mary Kay
Clara Gorman
Doris Smith
Cathy Ball

## "Wedding Bells"

The excitement and tension is over and everything is now back to normal in the Transit Information Office following the wedding of one of our operators Miss Gloria Holland to Mr. James R. Nelson. The happy event took place April 19 at the New Light Baptist Church in N.E. Washington. The reception was held at the Woodner Hotel in Upper N.W. Gloria, a native Washingtonian, joined Metro November 1973. She has proven to be a very diligent worker among her fellow employees and supervisors. Her newly-wed husband, a native of Calvert County, Md., is employed as a manager at People's Drug Store in Springfield, Va. Other operators participating in the wedding were: Mildred Moore, Maid of Honor; Pam Williams, Dell Minger, Mary Jackson, Sylvia Fernandez, Pat Ashton-Bridesmaids; and Mr. Curtis Mitchell-Usher. There were many well-wishers to attend the joyous affair. The many wonderful gifts were received with great appreciation from both the bride and groom. We would all like to take this time to congratulate James and Gloria and wish them the best of luck for a bright and prosperous future together.



MR. AND MRS. JAMES R. NELSON

## **Prince George's**

by Barbara S. Twyman



Mrs. Patricia King is one of Prince George's female operators. Mrs. King decided she would like a change from being in the school system so she became a Metrobus operator. Mrs. King is married and lives in Marlow Heights with her husband and daughter. Mrs. King came to Metro in 1974. She likes dealing with people. She says she likes all types of people

regardless of race, creed or color. She likes to drive a Metrobus because she loves to drive. Mrs. King is originally from Alabama. She came to Washington about three years ago. She says she likes Washington very much. She is one of many persons who likes to do different things in life. So, to Mrs. King, "Keep up the good work and keep smiling."



PATRICIA KING

Out from injuries received on or off the bus are Mr. E. Reynum and Mr. James West. "Doc" Simpson is back to work from a long illness. Glad to have you back.

Operators of the Month are Allen Reed, Carrie Cunningham and L. Farmer. They are three fine operators out of P. G.

Congratulations to Mr. and Mrs. Peter Savoy on the arrival of their wonderful daughter Miss Kesha Yavonne Savoy. Miss Savoy made the arrival a little late. She was born April 3. She weighed 7 lb. 3 oz. She was due to arrive in March, but like they say "better late than never," smile. Mr. Savoy is an operator at P.G. So, to both proud parents, good luck to you and your little baby girl.

Congratulations to Mr. and Mrs. Paul Alexander on the arrival of their second little girl Paula Laverne Alexander born March 30. Miss Alexander weighed 6 lbs. 9 oz. She has a little sister named Aryn Lorraine. Mr. Alexander is an operator at P.G. Good luck to the lucky Alexander family.

## SPORTS

Hope everyone from P.G. will support our baseball team by attending the games in Mitchelville, Md. I know a lot of you fellows and ladies like baseball. So, come out and support your team. Remember, by the time this paper comes out they will have played their first game which was April 20. So, see you at the game!

Operator Dick Wellman, P.G.'s famous golfer who won the Metro Golf Tournament, is interested in forming a golf league between the divisions. Wellman has played in and often wins tournaments throughout the Washington area. If anyone is interested in joining in, you can contact Wellman at either of these numbers after 1:30 P.M.: 420-9659 or 420-9881. If at all possible he would like to get organized by May 15.

Operator Willie Torrence, the brother of recording star "Little Royal" Torrence, has recently won the Maryland Marathon but may not go to Boston. He pulled a thigh muscle and he does not think it will be ready in time. In a talk with him Apr. 7, he stated he was up to 10 miles, far short of the distance necessary in the Boston Marathon. Operator Torrence is interested in knowing if there are other operators involved in cross country running. If so, would you like to form a team? Torrence works the day extra board at P.G. for those who may want to contact him.

—SPECIAL—

P.G.'s baseball challenges all other division's teams to at least one game. Managers or team captains contact Mr. E. L. Robinson at P.G. or let him know where he can contact you. Robinson works run no. 201.

## Southeastern

by Bernard D. O'Mahony



On a recent major sightseeing operation I had the pleasure of being associated with top chartermen E. Wilkinson, T, Warner, R. Sanford, J. Criste, E. Roberts, B. Johnson, V. Kline, J. Beale, J. Ryan and M. C. Harper. Outstanding lecturers, they are an asset to our company.

This issue we extend felicitations to street supervisor C. R.

Coley. A real professional in every sense of the word. He is an outstanding example of a model supervisor. Helpful and courteous, he has the respect and good will of both management and labor.

Veteran operators W. Evers and M. Malloy have specialized extensively on the Revolutionary War and its impact on the Washington area. Had the pleasure of hearing their fine oratory at a recent Colonial Round Table discussion.

On the mechanical front we were sorry to lose top mechanic D. S. Craig, who left for Bladensburg. A specialist on the shopper buses, he will be missed by all personnel. We welcome F. C. Gunter back to duty after an extended layoff due to a back injury. We commend L. Morton for outstanding service on the midnight shift. Congratulations to R. H. Cottrell on a beautiful new baby girl.

Mr. Sutphin, our efficient divisional superintendent, wishes to extend his appreciation to all drivers on the good showing in safety for the last quarter. Top drivers R. Cox, C. O. Murphy, G. M. Via and S. M. Watkins played a prominent part in the success story.

Our Courtesy Award is graciously extended to J. Crutchfield, R. E. Thomas, S. Hodges and P. Cofield. Smiling exponents of good will, they set a shining example for all personnel.

Our personality portrait features handsome vivacious Ovidio De II Acqua. Born in Guatemala, he majored in pharmacy at the State University. His hobbies include fishing and soccer. His favorite author is Shakespeare and his best loved play "Othello". He is the chief mechanic assistant to the dispatcher on the high priority morning rush.

On a brief visit to Gettysburg Battlefield Park gathering material for a series of articles on the Civil War, I had the good fortune to encounter charter coach operator Jay Cumbo. An expert on the war between the states, he was able to supply me with valuable statistics and information.

We wish to commend safety instructor "Tex" Henderson on the fine job he is doing at our division. His tips for summer driving — eternal vigilance and maintaining proper space between vehicles.

We welcome new arrivals J. B. Taylor, J. R. Jackson, K. Kinsey, and J. Williavs. Farewell and good luck to T. Harmon, J. Manley, H. Moses and M. Shanklin.

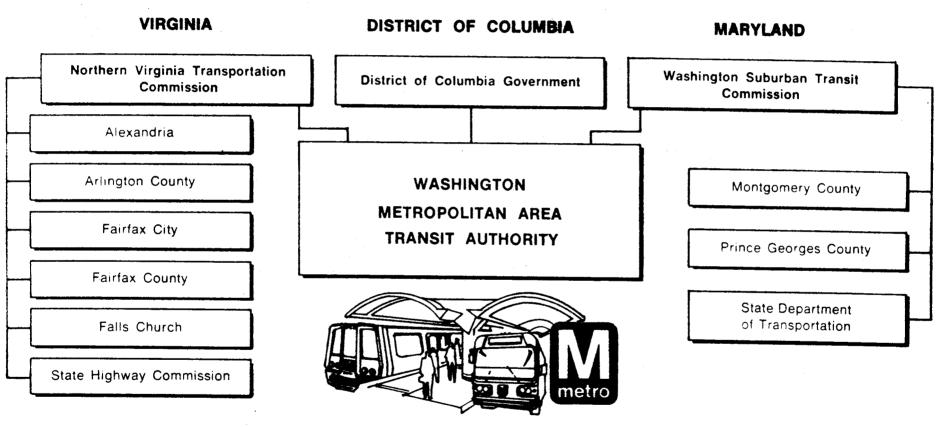
Our new custodian Kenneth Sherman has impressed us all by his industry and zealous dedication to duty.



E. ROBERTS

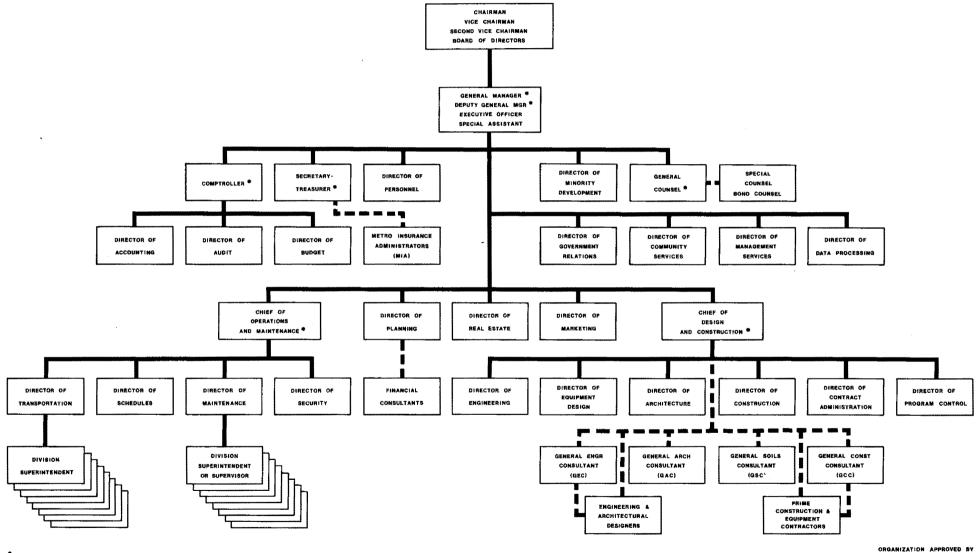
Top charter coach operator E. Roberts shown in a characteristic pose on a recent major movement. "Robbie", as he is familiarly known, has a winning personality that endears him to everybody. Noted for his kind heart and generosity, he is indeed a most harmonious companion on any type of job.







## WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY



\* OFFICERS OF THE AUTHORITY

WMATA BOARD OF DIRECTORS NOVEMBER 18, 1972



## Bus/Rail Feeder Plan Proposed

The WMATA staff has proposed that several Metrobus lines serving Northeast Washington and Prince George's County, Md. be rerouted to serve the Rhode Island Avenue Metro station when it opens later this year. A public hearing was held June 24.

The rerouting would be the first of the bus-rail coordination plans to become effective as Metro operations begin.

Rhode Island Avenue station, located at the B&O/C&O Railroad overpass, is the northeast terminus of the 4.6-mile segment of rail system that is to begin passenger service this fall. The line includes five other stations, Union Station-Visitor Center, Judiciary Square, Gallery Place, Metro Center, and Farragut North. The Farragut North

terminus is located under Connecticut Avenue just north of Farragut Square.

Bus passengers from northern Prince George's County or Northeast Washington headed downtown could save time by transferring to the train at Rhode Island Avenue station. The buses would continue their regular routes into and out of the District for those preferring the bus trip.

The Rhode Island Avenue station, an aerial station, is the only one of the first six operating stations to feature off-street facilities for Metrobuses. The station has six bus bays, 56 kiss & ride spaces (for auto drop-offs and pick-ups), and 300 parking spaces. The other five stations are all below ground and are accessible by entrances from the streets

The Maryland line, including routes 82, 84, 86, and 88, is planned to be diverted into the half-mile long bus loop at the station during the 7 a.m. to 7 p.m. rail operating hours. These buses presently pass the Rhode Island Avenue station and the bus loop would be the only change in the normal routes. The rush hour expresses, 87 and 89, would stop at the pedestrian access ramps on Rhode Island Avenue instead of using the loop. All of these buses use the Rhode Island Avenue-U.S. Route 1 corridor to serve Maryland points which include Seven Springs Village, Hollywood, University of Maryland, College Park, East Pines, Tuxedo, and Hyattsville at the Maryland end and Potomac Park (19th and (continued on page 6)

## **EXPRESS METROBUS LOCAL METROBUS** ROUTES **ROUTES** E3/64/64 RHODE ISLAND AVENUE RHODE ISLAND AVE. STATION

## Planners Tackle Bus Priorities Head On

The WMATA staff is working with the District of Columbia to redesign the traffic flow along 17 major corridors to speed both auto and bus traffic through Washington's central business district.

Metrobus planners are proposing a system of one-way streets combined the last of the la

Metrobus planners are proposing a system of one-way streets combined with "self-enforcing" bus priority lanes for major downtown arteries. WMATA's objective is to reduce running times on its routes, thereby reducing its own costs while increasing the appeal of mass transit to the public.

The bus planners are introducing the idea of contra-flow bus lanes to Washington, a concept used in other American and European cities in which buses run the wrong way on one-way streets in reserved bus lanes. Also new to Washington is their proposal for reserved center lanes on downtown streets for express buses. The proposals also include many additional bus priority curb lanes, but on one-way rather than two-way arteries.

Bus priority curb lanes are not new to Washington. Twenty-seven such lanes were effective on 18 streets as of March 1 of this year. However, they have not resulted in significant time savings to Metrobus passengers because of spotty enforcement. Motorists use them for making right turns, for dropping off or picking up passengers, for illegal parking, or for just another car lane. By combining its new curb lane proposals with one-way streets, the WMATA planners hope bus riders will benefit from the general speeding-up of all traffic.

WMATA is placing special emphasis on two of its contra-flow proposals. The first, which was submitted to the WMATA board in February, would change 14th and 15th Streets S.W. and N.W. to one-way streets north and south, respectively, between the Potomac River and Thomas Circle, with contra-flow bus lanes on both streets. The second would change I and H Streets N.W. to one-way streets west and east, respectively, with contra-flow bus lanes on both streets.

The report prepared by the planners suggests that the 14th and 15th Streets proposal serve as the pilot project for the implementation of the other proposals, and it predicts a year's elapsed time between the introduction and inauguration of the plan. The plan includes a bus passenger platform in the center of 14th Street (northbound)' between Independence Avenue and C Street S.W. Northbound buses would use this platform before turning left on Madison Drive to continue their route in the northbound contra-flow lane of 15th Street. Southbound buses would continue to use the curb stops on 14th between Independence and C Streets.

The transit authority has agreed to provide the National Park Service with an environmental impact study of this contra-flow proposal, since it affects traffic volume and flow around the Mall area.

The I and H Street contra-flow proposal would be implemented this fall when, according to the staff report, Metro contractors are to restore I Street and the D.C. Department of Highways and Traffic is to implement its plans to make I Street one-way westbound and H Street one-way east-

The staff report says, "it would be



timely to inaugurate contra-flow bus lanes on these streets with the implementation of one-way traffic operations; such actions in coordination with highway plans may be possible without environmental studies and public hearings. Thus, the time for implementation would be shortened and the H and I Streets priority treatment could precede the 14th and 15th Streets proposal."

The buses would run west on H Street at all times between New York and Pennsylvania Avenues. The buses would run east on I Street at all times between Pennsylvania and New York Avenues.

Another of the proposals would have Metrobuses traveling in the direction of peak hour traffic flow on New York Avenue but on the other side of the median strip from the lanes with the heaviest auto traffic. This would leave the same number of lanes available for automobiles traveling in the direction of the rush, but would reduce the number of lanes available to cars traveling counter to the direction of the rush.

This "unbalanced-median contraflow" proposal would be effective only during the morning and evening rush on sections between Montana and Florida Avenues and between the railroad bridge and Bladensburg Road.

The two center lanes of Connecticut Avenue would be reserved for rush hour express buses between Porter Street and Calvert Street, N.W. in one other proposal. The express buses would use the lanes southbound in the morning and northbound in the evening.







## 1 A NEW ASSIGNMENT—William H. "Pop" Saunders, who has held many different jobs in his 29-year transit career, is one of the first Metro train operators. He pauses in front of a new Metro car with fellow trainee Joseph Serensits, right.

2 POP AT THE CONTROLS—Pop Saunders uses the intercom system to speak with engineers aboard his test train during trial operations at the Brentwood Yard. The intercom system can be used to communicate with passengers.

3 CONTROL PANEL—Pop Saunders and the other train operators spend a part of their day at the complicated automatic control panel, learning the functions of the buttons and switches. Trains will run automatically when Metro opens, but the operator will be able to override the automatic controls if it becomes necessary.

## Transit Vet To Run First Trains

William H. "Pop" Saunders, a track laborer during the early part of his 29-year career in Washington transit, is now one of the select few to have mastered the operation of the sleek Metro trains that will begin carrying Washingtonians by the end of this year.

Saunders, who was among the first six Metrobus operators to be selected for train operations during the start-up testing program, has an intimate knowledge of developments in Washington mass transit during the past 30 years. Following service in the South Pacific during World War II, Saunders joined the Capital Transit Company as a laborer in 1946, the only transit job open to him.

"I was what they called a Laborer D," he said, which means "we did everything." "Everything" included repairing and replacing trolley rail along the old Glen Echo, Cabin John, and Benning Road lines.

Did he foresee, at that time, a rapid transit system for the District? "No, I thought there'd always be streetcars . . . that's the truth. To picture Washington without a streetcar line, I guess 4 you'd say, would be fantastic."

For the nearly 10 years that racial discrimination kept him from becoming an operator, Saunders was assigned various jobs in the ways and structures division of the transit company. This included maintenance work on transit buildings and work on the electrical trucks used to maintain the lines. It also included a job with an unappealing title—pit man.

The pit man, Saunders explained, stood in a pit beneath the tracks to switch the electrical traction current from underground cables to overhead wires. Saunders said that the overhead cable was not permitted in the downtown areas, so streetcars had to switch from one cable to the other, and that this was done at the pits. "I worked every pit they (the company) had," said Saunders.

### UP FROM THE PIT

At last, the opportunity to become a streetcar operator opened to Saunders. "Charlie Miller, my foreman, told us they were going to hire some blacks," said Saunders, recalling that Capital Transit had been under pressure to do

so. This, he said, was in 1955.

Saunders was the first to apply. However, the ways and structures division had a backlog of work because of a labor strike, and Saunders stayed a while longer on his old job to help out. He recalled there were four or five other black operators by the time he actually began running a trolley car.

"I fell in love with streetcars," he said, and apparently his ardor never cooled in spite of his long experience on buses following the demise of Washington streetcars.

Saunders wasted no time in applying for his new train position. "The buses were getting to the point where there was so much congestion and traffic downtown," he said. "And my heart belongs to rail anyway. It's a beautiful program."

### A PIONEER

Saunders became the senior member of a group of six pioneer train operators, or train supervisors, for the Metro system. The others are Gerald Benfield, Nathaniel E. Braxton, Harold E. Lambert, Joseph E. Taylor, and Jo-



seph S. Serensits. Benfield and Serensits, like Saunders, both had trolley experience with Capital Transit before becoming Metrobus drivers. Taylor had experience with the B&O Railroad before becoming a Metrobus driver. Braxton and Lambert both have only bus experience with WMATA and the predecessor private bus companies.

Serensits and Saunders are the same age, 53, but Serensits has only 21 years seniority to match against Saunders' 29.

The six-man team is currently testing the trains and working in the train control tower at the major repair shop and yard at Brentwood. "Anything pertaining to the (operation of) trains, we do," said Saunders.

The six are also working in conjunction with Rohr Industries, the car manufacturer, to train operators needed for the opening of the 4.6 mile segment of the rail system some time this fall. Eighteen additional train operators have been selected and have begun training.

When Saunders speaks of the new rail system, he uses the proprietary (continued on page 8)



Sixteen more Metrobus operators from around the metropolitan region have been named "Operators of the Month" for April and May because of written commendations from their passengers. Operators of the month (for May) are as follows:

William A. Stroud—4 G (Pershing Drive-Arlington Boulevard Line)

Robert Tidwell, Jr.—General assignment, Bladensburg Division

Tommie J. Campbell—7 W (Lincolnia-Washington Line) Frank T. Smith—T 6 (Rockville-Northeast Line)

Owen Napier—W 2 (Oxon Hill Line)

Larry L. Fulk—29 G (Alexandria-Annandale-North Springfield Line)

James L. McCoy, Jr.—General assignment, Southeastern Division

Roberta L. Lane—30 (Friendship Heights Line)
Operators of the month (for April) are:
Vaughn C. Stout—1 M (Wilson Boulevard Line)

Ernest E. Bland—D 2 (Glover Park-Trinidad Line)
William "Bill" Stallard—29 (Alexandria-Annandale-North
Springfield Line)

James L. Goode—60 (11th St.-Fort McNair Line)
Daniel W. Townes—T 11 (Central Avenue-Belair Line)
Gordon E. Shelton—11 A (National Airport Line)
Vanness Newman—M 8 (Downtowner)
Francis R. Nunnally—L 8 (Connecticut Avenue-Maryland Line)

Charles Walker, Metrobus courtesy coordinator, reports that he has received more than 15,000 commendations from Metrobus passengers since the program was initiated in January.

The operators receiving the most commendations in their divisions receive \$50 savings bonds. Pictures of the winners are displayed on a car card mounted on all the buses. Postcards are available on the buses for passengers who wish to comment on the operator's performance.

(continued from page 2)

Virginia Ave., N.W.) at the District end. The Rhode Island Avenue-Ager Road Line, which includes Routes E2, 4, 6, and G4, is planned to be rerouted to the bus loop at the Metro station. At present, the inbound routes head southbound on 12th Street to Franklin Street, where they turn west to 4th Street and then head south to Rhode Island Avenue. Under the proposal, they would miss Franklin and 4th Street entirely by staying on 12th Street to Rhode Island Avenue where they would turn southwest to serve the station and then continue on Rhode Island to 4th Street where they would resume their present routing. All of these lines operate between Lafayette Square in the District and Maryland points which include Hyattsville, Avondale, and Lewisdale.

The F5 and F7 Sargent Road Ex-6 press, operating rush hours between Prince George's Plaza in Maryland and the Southwest Mall (F5) and 12th and Constitution N.W. (F7) is to add a stop at the pedestrian access ramp of the station.

The F9 rush hour express, which operates between Lewisdale and Potomac Park, is to be rerouted to Rhode Island Avenue via 13th Street to serve the Rhode Island Avenue station pedestrian access ramp. This express now uses 4th Street between Michigan Avenue and Rhode Island Avenue. The buses would no longer use Michigan Avenue west of 13th Street or 4th Street north of Rhode Island Avenue.

Likewise, the G5 (Highview to Bureau of Engraving), G7 (Highview to Potomac Park) and G9 (Prince George's Plaza to Potomac Park) rush hour express buses are planned to be rerouted to the Rhode Island Avenue station via 13th Street. The G9 now

uses 4th Street between Michigan Avenue and Rhode Island Avenue and the G5 and G7 use 4th Street and Lincoln Road between Michigan Avenue and Rhode Island Avenue. The buses would no longer use Michigan Avenue west of 13th Street, 4th Street north of Rhode Island Avenue, and Lincoln Road north of Rhode Island Avenue.

The F1 (Avondale to Federal Triangle) rush hour express and the F4 (Avondale to Archives) base day route is planned to be rerouted along Franklin Street and 4th Street, N.E. to pick up the service abandoned by the rerouting of the Rhode Island-Ager Road Line. The two buses would use Franklin between 7th and 4th Streets, N.E. and 4th Street between Franklin and Edgewood Streets, N.E., where they would resume their regular routes.



TO SHOW YOU THE WAY TO RIDE—The Omnibus, a specially-equipped Metrobus full of maps, timetables and other information, has been visiting shopping centers, office buildings and other commercial centers providing "How To Ride" Information for new passengers. Staffed by Consumer Representatives from the WMATA Office of Marketing who will make up personalized route maps on the spot, the red, white and blue bus may be coming to your neighborhood soon!

## news briefs

## **METRO CONSTRUCTION**

For the first time in years, WMATA is in a "buyers market" for the award of new Metro construction contracts, but the continuing delay in funding may preclude the authority from taking full advantage of this temporary hiatus in inflation.

According to Acting Director of Program Control Donald O'Hearn, wholesale prices of basic construction materials Metro contractors buy are in a decline. The transit authority is prepared to advertise \$500 million worth of contracts by the end of this year, but cannot do so without the commitment of additional federal funds. The District of Columbia and the administration are reviewing a proposal to di-

vert \$500 million in highway funds to Metro construction, but it is uncertain whether more than \$200 million can be diverted at this time. WMATA needs to commit \$600 million per year for the next three years to meet the existing Metro construction schedule. Congress also has received a proposal for further Metro funding.

■ The Metro board April 24 awarded a \$44.3 million contract for production and installation of 1,200 pieces of automatic fare collection equipment to Cubic Western Data of San Diego, Calif. The first part of the Metro automatic fare collection system is being manufactured by Control Data Corp., Minneapolis.

### **METROBUS NEWS**

On June 22, Metrobus service on some routes in the District of Columbia, Montgomery County, Md. and Northern Virginia were adjusted to eliminate some under-utilized service and

provide more realistic running times between scheduled time points.

Operating economies achieved by rearranging operators' work assignments in accordance with a recent union contract revision will result in the operator quotas being reduced by 40. This will be accomplished by attrition.

The service and operator reductions will save \$615,000 annually, according to Metro Schedule Director Michael Bresnahan. Combined with savings resulting from service adjustments made in March, Bresnahan estimates that Metrobus costs will be reduced by a little more than \$1 million this year.

Metrobus school tickets for District of Columbia students were replaced with school tokens June 13. The decision in favor of tokens was based on the high costs of processing and auditing school tickets. The costs are borne by the transit authority, District of Columbia and Washington Metropolitan Area Transit Commission.

(continued from page 5)

"we" in describing plans for its operation. "They should have had transportation like this years ago," he said. "We're trying to get this program off the ground by September."

Saunders would much rather talk about the sophistication of the new rail cars than about himself. To those who board his test train for the first time, he eagerly points out the master control handle, the digital speedometer and train identification number, and he describes the function of each of the myriad buttons and circuit switches.

The master control features five power settings and five brake settings. which Saunders readily demonstrates during the innumerable test runs.

Asked to compare the train with the streetcars he used to run, he said, "This is altogether a different baby."

## **FAST SWITCH**

As a point of contrast, he recalled that the motorman on a streetcar was required to stop the car at each switching point, visually examine the position of the switch, and then proceed. On the Metro train, he said, it's hard to get used to crossing switch points, head-on, at 75 mph.

Saunders and his five colleagues learned the fundamentals of operating rapid transit trains during an intensive three-week course on PATCO's Lindenwold line which serves Philadelphia. "We took the same course as their own people," said Saunders. "They ran a real tight ship up there and gave you good discipline. We're going to instill the same kind of discipline in the operators we train.

"I've stayed up many a night reading that (Rohr) manual trying to stay on top of things," said Saunders. He added that there are many systems and gadgets packed into a single rail car.

"Pop" gained his nickname about seven years ago from his fellow operators at the Bladensburg bus garage, most of whom had only a fraction of his seniority. Saunders and his wife of 33 years. Odessa, live in Northeast Washington with two of their five children. The other three children, explained Saunders, are adults and on their own and have provided "Pop" with six grandchildren.

Saunders will be eligible for retirement next year, but don't count on his taking advantage of it. "With this program," he said, "I might just stay until they kick me out."



Metro Countdown	June 10, 1975
Miles Under Construction	43
Stations Under Construction	40
Stations Completed	1
Construction Contracts Awarded	
Miles Under Final Design	27.4
Stations Under Final Design	24
Design Contracts Awarded	\$90 million

### metro memo

### Published by WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

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## Prepared by:

Office of Community Services Cody Pfanstiehl, Director Marilyn McGinty, Editor Paul Willis, Writer 800 Fifth St., N.W. Washington, D. C. 20001 Phone: 637-1051



## WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

600 fifth st. n.w. washington d.c. 20001

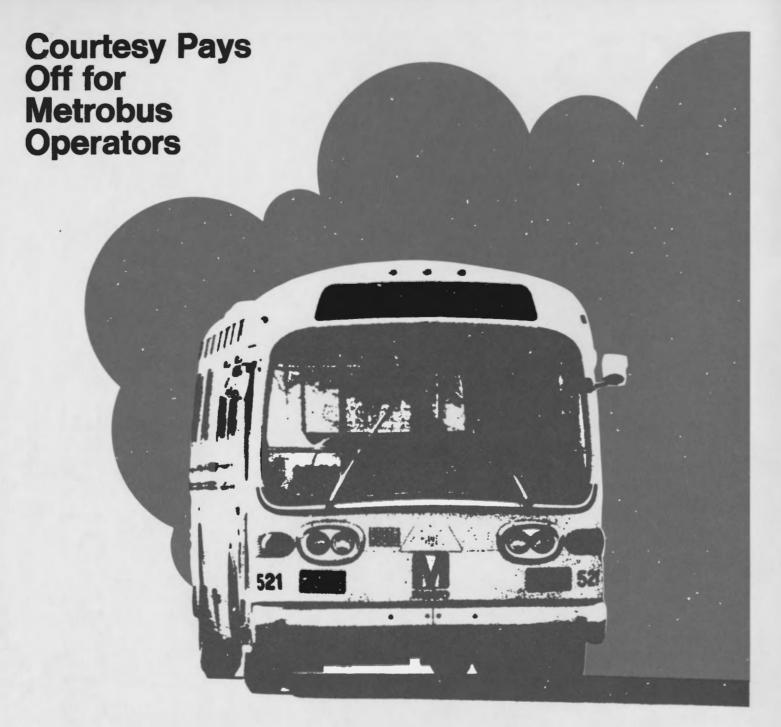
**metro** Address correction requested

Washington Metropolitan Area Transit Authority ISSUE NO. 59 April, 1975

DUSTOR

etro memo

Congratulations Deanwood



Metrobus passengers have responded enthusiastically to a transit authority program aimed at rewarding bus operators for extra courtesy.

Charles Walker, transit authority courtesy coordinator, received more than 900 cards and letters during January and February commending 200 operators for courteous conduct. More than 4,000 cards and letters were received in March.

Each month, there is a courtesy award winner from each of the eight Metrobus operating divisions. The Operator of the Month from each of the divisions is the person receiving the highest number of commendations 2 (minimum three). The winner receives

a \$50 savings bond and his, or her, picture is displayed with the other winners on a car card mounted on all the buses. Postcards are available on the buses for passengers who wish to comment on the operators' performance.

Winners in March (with their major route destinations) were: Gary Bartley (1-M Wilson Boulevard), Bobby Carter (D-1 Glover Park/Trinidad), E. A. Campbell (16-A Columbia Pike), P. J. Brown (Z-2 Silver Spring), Earl Blakley (T-14 Belair/Bowie), R. H. Cox (12-H Alexandria/Washington), Roy Knight (W-4 Portland Street), and Ralph Mundell (O-9 Montgomery Suburban).

In February, the winners were as follows: Reed Lovett (3-T Tysons Cor-

ner), Robert A. Jackson (K-9 Tamarack), Pete Shirocky (29-H North Springfield), Paul N. Spears (T-16 Belair), Walker H. Dye (11-A Fort Belvoir), Jack S. Crutchfield (A-2 Congress Heights), and Marshall Utterback (N-8 Cabin John).

For January, the winners were: David Price (2-T Merrifield), Sylvia Hopkins (R-2 Kennedy Center), Charles Wolfrey (6-J Alexandria), Richard Tinsley (T-4 Rockville), R. P. (Bob) Cooke (H-14 Heather Hills), William Louis Sr. (11-A Fort Belvoir), and Curtis Larks (C-1 Langley). One division was not included in the January awards because none of the drivers received the minimum of three commendations needed to qualify.





1. The Deanwood Citizens Association, Inc. held a community groundbreaking ceremony for the Deanwood station on April 12. D.C. Mayor Walter Washington was among the keynote speakers. The community also honored the oldest active member of the Deanwood Citizens Association, and the youngest person from Eastland Gardens.

2. And everybody turned out. The Woodson Senior High School Band marched through the neighborhood, gathering up all the youngsters. The Deanwood station is just southwest of the intersection of Minnesota Avenue and Quarles Street, N.E. Contractor is Volpe-Head. By 1990, some 12,000 passengers will use the station each day.

## **First Ride** Is Hint of Things To Come

- 1. Metro board members and special guests took the first train ride April 2 from Rhode Island Avenue station to the Union Station-Visitor Center stop. Boarding at Rhode Island Avenue are (from left) Fairfax County Supervisor Warren Cikins; Virginia Del. Ira Lechner (Arlington-Alexandria); Virginia Del. Dorothy McDiarmid (Fairfax): Department of Transportation Deputy Under Secretary Ted Lutz; D. C. Mayor Walter E. Washington; and Urban Mass Transportation Administrator Frank C. Herringer.
- 2. This escalator at Rhode Island Avenue station leads to the platform. An elevator for handicapped passengers is at right.
- 3. Passengers entering Rhode Island Avenue station for the first time may need fare assistance from the kiosk attendant. Waisthigh faregates will flank both sides of the kiosk next year. Once the farecard is validated by the gate, passengers may use the escalators (center) to reach the station platform and board trains.
- 4. Trains leaving Rhode Island Avenue station (top center) pass the huge Brentwood major repair facility which also houses the train control tower.
- 5. Del. James M. Thomson (left), majority leader of the Virginia House of Delegates, and Del. Frank E. Mann of Alexandria pause with WMATA General Manager Jackson Graham.
- 6. The REAL Metro Center resembles the transept of a cathedral.
- 7. Destination signs inside the train keep passengers informed of the stations along the route. Stations with two dots are transfer points.
- 8. Passengers seated near the front of the train can see far ahead into the tunnels. This is the section between Metro Center and Farragut North stations.

Later this year, WMATA is scheduled to open the first 4.6 miles of the Metro system. This initial segment, known informally as the pre-dedication phase, will provide service between Rhode Island Avenue and Farragut North stations, a distance that includes six stations, one aerial and five underground. Official ribbon-cutting ceremonies will occur in 1976 when the 18 mile (Stadium-Armory-National Airport) route is scheduled to operate.

Trains are scheduled to run from 7 a.m. to 7 p.m. on weekdays, with five 4 minute headways (time between trains)









during peak hours and ten-minute headways during off-peak hours. Weekend service will be set for 7 a.m. to 7 p.m. with ten-minute headways the entire day. These service hours will increase with the addition of new stations and routes to the system.

Let's take a trip on the pre-dedication phase with brief stops at each station.

## **RHODE ISLAND AVENUE**

Passengers arriving at the Rhode Island Avenue station will see an aerial station with two levels. Upon entering the lower level, passengers will notice a glass-enclosed klosk located in the center of the station. The kiosk will be occupied by an attendant who will assist persons with questions regarding fares. Once the automatic fare collection equipment is installed next year. waist-high fare gates will flank the kiosk. They will be closed until a farecard is inserted; then they will electronically determine validity of the farecard and mark the time and station of entry and return the card.

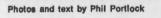
Three escalators located near the center of the station will carry passengers to the mezzanine and station



platform. From this point, the passenger can see that half (300 feet) of the station's center platform is covered by a concrete canopy, which serves as a shield from the sun and rain. Windscreens and benches will provide for passenger comfort. A glass-enclosed elevator, located near the north escalator, will be for use of handicapped riders. Bronze-colored pylons will line the center of the multi-hued platform surface, to assist those needing route information. The platform edges in all stations will be lined with signal lights imbedded in white granite to warn passengers of oncoming trains.

Just prior to boarding the train, riders can look north and see the Shrine of the Immaculate Conception, the U.S. Capitol to the south and the station's large parking facility (more than 300 cars) to the east. Six bus bays and bike racks will help facilitate the transfer from those modes of arrival.







Three sets of doors will slide open along the platform side of each of the 75-foot cars. A Metro train will be composed of no fewer than two cars (a married pair), and no more than eight. Each of the 10-foot wide cars has 81 seats, with standing room for 94 more passengers.

## **UNION STATION-VISITOR CENTER**

Back aboard the train, the doors will close and in less than three minutes the train will enter the Union Station-Visitor Center stop. The Metro facility at Union Station is the only station of the proposed 86 that Congress specified as to location. The mandate was for "early development" of a subway from Union Station capable of rapid dispersal of passengers from the railroad to principal employment centers in Washington and its immediate environs. Passengers using this station will be walking distance or a short bus

trip to the Senate and House Office Buildings, U.S. Capitol, Library of Congress and other important government office buildings. This station will receive intensive use during the nation's Bicentennial because of its proximity to the National Visitor Center, currently under construction in the Union Station complex.

## JUDICIARY SQUARE

The next station, Judiciary Square, is two minutes away. The remainder of the pre-dedication phase is underground. Indirect fluorescent lighting will provide illumination for the coffered concrete station arch. A threefoot separation between the walls and the station platform will hinder graffiti artists from altering the simplicity of the station.

A pair of escalators located at each end of the station will provide service from each platform to the mezzanine.

Since there will be no columns to obstruct the view, passengers standing on the mezzanine can get a spectacular view of the entire station. Two additional sets of escalators, located behind the north and south mezzanines, can carry passengers to street level and easy access to the Municipal Center. Judiciary Square, the federal courthouses, Federal City College and Metro headquarters.

## **GALLERY PLACE**

The next stop is Gallery Place station, a minute's ride from Judiciary Square. The station is under G Street between Seventh and Ninth Streets and under Seventh Street between F and H Streets. It will be a major transfer point between the red Metro line under G Street and the green and yellow lines under Seventh Street. When the Seventh Street line is finished, passengers will be able to take a short escalator ride down to the lower platform to board trains bound for Greenbelt Road in Prince George's County, Md., the waterfront, Navy Yard, Anacostia and points southward into Prince (continued on page 8)

## Tunneling Film Now Available

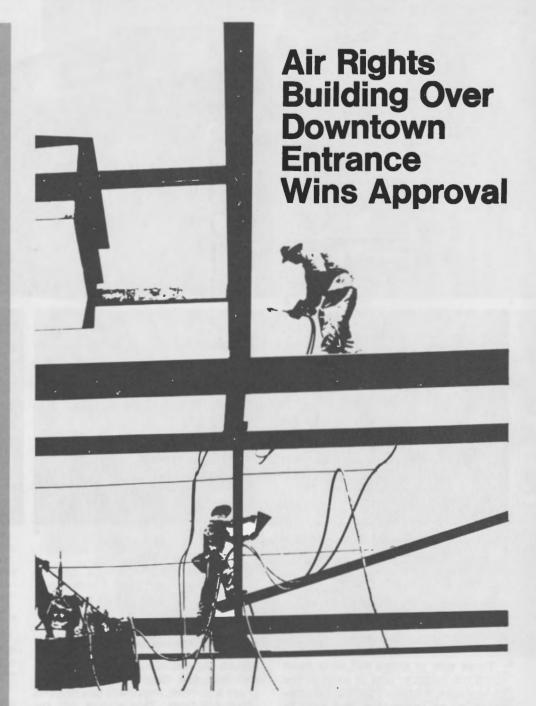
A ten-minute color, sound motion picture film describing construction of twin Metro tunnels under Lafayette Park in front of the White House is now available on loan from the transit authority's Office of Community Services.

Entitled "A-2: Earth Tunnels," the film touches upon early mining techniques and relates them to a contemporary steel 21-foot earth tunneling shield, weighing 85 tons, which was guided by a laser beam on its mission of tunneling a curve under Lafayette Park to link the G Street and Connecticut Avenue Metro sections.

The shield was pushed into the soft earth by 21 jacks exerting 3600 tons of pressure, push-button controlled by a single operator. A claw and bucket on an articulated boom scraped the earth away from the work face and dumped it on a conveyor to a train of muck cars. The car hoppers were lifted out by surface crane and dumped into trucks for hauling away.

A large concrete batch plant built underground supplied concrete for the job. A curtain of water was used to control dust during mixing. The concrete mix was transferred to agitator cars pulled by a diesel engine to the site of invert placement. A movable steel form was used in creating the 15-inch concrete tunnel lining inside the initial shell made by steel ring sets and timber lag-

Requests for the film, including date needed, should be addressed to the Office of Community Services, Washington Metropolitan Area Transit Authority, 600 Fifth Street, N.W., Washington, D.C. 20001.



The transit authority staff is finalizing terms for the development of a 12-story retail-office building over the escalator entrance to the Farragut North Metro station at the corner of Connecticut and L. N.W.

The building, which has been proposed by Miller-Connecticut Associates of Washington, would probably feature a boutique, a restaurant, and similar commercial ventures on the first two above-ground levels. Most of the remainder of the building, which would have a total rental space of 178,-800 square feet, would consist of office space.

The Miller-Connecticut proposal was the best of six submitted to the transit authority's Office of Real Estate. Real Estate Director Nicholas Roll said the proposal offered the highest and best

use of authority-owned land and air rights at the entrance site, which is next to the Mayflower Hotel. He pointed out that it offers the best return on the authority's investment in the property, that it will attract ridership to the Metro system, that it will generate substantial tax revenues for the District of Columbia, that the restaurant and retail shops will help to increase downtown activity after dark, and that it has an excellent architectural design with particular reference to useable open space.

The authority acquired the 17,566 square foot corner lot five years ago for construction of one of the three escalator entrances to the Farragut North station. The building will make use of the authority's excess land and air rights on that corner.

## **news**riefs

 Transit authority directors March 13 approved sale of \$177 million in federally guaranteed Series E Revenue bonds to the Federal Financing Bank at 8.35 per cent interest.

Bond proceeds, along with \$48.5 million in matching funds advanced by the local governments, will provide \$225 million to continue the Metro rapid rail construction program. The transit authority had already sold \$820 million in federally-guaranteed bonds.

• The Metro board March 13 endorsed a year-long special transit program to serve the projected 35 million local and out-of-state Bicentennial visitors. The plan calls for:

1) establishment of special fringe parking at R. F. Kennedy Stadium (6,000 spaces) and Fort Myer/North Pentagon (6,000 spaces);

2) provision of frequent shuttle service with special round-trip ticketing between the parking lots and the Mall;

between the parking lots and the Mall;
3) provision of shuttle service (at

regular fares) adjacent to the Mall;

4) continuation of rush-hour type service on 17 radial routes throughout the day and early evening; and

5) augmentation of extensive public relations and advertising efforts to encourage tourists to leave their cars at home or at their hotels and use public transit.

Congressional hearings on the plan, which is proposed to be financed by a \$10 million Department of Transportation grant, are scheduled for early May.

• The board March 20 awarded a \$16.1 million contract for construction of the New Carrollton station to the Interstate Bridge Co. of Maryland, Inc. The station will be next to the Penn Central Railroad tracks near the Capital Beltway (I-495) in Prince George's County. This is the first Metro station to be built in the county.

A center platform surface facility,

the station will serve some 18,800 passengers a day in 1990. It also will serve as the transfer point for Metroliner passengers using the nearby Amtrak station.

- The Metro board March 6 approved a staff recommendation to extend the Rockville line from Rockville to Shady Grove (Md.). The additional costs, according to the board action, will be paid by the state of Maryland. Under the plan, the terminal station would be located in the vicinity of Shady Grove Road. The storage and inspection yard, planned for the Rockville vicinity in the Adopted Regional System (ARS) in 1968, would be moved to the Shady Grove location.
- The transit authority annual report for 1974 is now available. To obtain a copy, write the Washington Metropolitan Area Transit Authority Office of Community Services, 600 Fifth St. N.W., Washington, D.C. 20001.

(continued from page 5)

George's County, or National Airport, Springfield and Franconia in Virginia.

Gallery Place station will serve an area that extends from 10th Street on the west, to Sixth Street on the east, and from E Street on the south and K Street on the north, with points of interest including the Smithsonian's National Portrait Gallery and National Collection of Fine Arts, the Martin Luther King Memorial Library and part of the downtown commercial district including Chinatown.

## **METRO CENTER**

A minute's ride later, the double side platform of Metro Center station under 12th and G Streets, N.W., appears. Metro Center is the second transfer station on the route, and has two track levels, each with a 600-footlong platform. The G Street platform and 12th Street concourse are both located on the station's upper level and serve the red route. From the center of the concourse, passengers may use one of the two sets of three parallel escalators to reach the lower platforms to board trains for Federal Triangle, Smithsonian and L'Enfant Plaza stations.

At Metro Center, the geographical center of the 98 mile Metro system, the juncture where the two arched ceilings cross looks like the transept of a cathedral. Passengers will find the U.S. Treasury Department, White House, long-distance bus terminals and the downtown commercial district an easy walk away. A local department store, Woodward and Lothrop, has a direct connection to one mezzanine.

### **FARRAGUT NORTH**

At the western end of the pre-dedication phase is Farragut North station, terminus for the route. The station is under Connecticut Avenue between K and L Streets, N.W. The station serves an area extending from I Street on the south to Rhode Island Avenue and M Street on the north and from 15th Street on the east to 20th Street on the west, with points of interest including the Statler Hilton Hotel, YWCA and the Connecticut Avenue business and commercial area.

Before leaving the station, future passengers will be able to pay their fares automatically by inserting their farecards into the exit gates.  $\mathbf{m}$ 

Metro Countdown	April 1, 1975
Miles Under Construction	41.5
Stations Under Construction	41
Construction Contracts Awarded	\$1.662 billion
Miles Under Final Design	29
Stations Under Final Design	25
Design Contracts Awarded	\$89 million

### metro memo

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## Prepared by:

Office of Community Services ffice of Community Service Cody Pfanstiehl, Director Marilyn McGinty, Editor Paul Willis, Writer 600 Fifth St., N.W. Washington, D. C. 20001 Phone: 637-1051



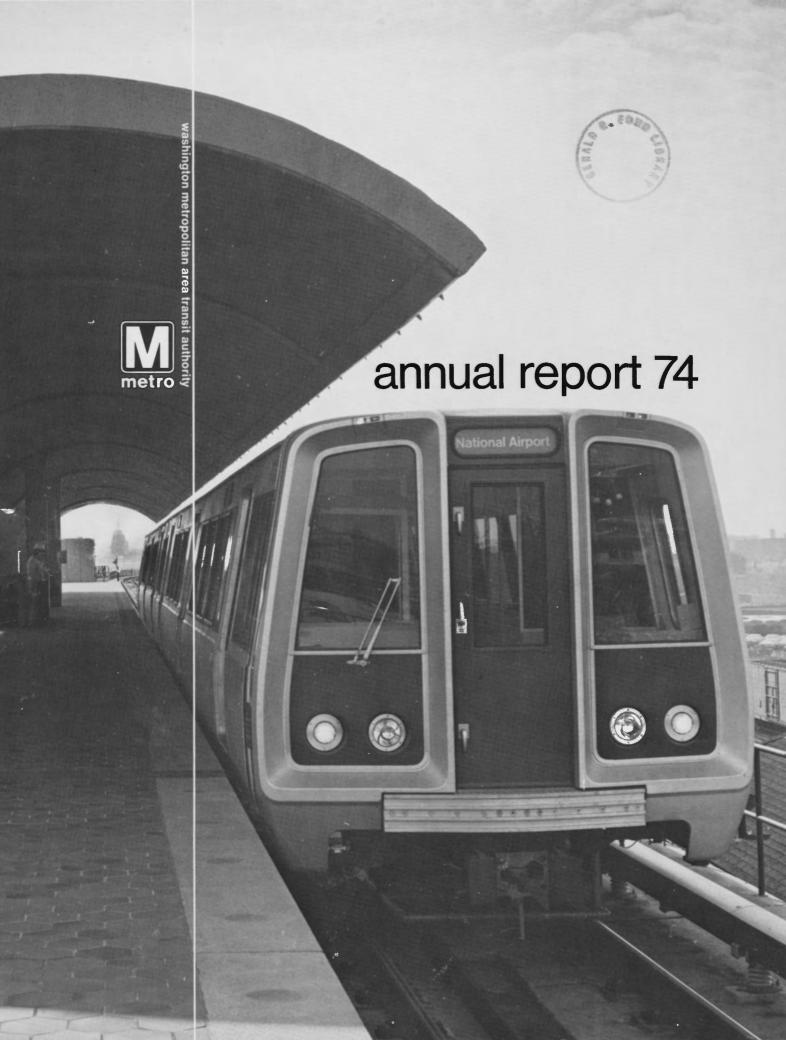
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600 Fifth Street, N.W., Washington, D. C. 20001

Telephone (202) 637-1234

December 31, 1974

Sirs:

In accordance with provisions of the Washington Metropolitan Area Transit Authority Compact, Public Law 89-774 approved November 6, 1966 (80 Stat. 1324), we have the honor of transmitting herewith the eighth annual report of the Washington Metropolitan Area Transit Authority covering calendar year 1974.

Pursuant to Section 70 (a), Article XVI, of the Compact, the audit section of this report is for the fiscal year ended June 30, 1974.

This has been a good year for Metro and Metrobus. Rail construction has spread into Maryland and Virginia suburbs and finish work is now contracted for all downtown Washington stations. The first transit cars have been received.

The Metrobus operation was enhanced by 620 new buses and an expansion of routes. Criticisms and complaints are down and ridership, compliments and the number and percentage of information calls being handled every day are up.

It is a pleasure to submit this favorable report of our progress.

Cleatus E. Barnett

To: President of the United States
President of the U.S. Senate
Speaker of the U.S. House of Representatives
Governor of the Commonwealth of Virginia
Governor of the State of Maryland
Mayor of the District of Columbia
Chairman of the City Council
of the District of Columbia



Finish work begins on Dupont Circle station.

Cover: First Metro cars operate automatically

into Rhode Island Avenue station.

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John A. Nevius Director



Henry S. Robinson



Sterling Tucker

The Washington Metropolitan Area Transit Authority was created in 1966, with the consent of Congress, by an interstate compact among the District of Columbia, Maryland and Virginia. The purpose of the Authority is to plan, construct, finance and provide for the operation of a rapid rail and bus transit system for the Washington Metropolitan Area Transit Zone. The Authority is governed by a Board of six Directors consisting of two members for each signatory and their alternates. For the District of Columbia, the Directors are appointed by the City Council; for Maryland, by the Washington Suburban Transit Commission; and for Virginia, by the Northern Virginia Transportation Commission.

Lane Construction Company

Morrison-Knudsen Company

American Structures and

**Norair Engineering Corporation** 

P&Z Co., Inc. and Mergentime

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## Maryland Groundbreaking

Zap!

**Metro Rolling Stock** 

22p

620 New Buses

Breaking ground in Maryland, expanding construction in Virginia, receiving the first Metro cars and AM General buses, beginning Metrobus garage renovations, expanding Metrobus service and identifying financial problems and possible solutions in rail and bus operations highlighted the year of 1974.

On the rail front, the year ended with 39 miles of route and 39 stations under construction, including 26 stations for which finish contracts have been awarded. About 4.6 miles and six stations of Metro service is scheduled to begin in early fall of 1975 in downtown Washington with a total of 18 miles and 25 stations to be in service during the Bicentennial year. At that time Rhode Island Avenue station will be linked with Farragut North, and Stadium-Armory with National Airport (see map, p. 16).

The year closed with 39 percent of the 98-mile system and 46 percent of its 86 stations under construction. Another 29 percent of routes and 34 percent of stations were under final design. Over \$1.5 billion had been obligated for Metro engineering and construction. Work was being placed at the rate of about \$1.2 million a day for a year-end total of \$790.6 million in work in place.

The first "married pair" of Metro cars arrived in November. Shipped on piggyback cars, the two Metro cars were eased down a tracked ramp to waiting tracks in the Metro Brentwood yards. Tracks and third rail already had been placed over most of the route between Rhode Island Avenue and Farragut North stations. At year end, the third rail was being sectionally energized in tests. Operational testing of the first cars had begun.

The first cars were inspected by the board of directors and found attractive, well lighted, comfortable — offering riders a pleasant environment.

## **ELEVATOR INSTALLATION BEGINS**

A ruling on a court suit brought by the Urban League and others requires elevators for the handicapped to be installed in stations before they can be commercially operated. Legislation was later passed enabling the federal government to fund the \$65 million of elevators on an 80/20 percent basis with local jurisdictions. Provision of elevator facilities is in progress on all stations under construction.



Workman shapes bronze handrail for Metro Center station.



## **EQUIPMENT, FURNISHINGS, UNIFORMS**

Virtually all equipment for first train operation was installed by year end and being tested. The command center automatic train controls, including dual computers, control console and display, were delivered to the Authority Operations Control Center Building at 600 Fifth Street, N.W. Train operations will be monitored and regulated to schedule by the computer from this building. Wayside and carborne train control equipment will provide local fail-safe controls, subject to override by the human attendant on each train. Command center personnel will direct trains manually in response to abnormal situations but cannot override any of the wayside safety protection.

Prototype models of change-making, fare-vending, faregate and passenger counting equipment had been fabricated and were undergoing tests.

Procurement of station furniture was begun for such items as ash and trash receptacles, telephone enclosures, and map cases. In addition, orders were placed for pylons bearing graphics to identify stations and routes and to guide Metro passengers.

## THE SPIRAL OF DOLLARS

The original cost estimate of \$2.98 billion for the 98-mile system was pushed up to a new estimate of \$4.45 billion. The new estimate reflects inflation, materials shortages, a major court decision, various delays, storms, strikes, and other factors. This increase of \$1.4 billion is proposed to be shared on an 80/20 percent federal/local basis recalculated as of July 1, 1973. This would increase the federal share by \$1.257 billion, and the local share by \$135.5 million. Under the current formula for allocating costs, the local shares would be:



While finishing touches are added elsewhere, construction starts at other sites.

		Jurisdio	tional /	Allo	cations (Mill	ions)
		1971	Increas	е		1974
District of Columbia		\$266.7*	51.1			\$317.8*
Maryland						
Montgomery County \$137	.9 .		26.1		\$164.0	
Prince George's County 111	.0 .		20.5		131.5	
Virginia		204.9			*************	242.7
Alexandria 39	.9 .		7.2			
		***************************************				
Fairfax City 3	.2 .	***************************************			3.8	
					100.6	
Falls Church1					1.2	0000
Total	*****	720.5*	135.5			856.0*

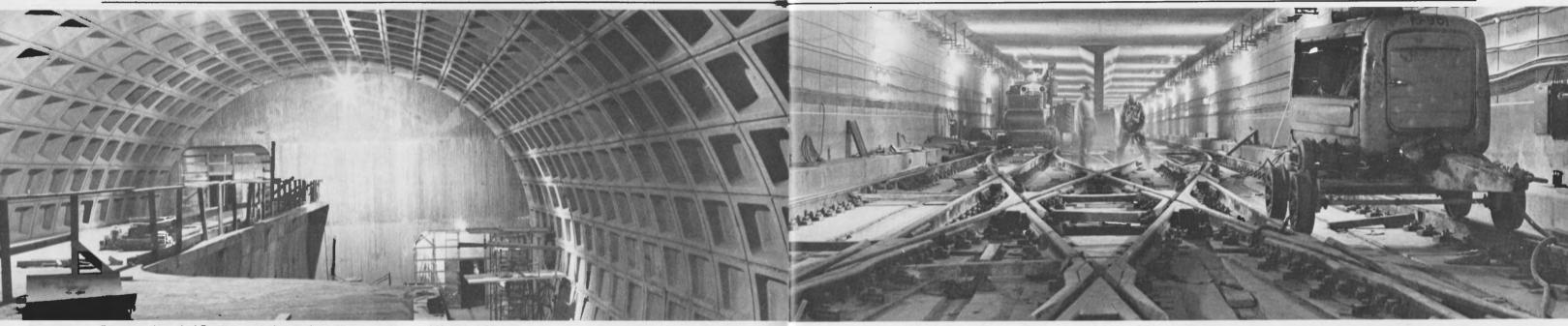
<sup>\*</sup> Does not include \$3 million for mid-city alternate alignment requested by D.C.



One of the first in a series of shelters to be erected at Metrobus stops.

Gull-wing canopy provides shelter at Rhode Island Avenue station platform.





From south end of Pentagon station, trains will proceed toward National Airport.

## **BUS-RAIL FARES STUDIED**

A new net income analysis examined three fare systems for bus-rail operations. Included were future passenger levels, associated revenues and operating expenses. With moderately high fares, the combined bus-rail system would clear operating expenses by \$21.7 million in 1990 or, with low fares, incur a deficit approaching \$73.7 million. Subsequently, a bus-rail fare system was proposed and seven public hearings were scheduled for March 1975.

## **UNDERGIRDING MINORITY PARTICIPATION**

During the year the Authority reaffirmed its desire to strengthen participation of minority contractors. It eased bonding requirements and broke out of future construction contracts those parts that could be handled by minority primes. The Authority also instituted a 10/20 policy that assures that 10 percent of all structural and 20 percent of all finish contracts will be performed by minority contractors. The Authority matched its 1972 contribution of \$100,000 to the Minority Contractors Resource Center with a like contribution, and helped constitute the Minority Development Advisory Council to act as consultant to the Resource Center and Authority.

## OTHER METRO MILESTONES

- Broke ground in Maryland for Silver Spring station, and for yard facilities at New Carrollton.
- Reached agreement with B&O and Penn Central for use of railroad rights of way for New Carrollton route.
- Completed architectural general plans for seven stations.
- Completed Branch Avenue alternatives study.
- Designed rail and neighborhood maps for display in stations.
- Designed uniforms for train and station operating personnel.
- Began recruiting operating personnel.
- Proposed and won approval in Virginia and Maryland of a transit police force.
- Developed training plans for transit police force.
- Received favorable fire risk analysis of materials used in trains.
- Embarked on short- and long-term programs with National Bureau of Standards and National Academy of Sciences to study fire safety characteristics of materials use in public transportation systems.
- Sold \$225 million of Series D bonds.
- Acquired 248 properties for \$14.5 million (including over \$2 million for Metrobus parking).
- Paid relocation claims totaling \$1 million to 167 families, individuals and businesses.
- Increased total minority program awards to \$32.2 million.
- Disposed of excess property around Rosslyn station and advertised for development of long-term property rights at the northeast entrance to Farragut North station.
- Described public transportation by rail and bus to 16,000 school students.
- Presented the continuing Metro slide show to the "50,000th person" in 1974.

First rails, including complex crossovers, were laid in 1974.

## METROBUS IMPROVES SERVICE

For bus riders, the Authority had the good news that 620 buses had arrived, enabling 369 old clunkers to be retired. One hundred new buses were used to beef up existing schedules by 250 daily trips, and 151 buses were dispatched over 22 new routes beginning September 1 to expand system service.

The 251-bus net increase expanded the fleet to 2035 active buses with 130 in reserve. The year ended with a bus operating force of 3240 operators plus 56 in training. The bus fleet meets 15,674 scheduled trips every weekday of which an average of 15,662 are dispatched — 99.92 percent perfect. Some of these trips are not completed because of breakdowns, accidents or other reasons, but the average number of scheduled trips completed is 99.03 percent.

By year end the number of telephone information clerks had jumped from 25 to 48 and an expansion to 59 was anticipated by the end of January 1975. The number of calls for route and schedule information, however, also increased, sometimes exceeding 30,000 a week. However new ways of retrieving route and schedule information were tried and statistics show substantial improvement in the number and percentage of calls handled.

During its first year the consumer assistance branch recorded more than 6000 comments on Metrobus, received 2760 letters and 500 phone calls per month, and filled more than 60,000 individual and 29,000 bulk order requests for timetables.

Foundation items laid in 1973 for improving Metrobus service are now paying off in reduced criticism and complaints and increasing compliments.

Part of the Metrobus improvement program is directed inwardly. At acquisition, the Authority found in run-down condition not only buses but also terminal facilities for cleaning and servicing buses. Efforts initiated in 1974 have improved operators rooms in these facilities through painting, lighting, and repairs.

Some terminal properties had serious deficiencies such as leaking roofs, unpaved parking lots, and deteriorating structures. With a grant from the Urban Mass Transportation Administration the Authority is correcting some of the serious deficiencies under a \$9 million program. In addition, the Authority hopes to construct two new garages to relieve storage congestion and improve efficiency by garaging buses closer to the ends of their routes.

## MASSIVE TECHNICAL STUDY COMPLETED

The final draft and a series of memorandum reports of the massive Transit Technical Studies program were received. They present a strategy for development of needed service, maintenance facilities, and guidelines for policy relating to fringe and station area parking, transit fares, fare subsidy programs, accounting procedures and system implementation. Included was an origin-destination survey, the first since 1966 for profiling the types of bus riders. The purpose of the program is to provide information needed to complete the amalgamation of four private bus companies into a unified system.



#### THE CAUSES OF BUS DEFICITS

Jurisdictional officials understandably are concerned over mounting Metrobus deficits. Prior to acquisition in 1973 the four companies had been dodging deficits by neglecting maintenance of buses and garages, not replacing spare parts supplies, allowing the ranks of drivers, mechanics and other personnel to diminish through attrition, and by seeking fare increases. With every fare increase came a decline in ridership, leaving the companies in about the same relative financial condition. Not only did the Authority have to recover this lost ground but also the board of directors elected to maintain existing fares to keep them within means of people who need public transportation most. This put Metrobus on a fixed income that shrank rapidly with inflation.

Just prior to its acquisition by the Authority in January of 1973, D.C. Transit negotiated with the union an expensive cost-of-living provision to replace a less costly version which it had obtained by arbitration in 1969. Further contributing to the deficit has been the tremendous cost of correcting inequities in wages and fringe benefits existing among employees of two bus companies with those of the other two companies. In addition, the oil shortage pushed the cost of diesel fuel from 11.85 cents per gallon at acquisition to a 1974 high of 39.9 cents.

The causes of deficits thus are the inrceasing costs of providing transportation to a public unwilling or unable to pay a fare that properly meets operating expenses. The forecast deficit for fiscal 1975 is \$38.2 million, and for fiscal 1976 is \$53.5 million. At year end some jurisdictions were beginning to call for a fare increase to mitigate the deficit, and an improved formula for allocating the deficit among participating jurisdictions was finalized.

Various approaches to reducing the deficit were being developed, including finding ways to boost midday ridership and identify and curtail service over poorly used routes.

The board held public hearings on a proposal to equalize Maryland and Virginia fares, but withheld action pending further hearings in March 1975 on a recommended fare structure for bus and rail operations.

#### MAPS, TIMETABLES, SHELTERS, BUS LANES

Metrobus achievements ranged over a wide field in 1974. The Authority:

- Established 1100 new bus stops, and received at year end the first shipment of 7500 new stop markers for erection starting in 1975.
- Inaugurated bus-only lanes along Georgia Avenue between Colesville Road and Alaska Avenue and along South Capitol Street between Portland and South Capitol Street parking lot (for northbound morning buses), and along Arlington Boulevard between Seven Corners and Fort Myer.
- Installed 54 passenger shelters in a program for erecting 200 a year for five years.
- Expanded bus token and ticket outlets to a total of 245.
- Published a 72-page atlas of Metrobus routes.
- Published a single-sheet map of bus routes in English and Spanish.
- Developed maps showing bus routings from 50 locations throughout the area to Gonzaga High School.
- Revised headways to allow realistic running times.
- Arranged for senior citizen passes to be issued at all public libraries.
- · Assumed operation of Downtown Midibus service.
- Participated in a Dial-a-Ride demonstration program in Southeast Washington with Council of Governments.
- · Equipped Metrobus operators with new uniforms.
- · Minted new tokens.
- Raised to 350 the number of old buses repainted in Authority colors.
- Developed bus transportation plans for the Bicentennial year.
- Established a Citizens Advisory Committee for Metrobus matters.
- Authorized a management firm to study bus operations procedures and policies to recommend improvements,

#### LOOKING INTO 1975 WITH THE NEW CHAIRMAN



troubled times. Runaway inflation and materials and energy shortages have combined with other factors to threaten our ability to complete all 98 miles of the adopted regional Metro system.

We begin the new year 1975 in

Metro is too great an asset not to be completed in the fullness of the original plan. We will never build it at less cost than we can today.

Finding ways to overcome our bus and rail financial difficulties is the prime object of this year. We will achieve that goal with the backing and confidence of the people of this region and the federal government. That confidence is justified. On both rail and bus fronts our advancements are substantial.

This annual report offers positive proof that Metro has been well conceived and properly managed by its board and staff, sensitive to the wishes of the public. We are proud of our accomplishments and believe you will share our enthusiasm when trains start rolling.



First Metro cars were unloaded from piggyback railroad cars in Brentwood yard.



Passages leading to station mezzanines will contain fare-vending and change-making machines. Farecards will be used for exit as well as entry.





Ra	lar	CA	St	neets
Da	a		OI	וכבנס

Dalarice Oricets			June 30, 1974			June 30, 1973 — Note 3			
ASSETS	Capital Construction Fund	Metrobus Capital Improvement Fund	Bond Interest Fund	Metrobus Operating Fund	Jurisdictional Fund; Metrobus Capital Improvements Grants	Capital Construction Fund	Metrobus Capital Improvement Fund	Bond Interest Fund	Metrobus Operating Fund
Cash	\$ 7,165,735	\$ 44,448	\$ 29,078	\$ 914,192	\$2,143,238	\$ 408,283	\$ 75,641	\$ 199,727	\$ 1,369,515
Investments, at cost and accrued interest — Note 6 Accounts receivable Allowance for doubtful accounts Inventory, at average cost	699,843,709 502,492,777	8,774,975 24,904,555	160,111,720 713,024	19,056,303 (163,941) 1,766,190	1,000,000 1,764,128	509,809,029 515,030,866	68,483,667	96,738,443	200,000 6,531,310 867,482
Sundry accounts receivable and other assets	3,555,595	91,660		329,244		2,848,792	41,654		233,988
transferred to Metrobus Operating Fund		79,312,947				•	55,661,359		
Property, plant, and equipment:  Land				20,251,394					20,044,727
Buildings and improvements Revenue equipment Other				13,529,135 35,735,863 3,078,462 72,594,854					13,488,310 21,117,170 2,409,317 57,059,524
Less allowances for depreciation				6,346,270 66,248,584		*			2,009,309 55,050,215
Construction in process  Organization, route develop-	931,886,537			422,406 66,670,990		544,981,509 544,981,509			55,050,868 55,050,868
ment, etc., from acquisition of bus companies	162,725,321	1,380,074		3,526,859 76,344		97,191,804	168,542		4,003,599
	\$2,307,669,674	\$114,508,659	\$160,853,822	\$92,176,181	\$4,907,366	\$1,670,270,283	\$124,430,863	\$96,938,170	\$68,256,762
LIABILITIES								75 (A)	100 100 Text
Accounts payable and accrued expenses	\$ 60,925,923	\$ 8,566,633		\$ 4,855,635		\$ 37,370,296	\$ 173,564		\$ 8,127,129
Accrued salaries, wages, vacation and other	1,641,591			6,190,329		1,829,215			5,504,574
Retainage on contracts in process	27,617,293 251,000	347,966		8,056		19,671,916 7,343,500	8,451		
Notes payable — Note 2 Bonds payable, less unamortized discount; 1974 — \$5,519,652;				6,302,000			18,516,667		
1973 — \$2,796,735 — Note 8	814,480,348		•			442,203,265			
Accrued interest payable Estimated liabilities for claims for injuries and damages —	26,694,375			113,286		16,297,500			519,475
Note 9 Deferred marketing fund				1,725,447 197,281			215,181		928,318
Deferred revenue  Due to other funds	931,610,530	77,060 8,991,659	\$160,853,822 160,853,822	961,008 1,870,783 22,223,825	\$1,380,074 1,380,074	524,715,692	18,913,863	\$96,938,170 96,938,170	624,300 422,176 16,125,972
FUND BALANCE	001,010,000	0,001,000	100,000,022	22,220,020	1,000,074	024,710,032	10,910,000	30,330,170	10,120,972
Equity of participating jurisdictions	1,328,842,102	105,517,000		89,331,298	2,972,666	1,114,262,670	105,517,000		53,993,833
Earnings on investments	47,217,042			(19,378,942)	554,626	31,291,921			(1,863,043)
	1,376,059,144 \$2,307,669,674	105,517,000 \$114,508,659	\$160,853,822	69,952,356 \$92,176,181	3,527,292	1,145,554,591	105,517,000	÷06 029 170	52,130,790
See notes to financial statements.	<del></del>	<u> </u>	¥130,000,022	402,170,101	\$4,907,366	\$1,670,270,283	\$124,430,863	\$96,938,170	\$68,256,762



Benches, air conditioning and indirect lighting contribute to passenger comfort underground.

Operating revenue:  Passenger revenue  Charger and contract  Northern Virginia Transit Commission subsidy  School subsidy  Other
Operating expenses:  Equipment maintenance and garage expenses  Transportation and station
Insurance and safety Employee benefits
Administrative and general
Operating loss before depreciation  Less depreciation and amortization:  On assets acquired with own funds  On assets acquired from contributions in aid of acquisition
On intangible assets acquired — Note 2
Interest income (expense), net
NET LOSS
DISPOSITION OF NET LOSS Net loss
Add credit arising from transfer to contributions in aid of acquisition:  Depreciation and amortization
Bus refurbishment
Materials and supplies usedInterest expense on award deficiency
LOSS TO RETAINED-EARNINGS DEFICIT

FUNDABLE BY LOCAL JURISDICTIONS —

See notes to financial statements.



Period from January 14, 1973 to June 30, 1973

\$22,112,959

2,603,684

798,063

1,719,476

100,630

27,334,812

5,903,925

16,520,190

214,970 1,366,740

4,048,367 1,727,671

29,781,863

(2,447,051)

2,008,833 380,420 2,389,729

(4,836,780) (623,790)

(\$ 5,460,570)

\$ 5,460,570

2,389,253

1,024,208

184,066

3,597,527

476

\$47,833,221

4,671,825

2,550,772

3,500,989

58,808,683

14,980,676

42,984,208

1,411,927 2,937,644

10,574,811 4,147,607

77,036,873

(18,228,190)

12,924

4,423,297 797,440 5,233,661

(23,461,851) 71,438

(\$23,390,413)

\$23,390,413

5,220,737

251,478

402,299

5,874,514

(\$17,515,899)

251,876

First Maryland ground is turned for Silver Spring station.

## Statement of Changes in Fund Balances

	Year ended June 30		
	1974	1973	
		Note — 3	
CAPITAL CONSTRUCTION FUND			
Balance at beginning of year	\$1,145,554,591	\$ 851,450,120	
Contributions committed	210,371,000	261,482,000	
Systems modifications	1,001,247	6,251,918	
Earnings on investments, etc., net of			
interest income capitalized	19,132,306	<b>15,2</b> 88,331	
Consolidation of Planning and			
Administrative Fund	_	11,082,222	
BALANCE AT END OF YEAR	\$1,376,059,144	\$1,145,554,591	
METROBUS CAPITAL IMPROVEMENT FUND			
Balance at beginning of year	\$ 105,517,000	\$ -	
Contributions committed	_	105,517,000	
BALANCE AT END OF YEAR	\$ 105,517,000	\$ 105,517,000	
BOND INTEREST FUND			
Balance at beginning of year	\$ -	\$	
Earnings on investments	8,836,891	3,058,236	
Transfers to other funds	(8,836,891)	(3,058,236)	
BALANCE AT END OF YEAR	\$ -	<u>\$</u> _	
METROBUS OPERATING FUND			
Equity of participating jurisdictions:			
Balance at beginning of year as			
previously reported	\$ 55,399,799	s —	
Restatement for settlement of bus			
acquisition during the year - Note 3	(1,405,966)		
BALANCE AT BEGINNING OF			
YEAR AS RESTATED	53,993,833	_	
Contributions in aid of acquisition	23,696,080	55,728,317	
Contributions in aid of operating deficit	17,515,899	1,863,043	
Expense relating to assets acquired from			
contributions in aid of acquisition:			
Depreciation	(5,220,737)	(2,389,253)	
Bus refurbishment	(251,478)		
Materials and supplies	_	(1,024,208)	
Interest expense	(402,299)	(184,066)	
11101001 0/1p0/100 111111111111111111111	(5,874,514)	(3,597,527)	
	89,331,298	53,993,833	
Retained-earnings deficit:			
Balance at beginning of year	(1,863,043)	— —	
Net operating loss fundable by local			
jurisdictions	(17,515,899)	(1,863,043)	
	(19,378,942)	(1,863,043)	
BALANCE AT END OF YEAR	\$ 69,952,356	<b>\$ 52,</b> 130,790	
JURISDICTIONAL FUND: METROBUS		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
CAPITAL IMPROVEMENTS GRANTS			
Contributions in aid of acquisition	\$ 2,972,666	\$ <b>—</b>	
Earnings on investments	554,626	_	
BALANCE AT END OF YEAR	\$ 3,527,292	\$ —	

See notes to financial statements



Construction starts for bridge spanning Potomac near the Pentagon.

Statement of Changes in Financial Position
Capital Construction Fund

Capital Construction Fund	Year ended June 30			
CASH WAS PROVIDED FROM	1974	1973		
Collection of contributions in aid of construction Proceeds from issuance of bonds, net of	\$223,910,336	\$184,554,199		
amortization of discount	372,277,083	442,203,265		
income capitalized	15,925,121	15,738,128		
Property management income Increase in accounts payable, accrued expenses,	3,255,195	1,479,371		
accrued wages, and amounts withheld	23,368,003	25,703,000		
Increase in retainage on contracts in process	7,945,377	9,541,725		
Increase in interest payable on bonds	10,396,875	16,297,500		
Increase in prepaid contributions	_	2,078,500		
	657,077,990	697,595,688		
CASH WAS USED FOR				
Additional purchases of investments, net	190,034,680	320,059,140		
Increase in expended fundsTransfer of funds to the bond interest fund,	386,905,028	277,563,092		
net of interest payments	61,403,384	95,109,562		
Decrease in prepaid contributions	7,092,500	-		
Increase in interfund receivables	4,130,133	2,082,242		
Increase in other assets	706,803	1,997,694		
Other	48,010	449,797		
	650,320,538	697,261,527		
INCREASE IN CASH	6,757,452	334,161		
Cash at beginning of year	408,283	74,122		
CASH AT END OF YEAR	7,165,735	\$ 408,283		

See notes to financial statements.

See notes to financial statements.

Statement of Changes in Financial Position

Metrobus Operating Fund

Period from
January 14, 197

Metrobus Operating Fund	Year ended June 30, 1974	Period from January 14, 1973 to June 30, 1973 Note — 3	
CASH WAS PROVIDED FROM	£ (02 200 440)	¢ (E 460 570)	
Net loss  Items recognized in net loss not requiring or providing cash:	\$ (23,390,413)	\$ (5,460,570)	
Depreciation and amortization	5,233,661	2,389,729	
and damages	797,129	928,318	
Increase in salaries and wages payable	685,755	5,504,574	
Increase in deferred revenue(Decrease) increase in accounts payable	336,708	624,300	
and accrued expenses	(3,271,494)	8,127,129	
Increase in inventory	(898,708)	(867,482)	
(Decrease) increase in interest payable	(406,189)	519,475	
Additions to intangibles	(320,700)	(4,384,019)	
(Applied to) Provided from Operations	(21,234,251)	7,381,454	
Contributions in aid of acquisitions  Receipt of contributions in aid of operating	23,696,080	55,728,317	
deficit	8,075,999	- The second	
Proceeds from notes payable	32,953,702	1-	
Increase in amounts due other funds	1,448,607	442,176	
Sale of investments	200,000	_	
CASH WAS USED FOR	45,140,137	63,531,947	
Payment of notes payable	26,651,702	_	
Purchases of property, plant, and equipment	16,056,343	57,060,177	
Increase in accounts receivable	2,921,151	4,668,267	
Purchase of investments	-	200,000	
Other	(33,736)	233,988	
	45,595,460	62,162,432	
(Decrease) Increase in Cash Cash at beginning of year	(455,323) 1,369,515	1,369,515	
CASH AT END OF YEAR	\$ 914,192	\$ 1,369,515	



Rock tunnel under Connecticut Avenue awaits first rails.





Finish work winds up on Rhode Island Avenue station parking lot.



Trains will be run by computer from new Operations Control Center building, the Authority's headquarters.

#### Notes to Financial Statements

## Note 1 — ORGANIZATION OF AUTHORITY AND SIGNIFICANT ACCOUNTING POLICIES

The Washington Metropolitan Area Transit Authority is a taxexempt organization created in 1967 by Interstate Compact among the States of Maryland and Virginia, and the District of Columbia, pursuant to Public Law 89-774 (as amended). The Authority's primary function is to plan, develop, finance, and operate transit facilities serving the Washington Metropolitan Area Transit Zone (as defined).

The various funds of the Authority are described as follows:

(1) The Capital Construction Fund represents the accounting for the planning and development of the rapid rail transit system. Contributions in aid of construction represent amounts appropriated by the signatories to the compact and various U.S. Government agencies for use by the Authority. Contributions from the signatories are due each January 1, and July 1, at amounts determined by a contribution schedule as approved by the signatories.

Interest at a rate of 6% is charged on delinquent capital contributions from the jurisdictions and added to the Authority's equity. Such interest may be paid by the prepayment of subsequent contributions. Interest charged on delinquent contributions for other than capital contributions is charged at prime rate. Interest charges to June 30, 1974, aggregate \$3,390,617, of which \$3,228,480 is uncollected.

Until such time as the rapid transit system is operative, all amounts expended by the Authority including interest on Transit Bonds during the period of construction net of interest accrued on investment of unexpended proceeds, are being capitalized since the Authority believes such net interest is a proper cost of the project. These capitalized costs will be amortized over the estimated useful life of the system.

For modifications to the planned system requested by the local jurisdictions, the Authority records the cost of such modifications as receivables from the local jurisdiction and as a contribution to equity at such time as contracts are signed for the performance of the work. As of June 30, 1974, \$10,718,000 is included in equity representing the cost of modifications meeting this criterion.

For modifications to the planned system requested by and granted to other than the signatories, the Authority excludes the cost of such modifications from the cost of the system. As the work is performed, the Authority records a receivable representing a cost reimbursement of the modification.

Income earned by the Authority on its investment of jurisdictional construction funds is included in equity. This equity is used in part to fund the cost of executive management, which cost is excluded from the amount for which the local jurisdictions and the various Federal agencies provide contributions.

- (2) The Metrobus Capital Improvements Fund represents the accounting for the funds contributed by the Department of Transportation, Urban Mass Transportation Administration (UMTA) (two-thirds contribution) and the local jurisdictions (one-third contribution), to acquire and improve the transit facilities of the metropolitan Washington local bus companies.
- (3) The Metrobus Operating Fund represents the accounting for the revenue and costs of operating bus service in the Transit Zone with the facilities acquired from the private local bus companies.

In accordance with the recently issued Audit Guide of the American Institute of Certified Public Accountants for Audits of State and Local Government Units, the charge for depreciation and amortization of assets acquired by Federal and local government contributions, while deducted in arriving at net loss, is transferred to the related contribution account and

has been excluded from the amount used for operating deficit subsidy calculations. Other expenses for which contributions were received were similarly treated.

Property, plant, and equipment are being depreciated by the straight-line method based principally on the estimated economic lives of the assets as follows:

Buildings and improvements
Revenue and service equipment

20 to 38½ years 3 to 9 years 2½ to 10 years

Intangible assets (trained personnel, systems and procedures, business records, organization, and route development) arising from the acquisition of the local bus companies are being amortized over their estimated useful lives of 3 to 10 years.

Passenger revenue derived from sale of tickets and tokens is deferred and recorded as earned when used.

- (4) The Bond Interest Fund is a restricted fund established under the Transit Bond Resolution dated August 3, 1972, for the purpose of payment of interest on the Authority's Transit Bond issues.
- (5) The Jurisdictional Fund; Metrobus Capital Improvement Grants was established as of June 30, 1974, to record the local jurisdiction contributions received which will be transferred to the Metrobus Capital Improvement Fund upon receipt of UMTA's two-thirds contribution.

#### Note 2 — PLANS OF FINANCING

Rapid Rail Transit System

The original plan of financing of the transit system adopted in 1969 and the Capital Contributions Agreement of January 1970, between the Authority and the local jurisdictions contemplated total rail transit system costs of approximately \$2.5 billion to be derived by revenue bonds of \$900 million, capital contributions from the local jurisdictions of \$573 million and contributions for the remainder (approximately two-thirds of total capital contributions) from the Federal Government.

The estimated total system cost was increased to approximately \$3 billion during 1972 which resulted in passage of the National Capital Transit Act of 1972. This Act included authorization of a Federal guarantee of \$1.2 billion in revenue bonds. The guarantee of the additional \$300 million in bonds is contingent upon the total local jurisdictions contributions increasing by 50% of all additional bonds sold. In the aforementioned capital contributions agreement, each jurisdiction pledged its best efforts to obtain authorization for increases in its capital contributions if the system cost increased. The funding of these additional local jurisdictions contributions has been accomplished for the District of Columbia and the Maryland jurisdictions, and action has been initiated in the Virginia jurisdictions.

To obtain the Federal guarantee of revenue bonds issued to date, the Authority has assured the Department of Transportation that necessary revenue will be made available to pay the bond principal and interest. In this regard, the local jurisdictions in varying resolutions have pledged financial assistance to support the Authority's assurance; however, these pledges for certain jurisdictions provide assistance only to the extent of a loss of revenue when restrictions are imposed by these jurisdictions. Current forecasts indicate the Authority will be unable to pay the bond principal and interest from revenue.

The most recent estimate of the total cost of the transit system approximates \$4.5 billion. Several alternatives for funding this additional \$1.5 billion system cost or for reducing the planned system are being investigated; however, no resolutions of the funding have been completed.

#### **Operating Deficit**

Subsidies to fund losses of the Metrobus operations are expected from the local jurisdictions. Subsidy payments are based upon the annual deficit budgeted by the Authority and are payable during that fiscal year. Funding of these subsidy payments is authorized annually by the local jurisdictions through their budgeting processes. Any subsequent funding requirements in excess of the initial budgeted estimate are due two years thereafter with interest charged at the prime rate.

The 1975 and 1976 deficits have been estimated at \$38,192,000 and \$53,576,000 respectively. Currently, means of reducing these deficits by fare increases, route reductions, or other are being investigated.

To provide interim sources of financing of Metrobus operations, the Authority has obtained lines of credit with four banks totaling \$12,000,000 of which \$5,698,000 was unused at June 30, 1974. As of January 10, 1975, lines of credit with five banks amounted to \$22,500,000 of which \$15,094,844 was unused.

#### Note 3 — ACQUISITION OF ASSETS OF BUS COMPANIES

In 1974, settlement was reached on the compensation due by the Authority on its condemnation of January 14, 1973, of substantially all of the transit assets of D. C. Transit System, Inc., and its subsidiary, Washington, Virginia, and Maryland Coach Company, Inc. The settlement provided for total compensation at \$44,904,960 of which \$38,200,000 had been previously deposited with the U. S. District Court. Additionally, settlement has been reached of the various claims and counter-claims of the parties related to liabilities assumed and other miscellaneous matters. A summary of the condemnation and claim settlement is:

Settlement of condemnation		44,904,960 38,200,000
Interest themes at CO/ to live CO 4074		6,704,960
Interest thereon at 6% to June 30, 1974	_	586,365
at June 30, 1974	\$	7,291,325
Settlement of claims and counter-claims: Redemption of tokens and tickets issued		
prior to acquisition	\$	554,006
Asumption of vacation liability		2,255,874
Sick leave credit given		795,700
Assumption of Salaried Retirement Plan		
liabilities, including interest		2,871,337
Other		(39,028)
		6,437,889
Less payments previously made to		
the Authority		(1,248,333)
	_	5,189,556
Interest thereon at 6% to June 30, 1974		
(net of \$6,523 previously paid)		212,121
Gross amount due to the Authority at June 30, 1974	\$	5,401,677

The settlements provided that of the amount due the Authority, \$2,500,000 would be in the form of a promissory note payable in 10 equal semiannual installments beginning January 1, 1975, with interest at 6%, and the remainder would be offset against the condemnation amount due.

With the settlement of these matters, the Authority in 1974 has retroactively allocated the condemnation amount and the purchase prices of the WMA Transit Company and Alexandria, Barcroft, and Washington Transit Company acquired on February 4, 1973. These allocations have been based upon appraisal reports and the condemnation proceedings. Financial statements for 1973 have been restated to reflect these allocations, the depreciation and amortization related thereto, and the interest on the settlements applicable to 1973. The effects of the restatement are to increase the net loss previously reported by

\$3,076,661 and decrease the net fundable deficit by \$520,866. The sick leave credit given to the Authority by D. C. Transit has been used to offset sick leave taken of \$499,978 in 1973 and \$295,722 in 1974 since the Authority has no liability for unused sick leave.

Funds were made available for the acquisition and improvement of the local bus companies through a grant from UMTA providing for two-thirds of the net project cost (estimated at \$105,517,000) with one-third to be provided by the local jurisdictions. To provide interim financing of the local jurisdictions funds needed for the acquisition of the bus companies UMTA loaned the Authority \$18,516,667 on 6% notes due September 1974. The UMTA loans were repaid from funds received during 1974 from the local jurisdictions.

Interest expense of \$519,475 and \$294,797 on the UMTA loans has been charged to Metrobus operations in 1973 and 1974. Investment earnings of \$814,272 on local jurisdictions contributions in excess of one-half of the UMTA contributions has been credited to 1974 Metrobus operations to offset these interest charges. Additionally, such investment earnings in excess of the interest expense, has been included separately in the Metrobus Capital Improvements Fund to fund, if required, the intangibles resulting from the acquisitions of the bus companies. UMTA has informed the Authority that in its opinion, investment earnings after the date of repayment of the UMTA loan (\$401,686) should accrue to the Grant Fund to reduce future contributions reguired. Further, UMTA has advised the Authority that intangibles do not represent allowable costs for funding. The Authority is protesting these positions and has presented its financial statements on the basis of favorable resolutions.

#### Note 4 - PENSION PLANS

The Authority has retirement plans covering substantially all of its employees. The total pension expense for all Funds for fiscal years 1974 and 1973 amounted to \$5,697,332 and \$2,285,895, respectively, which includes, as to certain of the plans, amortization of prior service cost over periods ranging from 24 to 26 years. The Authority's policy is to fund pension cost accrued. The actuarially computed value of vested benefits of four of the plans exceeded the plans' assets by approximately \$10,000,000 as of the dates of the latest actuarial evaluation which was December 1972, for three of the plans and July 1, 1974 for the other plan. As to the remaining plans, plan assets exceeded vested benefits as of July 1, 1974. The unfunded prior service costs of the various plans at June 30, 1974, amounted to \$55,993,000. The Pension Reform Act of 1974 will have no impact upon the plans as the Authority is exempt from its provisions.

On January 9, 1975, the Authority approved a consolidating plan for the three present plans for salaried employees which will increase benefits for certain salaried employees. Total additional cost is estimated at approximately \$200.000.

#### Note 5 — COMMITTED CONTRIBUTIONS

Cash receipt of committed contributions from the signatories is reconciled to the amounts included in the Authority's equity in the Construction Fund as follows:

Total receipts of committed contributions Add:	\$ 801,141,172
Dissolution of Planning and Administrative Fund Contributions receivable from	10,886,695
Department of Transportation excluding \$2,670,000 of additions and	
\$13,600,000 handicapped facilities	483,620,298
	\$1,295,648,165
Committed contributions:	
Federal Government	\$ 856,314,470
Local jurisdictions	439,333,695
	\$1,295,648,165



Investments of the various funds are comprised of the following:

	June 30, 1974			June 30, 1973		
	Cost	Market	Accrued Interest	Cost	Market	Accrued Interest
CAPITAL CONSTRUCTION FUND U.S. Government agencies Repurchase agreement Certificates of deposit Federally guaranteed	39,255,000 80,722,301 51,250,116	\$497,380,628 39,255,000 80,720,000 47,893,159	\$ 8,124,451 117,387 3,891,210 1,369,170	\$343,820,631 53,510,000 65,719,201 39,245,578	\$338,457,587 53,510,000 65,719,201 38,807,984	\$4,819,444 58,317 1,720,270 915,588
TOTALS	686,341,491	665,248,787	13,502,218	502,295,410	496,494,772	7,513,619
METROBUS CAPITAL IMPROVEMENT FUND Repurchase agreement		5,700,000 3,000,000 8,700,000	3,563 71,412 74,975	<u> </u>	=	
BOND INTEREST FUND U.S. Government agencies Repurchase agreement Certificates of deposit Federally guaranteed TOTALS	17,700,000 11,986,894	116,823,936 17,700,000 12,000,000 3,889,662 150,413,598	1,957,472 8,604 563,457 125,403 2,654,936	66,034,384 17,900,000 11,000,000 950,312 95,884,696	65,417,841 17,900,000 11,000,000 935,000 95,252,841	706,408 13,308 111,656 22,375 853,747
JURISDICTIONAL FUND: METROBUS CAPITAL IMPROVEMENT GRANTS Repurchase agreement METROBUS OPERATING FUND	(10) (1) (0) (0) (10) (10) (0) (0) (0) (0)	1,000,000		_		Amaria III Amaria III Amaria III Amaria III
Repurchase agreement			,—	200,000	200,000	_
TOTAL INVESTMENTS	\$853,498,275	\$825,362,385	\$16,232,129	\$598,380,106	\$591,947,613	\$8,367,366

#### Note 7 — U. S. GOVERNMENT FUNDS EXPENDED

The ratio of U.S. Government funds expended on a cash basis to total participating expenditures through the Construction Fund

as follows.	Amount	Percent
U.S. Government funds drawn	\$372,694,173	65.36
Local funds	197,508,784	34.64
Total Participating Expenditures	\$570,202,957	100.00

#### Note 8 — BONDS PAYABLE

Pursuant to the Interstate Compact and the Transit Bond Resolution of the Authority, as supplemented, adopted August 3, 1972, the Authority has issued the following bonds:

	Principal	Unamortized Discount
Transit Bonds (Guaranteed by the United States of America), Series A, 7.3% dated October 1, 1972, and due	Reg Cilmina	4-1174
July 1, 2012 Transit Bonds (Guaranteed by	\$225,000,000	\$1,787,434
the United States of America), Series B, 7.35%, dated July 1, 1973, and due		
July 1, 2012 Transit Bonds (Guaranteed by the United States of America),	220,000,000	937,590
Series C, 7.75% dated July 1, 1973, and due		
July 1, 2013 Transit Bonds (Guaranteed by	150,000,000	601,088
the United States of America), Series D, 8.15%, dated April 1, 1974, and due		
July 1, 2014	225,000,000	2,193,540
TOTALS	\$820,000,000	\$5,519,652

The Bond Resolution as supplemented provides, among other things, that four years of interest payments for each issue be set aside from the bond proceeds in the Bond Interest Fund for the payment of interest charges as they come due. The Bond Resolution also provides for deposits to be made, beginning July 1, 1983, in a Bond Sinking Fund.

The Authority and the United States of America, acting through the Secretary of Transportation entered into a Project Agreement dated August 3, 1972, providing for the guarantee of the bonds and also providing for interest subsidy payments to the extent of 25% of the net interest cost, as defined, of the bonds.

#### Note 9 — ESTIMATED LIABILITY FOR INJURIES AND DAMAGES - METROBUS OPERATING FUND

The Authority is self-insured for personal injury and property damage claims up to \$100,000 for any one occurrence and for workmen's compensation claims up to \$100,000. Claims in excess of these amounts are covered under insurance policies with coverages amounting to \$5,000,000 for each occurrence. The amounts stated for the estimated liability for injuries and damages is, in management's opinion, sufficient to cover claims for injuries and damages incurred prior to June 30, 1974.

#### Note 10 — COMMITMENTS AND CONTINGENCIES

At June 30, 1974, the Authority had commitments under contracts in process related to all funds for which work had not yet been performed aggregating approximately \$696,633,000.

The Authority has deducted from payments due to the suppliers of buses the amount of \$820,150 representing penalties for late delivery of buses in accordance with their contract. Such action is being contested by the supplier but, in the opinion of management of the Authority, such reduction is justified.

#### **ERNST & ERNST**

1225 CONNECTICUT AVE., N.W.

WASHINGTON, D. C. 20036

**Board of Directors** Washington Metropolitan Area Transit Authority Washington, D. C.

We have examined the financial statements named below of the Washington Metropolitan Area Transit Authority for the years ended June 30, 1974, and June 30, 1973:

Capital Construction Fund — Balance Sheets, Statement of Changes in Fund Balances, and Statement of Changes in Financial Position.

Metrobus Capital Improvement Fund - Balance Sheets and Statement of Changes in Fund Balances.

Bond Interest Fund — Balance Sheets and Statement of Changes in Fund

Metrobus Operating Fund — Balance Sheets, Statement of Operations, Statement of Changes in Fund Balances, and Statement of Changes in Financial Position.

Jurisdictional Fund; Metrobus Capital Improvements Grant — Balance Sheet and Statement of Changes in Fund Balances.

Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, subject to the effects, if any, of the financing matters described in Note 2 to the financial statements, the financial statements referred to above present fairly the financial position of the various funds of Washington Metropolitan Area Transit Authority at June 30, 1974 and June 30, 1973, and the results of their operations and changes in their financial position for the years then ended, in conformity wtih generally accepted accounting principles applied on a consistent basis after restatement for the changes in depreciation and amortization resulting from the allocation of the assets acquired from the local bus companies as described in Note 3.

Fruit & Fresh

Washington, D. C. January 10, 1975



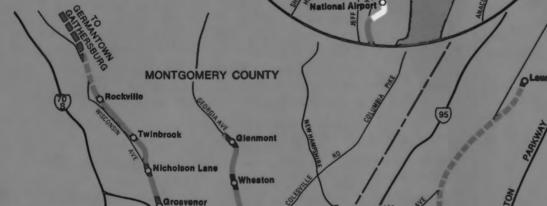
FAIRFAX COUNTY

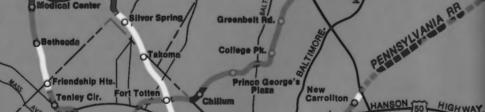
Burke Or Samuel

FAIRFAX CITY

Year-End Construction: 39 Route-Miles; 39 Stations

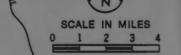


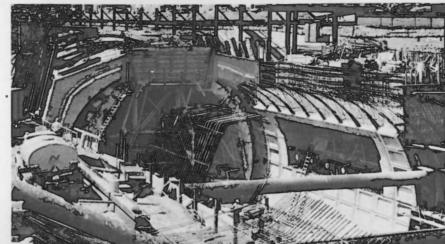














Pentagon station passageway (right) will connect underground to bus platforms. A concrete-lined tunnel.



Checking threads on a bolt.



Preparing an escalator at Judiciary Square station.



Casting concrete coffers in Hyattsville for Dupont Circle station.







# **WMATA Has Dual Challenge:** Improve Bus System While **Building Rapid Rail**

Metro, the region's 98-mile rapid rail transit system, authorized and supported by Congress and approved overwhelmingly by area voters, is well under construction.

As the region awaits the first Metro operations, changes to the Washington-area bus network, now called Metrobus, continue to improve public transport for millions of capital area citizens and tourists.

Metro service will begin as soon as humanly possible. The first phase, 4.6 miles, will be opened in 1975. By the end of 1979, the entire 98-mile system is planned to be open to carry hundreds of thousands of people quickly, effortlessly and safely. Coordinated with this rail system will be the Metrobus system, providing improved cross-town and cross-county service.

(continued on page 22)

## **Metro Facts in Brief**

Adopted Regional Rapid Rail

Transit System

ROUTE MILES-98 total; 38.3 in District of Columbia; 30.3

in Virginia, 29.4 in Maryland.

MILES IN SUBWAY—48
MILES ON SURFACE—50
NUMBER OF STATIONS—86 including 53 underground; 43 in the District of Columbia; 21 in Virginia; 22 in Mary-

**ESTIMATED 1990 ANNUAL MASS TRANSIT PATRONAGE** -350 million passengers.

VEHICLES-556 air-conditioned cars; 75 feet long, 10 feet wide; seating 81 with 94 standing; maximum eight-car

OPERATION—Automatic train control system will regulate train speed and spacing start and stop trains, operate doors, and monitor train performance. Attendant can over-

SPEED-Maximum 75 mph; average system speed, includ-

ing stops, about 35 mpl

PROPOSED SERVICE-2-minute rush hour headways on main routes; 4 to 8 minutes on branch lines. Operation daily from 5 am. to 1 am.

COORDINATION—Metrobus service coordinated with rapid rail, auto and taxi drop-off lanes at stations; 27,000 parking

ESTIMATED COMPLETION DATE-Initial operation 1975;

completion by the end of 1980. ESTIMATED CAPITAL COST—\$2.98 billion.

# metro memo

published by WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

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- **WMATA Board of Directors**
- **Mass Transit Financing Minority Development Office: Fair Hiring Watchdog**
- And Now, a 1979 Tour Floating Slabs, Padded Rails **Keep Metro Quiet**
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- **Marketing Office Seeks to Improve Mass Transit Product** for Customer
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- **Bus Lanes Prove Successful,** More in Planning Stages
- Where Do You Take a Broken Bus?
- **Metro Cools It Underground** Tunnels to be Ventilated
- Wilbur Smith Study **Looks to Future**
- Chronology



Prepared by: Office of Community Services Cody Pfanstiehl, Director Marilyn McGinty, Editor 600 Fifth Street, N.W. Washington, D.C. 20001 Phone: 637-1051

Officers

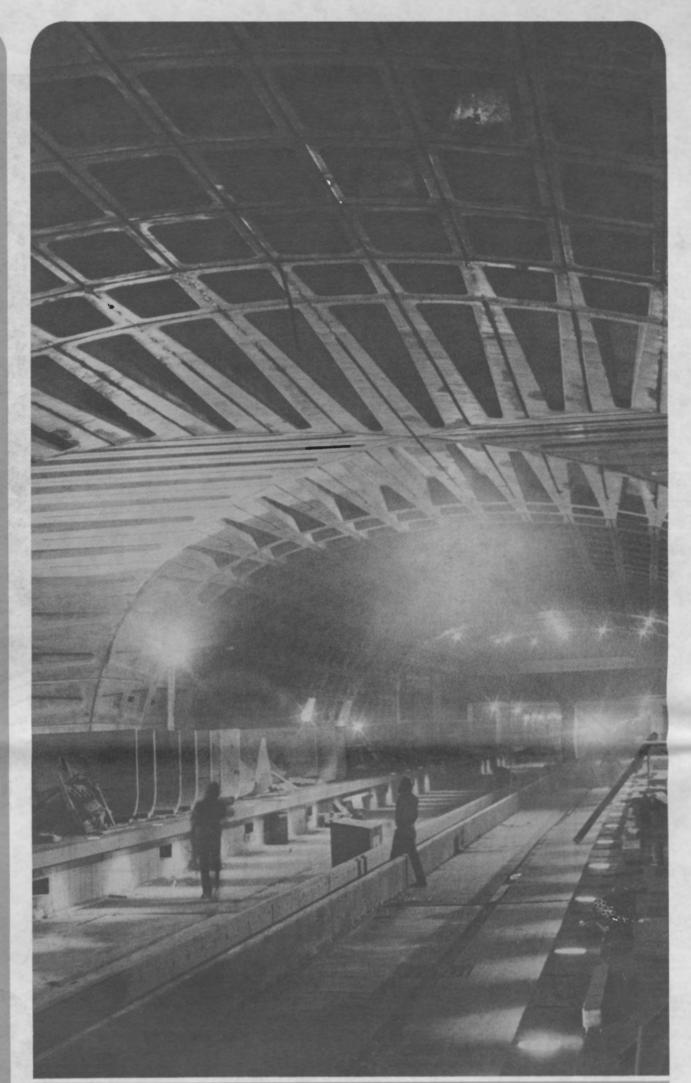
Jackson Graham General Manager Schuyler Lowe Executive Officer and Comptroller

Raiph Wood Chief of Operations and Maintenance

Warren Quenstedt Deputy General Manager

Delmer ison Secretary-Treasurer

Roy T. Dodge Chief of Design and Construction



Metro center station under construction

#### metro memo

WMATA is an interstate compact agency (a public body) authorized to plan, build and operate the re-gional rapid rail and bus systems in the Washington area. The WMATA Board of Directors is made up of six members and six alternates, who are appointed from among the members of the Washington Subur-ban Transit Commission, Northern Virginia Trans-portation Commission and the District of Columbia City Council, respectively.

MARYLAND

Washington Suburban Transit Commission — Francis W. White, Chairman, 8720 Georgia Avenue, Silver Spring, Md. Phone: 587-8770

Montgomery County Department of Transportation — 6110 Executive Boulevard, Rockville, Md. 20852 Phone: 279-j381

Prince George's County Department of Public Works and Transportation — 8400 D'Arcy Road, Forestville, Md. 20028 Phone: 350-3000

Maryland Department of Transportation — P.O. Box 8755, Baltimore-Washington International Airport, Baltimore, Md. 21240 Phone: 301-768-9520

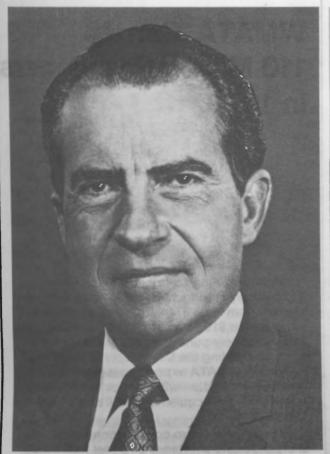
Northern Virginia Transportation Commission — Everard Munsey, Chairman, 2009 N. 14th Street, Arlington, Va. 22201 Phone: 524-3322

DISTRICT OF COLUMBIA
Mayor's Office, Walter E. Washington, Mayor, District
Building, 14th & E Streets, N.W., Washington, D. C.
20004 Phone: 629-4555

D.C. City Council — John A. Nevius, Chairman, District Building, 14th & E Streets, N.W., Washington, D.C. 20004 Phone: 629-3806

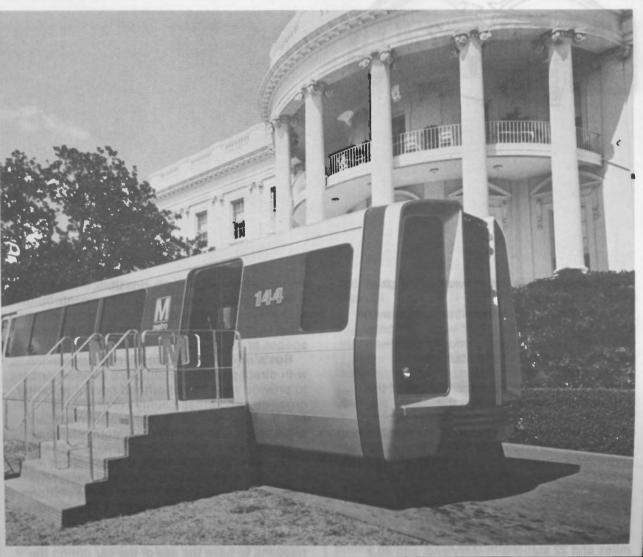
D.C. City Council Subcommittee on Highways and Transportation — Rev. Jerry A. Moore, Jr., Chairman, District Building, 14th & E Streets, N.W., Washington, D.C. 20004 Phone: 629-3806

CITIZEN ADVISORY COMMITTEES—All citizens can make their views on transit known through their lo-cal governments (listed above) and to their local governments through citizen advisory committees in each political jurisdiction. A regional citizen advisory group has been established to commun-icate those views to the WMATA board.



President Richard M. Nixon

The prototype engineering and architectural design car and Metro officials visited the White House in 1968. In later weeks, 165.000 persons visited the prototype as it toured the city and suburbs so WMATA could listen to design suggestions.



# White House Supports Rapid Rail System

Four Presidents have endorsed the concept of a rapid rail transit system for the Nation's Capital beginning with the creation (by Congress) of the National Capital Transportation Agency in 1960.

In establishing the first transit agency for the region, Congress and President Dwight D. Eisenhower (in signing the legislation) declared:

The Congress finds that an improved transportation s ystem for the

National Capital region:

• . . . is essential to the continued and effective performance of the functions of the government of the United States, for the welfare of the District of Columbia, for the orderly growth and development of the National Capital region, and for the preservation of the beauty and dignity of the Nation's Capital;

 requires the planning on a regional basis of a unified program of freeways, parkways, express transit service on exclusive rights-of-way,

and other major transportation facilities

• requires cooperation among the federal, state and local governments of the region and public carriers in the development and administration of major transportation for littles.

administration of major transportation facilities;
• requires financial participation by the federal government in the creation of certain major transportation facilities that are beyond the financial capacity or borrowing power of the public carriers, the

District of Columbia and the local governments of the region; and

• requires coordination of transportation facilities with other public

facilities and with the use of land, public and private.

President John F. Kennedy endorsed the concept when he sent the original NCTA plan to Congress in May, 1963.

During the administration of Lyndon B. Johnson the Washington Metropolitan Area Transit Authority was born and the regional transit system officially adopted.

In signing the District of Columbia transit bill on Sept. 8, 1965, President Johnson said:

"... The metropolitan area's highway system has been planned on the assumption that it would be balanced by a rapid rail system. And I congratulate the Congress on following through to make that balance feasible.

"We all realize the significance of this measure reaches beyond the federal city itself . . ."

President Richard M. Nixon has consistently backed rapid transit for the region. In his message to Congress on the District of Columbia in April, 1969, he said: "I urge that Congress promptly enact the necessary authorizing legislation . . ." He signed the \$1.1 billion authorization bill in December, 1969.

At the groundbreaking he was represented by Transportation Secretary John A. Volpe. "More than a subway will begin in December. A city will begin to renew itself, a metropolitan area to pull itself together. That the Nation's Capital is involved makes this an event of national significance," the President said.

In proposing a federal guananty of \$1.2 billion in Metro bonds, President Nixon on April 7, 1971 said that Metro "should do much to

unify the metropolitan Washington community, to improve the quality of life by reducing congestion and pollution in the area, and to stimulate the metropolitan economy by the increased labor mobility it will provide."

On February 4, 1972, President Nixon again voiced his support for Metro in his Bicentennial message and urged completion of 24 miles of

the system by 1976.

"Metro, and all of the other elements which with it will comprise a balanced modern transportation system for greater Washington, are central to Bicentennial plans for the District," the President said. "We need the pride of achievement in areawide cooperation which the system will give all communities taking part. We need its people-moving capacity to cope with visitor traffic which may average up to 100,000 people daily throughout the anniversary year.

"I am today renewing the commitment of all the agencies and resources of the federal government toward maximum progress on the entire transportaiton system—subway, freeways, bridges, parking, and support facilities—before 1976. The action of the Congress in December to support continued Metro funding was enormously heartening to the people of the Capital region; it gave, in fact, a glimmer of hope to beleaguered commuters everywhere," Mr. Nixon said.

# **Congressional Backing Continues**

"The Congress finds that an improved transportation system for the National Capital region (1) is essential to the continued and effective performance of the functions of the government of the United States, for the welfare of the District of Columbia, for the orderly growth and development of the National Capital region, and for the preservation of the beauty and dignity of the Nation's Capital . . ." National Capital Transportation Act of 1960.

With those words, Congress authorized the Washington region's rapid rail transit program. Those words continue to be the Congressional guiding policy toward Metro.

Since the introduction of the original National Capital Transportation Act in 1959, every piece of legislation introduced on behalf of the rapid transit system in the Washington metropolitan region has achieved full consideration by the Congress. The 1972 Congressional action approving a federal guaranty of \$1.2 billion in Metro revenue bonds continues more than a decade of Congressional support.

## What is Metro?

Actually, Metro is not subway in the strict sense of the word.

It is a modern rapid transit system, always on its own exclusive right-of-way, with only 48 of the 98 miles actually underground—in subway-and 53 of the 86 stations

underground.

To preserve the environment, most of the underground portions are in the highly-developed parts of the region. Some 42 miles will be on the surface, 30 of them along existing railroad rights-of-way or in medians of highways, again to reduce or eliminate adverse environmental impact. The remaining eight miles will be on aerial structure, mostly on grade separations and bridges.

The system includes 38.3 miles of service and 43 stations in the District of Columbia, 29.4 miles and 22 stations in Maryland, and 30.3

miles and 21 stations in Virginia.

The automated, air conditioned electric trains will operate entirely on Metro's exclusive right-of-way every two minutes in peak hours, uninterrupted or slowed by other vehicles or grade crossings.

All three principal routes traverse the District of Columbia. Some branch as they reach into suburban areas to permit broader coverage.

Centered on the economic heart of the region, the principal routes and branches provide service within and across the city and counties as well as from the city outward and from the suburbs inward.

Convenient transfer points are provided at double-level stations: Metro Center at 12th and G Streets, N.W.; Gallery Place at 7th and G Streets, N.W.; L'Enfant Plaza at 7th and D Streets, S.W.; and Fort Totten at Riggs Road and the B&O Railroad. Convenient transfer also is provided at Rosslyn and the Pentagon. A future walkway connecting Farragut North and

Farragut West stations is possible.

Park'n'ride facilities are a major contributor to the success of modern rapid transit systems. Thus Metro will provide some 27,000 parking spaces at its stations.

Bus'n'ride—coordinated Metrobus service with direct platform or entrance connections to provide wide neighborhood coverage, better cross-city and cross-county service. As a result, about two-thirds of the system's riders will use a bus to or from their Metro stations.

Kiss'n'ride facilities, another necessity for a successful modern system, will be built at many stations. These are auto lanes and short-term parking spaces conveniently near the platform or station entrance where wives or husbands can deposit and pick up their spouses in the morning or evening, allowing the wife or husband to have the use of the car during the day.

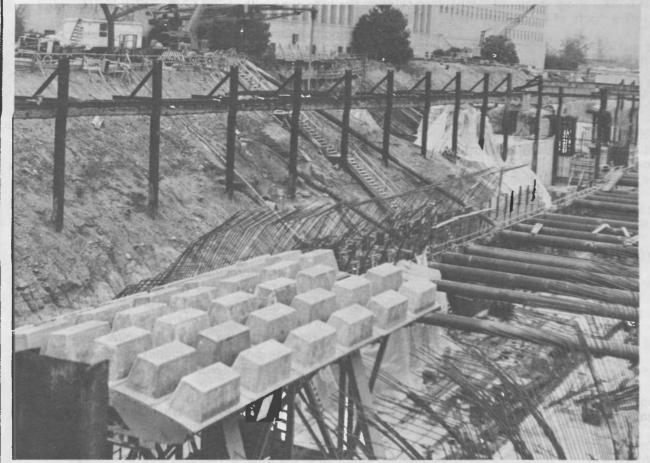
It is expected that public transportation will carry about 350 million riders annually by 1990.

Metrorail service will be provided over a 20-hour period from 5 a.m. to 1 a.m. Metrobus service runs 24 hours a day. Train schedules during typical weekday peak periods will consist of two-to-four minute service. During the base day, trains will run every six minutes, and during the early morning and late evening hours, every 10 minutes.

On Saturdays, "base day" rail operations will be run during the peak periods. Sunday operations will approximate the weekday "early morning-late evening" operations.

Patrons entering trains will walk on at platform level. Three wide doors on each car will open simultaneously allowing easy access for those getting on or off.

Trains will reach top speeds of 75 miles an hour and will average 35 miles an hour including stops.



These fiberglass ceiling forms, appearing in the foreground as inverted bathtubs, are assembled at the Pentagon station in preparation for the eventual pouring of the reinforced concrete walls and ceiling of the station. The "bathtubs" form the coffers in the vaulted walls and ceiling of the underground station.

# **WMATA Carries** 110 Million Passengers in 1973

While providing Metrobus service for some 110 million passengers in 1973, the Washington Metropolitan Area Transit Authority (WMATA) added some \$105.4 million to the local economy through supply purchases and the wages of workers building the Metro rapid rail system.

In 1974, WMATA expects passenger levels to increase markedly—with service expansion possible by the acquistion of 620 new Metrobuses.

Spending for Metro construction will be up sharply despite shortages of diesel fuel, steel and cement which have hurt schedule estimates. WMATA expects to spend about \$350 million in 1974 for Metro construction, \$120 million of it for wages. About half of the wages-\$60 million-will go to minority

#### "METROBUS" BORN IN JANUARY, 1973

January, 1973 marked the first time the Washington region has publicly owned and operated its transit system. After action by Congress and President Nixon in late 1972, WMATA on January 14, 1973 deposited \$38.2 million with the U.S. District Court for the District of Columbia to acquire by condemnation the operating assets of D.C. Transit System, Inc. and its Virginia subsidiary, WV&M Coach Co. Negotiated prices of \$10.7 million for AB&W Transit Co. and \$4.5 million for WMA Transit Co. were reached and the companies acquired on February 4, 1973.

The first year after acquisition, WMATA operated some 44 million bus miles of regular service, collecting \$46 million in farebox revenue. WMATA received some \$5 million in additional revenue through the operation of some 3.2 million contract and charter miles. Operating expenses totaled \$64.4 million through December 31, 1973, compared with gross revenues of some \$56.5 million, for a deficit for 1973 of some \$8 million.

#### **METROBUS IMPROVEMENTS**

Although three of the bus companies were in severe financial difficulty before the acquisition and economy measures had resulted in reduced service, personnel, maintenance and parts inventories, WMATA accomplished service improvements in the first year. Those included:

1. Operation of all scheduled trips barring breakdowns. WMATA averaged 98 to 99 percent operation of all scheduled trips through recruitment and training of additional operators and utilization of overtime work until the full complement of operators could be employed.

2. Elimination of the 35 cent transfer charge for trips utilizing more than one of the former

bus lines.

3. Extension of the 15 cent senior citizen discount region-wide in the off-peak hours.

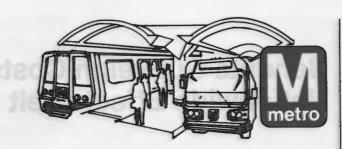
4. Reduction of Arlington Division fares five cents a zone (proposed and financed by the Northern Virginia Transportation Commission).

5. Reduction of Maryland Division fares for D.C. only trips from 45 cents to 40 cents.

6. Establishment of one of the first offices of marketing in the transit industry. The office is responsible for consumer assistance of all varieties, advertising and promotion. The customer information unit, which had 27 operators at takeover and is now 54 strong, received 1.2 million calls in 1973. The sales branch more than doubled ticket sales locations in the year-to 250.

7. Purchase of 620 new Metrobuses for delivery in the first half of 1974.

8. Plans for the renovation of the bus



operating divisions, including roof repair, paving, repair of substandard heating and air conditioning plants, etc.

9. Purchase of 200 bus passenger shelters for installation throughout the region; and

10. Construction and testing of eight prototype bus stop signs which will lead to installation of some 7,500 throughout the region in the coming years.

#### **RAIL PROGRAM ADVANCES IN '73**

Through 1973, contract awards for the Metro program totaled \$1.3 billion. That will jump more than \$450 million—to \$1.7 billion—in 1974 if the Authority's revenue bonds are sold in a timely manner. Contracts and subcontracts awarded to minority firms totaled about \$25 million through November 30.

Actual expenditures for the Metro program in 1973 broke down like this: Construction, \$273 million; engineering and design, \$24 million; land and land rights, \$24 million; construction management, \$9 million.

Calendar 1973 saw continuing Metro construction progress, including completion of the structural portions of several Phase 1 Metro stations and letting of several "finish" contracts to make the stations ready for the

Tirst passengers.
Contractors on "stage" or systemwide contracts—automatic train control, communication and automatic fare collection—

report steady progress as WMATA heads toward operations in 1975.

During 1973, WMATA started construction of seven new stations and 12 miles of line, bringing the total to 28 miles and 31 stations under construction. Another 30 miles and 25 stations were in design at year's end.

#### 1974 METRO PLANS

During 1974, WMATA plans to:

 Accept delivery of the first 60 rapid transit cars and and begin a comprehensive testing program of train control, communications and other systems;

2) Move staff and general consultants to the completed Operations Control Center Building at 600 Fifth St., N.W.;

3) See completion of the structural contracts on all Phase I stations and tunnels and several of the Bicentennial phase contracts; and

4) Continue the Metro public hearing series throughout the region.

#### 1974 METROBUS PLANS

In 1974, WMATA will continue its lengthy series of public hearings on proposed Metrobus service improvements. This will include recommendations being developed by Wilbur Smith and Associates under a \$1.6 million bus technical study—more through routing, cross-city and cross-county routes, and addition of service to neighborhoods not previously

receiving Metrobus service. Other plans include:

 purchase of land and beginning of design for two new bus garage facilities, one in Maryland and one in Virginia;

 purchase of 175 new buses to replace 150 older buses and expand service;

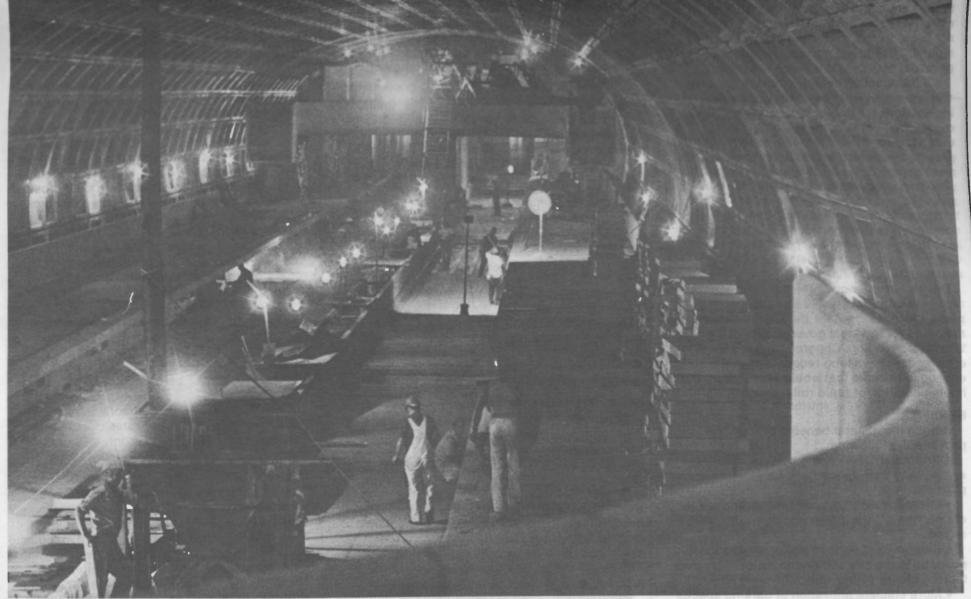
 purchase of 200 more bus passenger shelters; and

• purchase of 82 items of service equipment for better operation of the system. This includes trucks, wreckers, and other service vehicles.

#### Numbers, Numbers, Numbers

The transit authority staff completed its move to the new Metro Operations Control Center Building at 600 Fifth St., N.W. in March. Telephone numbers are as follows:

Metrobus Schedule Information	637-2437
Consumer Representatives	
(complaints, suggestions, etc.)	637-1328
Senior Citizen Identification Cards	637-1180
Charter Sales	637-1316
Contract Service	637-1132
Race Track Service	835-5100
Timetables	637-1261
Office and Employee Listings	
Office of Community Services	
(other information)	. 637-1051



JUDICIARY SQUARE STATION NEARS COMPLETION—Incandescent work lights appear lost in the cavernous interior of Judiciary Square station. Indirect fluorescent lighting which will paint the walls with light will be featured in finished stations. Boxes of sound-absorbing tile, stacked on the platform to the right, await installation in the arched ceiling coffers. Sound deadening devices will be used throughout Metro to increase passenger comfort.

# **Benefits Outweigh Costs 3-1, Nationwide Effects Felt**

Congress determined years ago that rapid rail transit is a desirable investment for the National Capital region.

In 1968 referenda, voters of the region attested strongly to the desirability of the adopted plan and program.

A team of independent economic analysts has concluded that Metro is a sound financial investment—one that will produce benefits three times greater than its net cost.

The scientific investigation of benefits and costs of the adopted regional rapid rail transit system testifies to the wisdom of the Congressional recommendation and the voter endorsement.

#### **ECONOMIC ANALYSIS**

Here are some of the major findings of the economic analysis of Metro:

(1) The National Capital region is ideally suited for rapid rail transit. Its unique combination of characteristics with its large downtown, relatively compact suburban areas, and traditionally high transit ridership results in benefits unmatched by any other city in the nation.

(2) Measurable cumulative benefits, developed by projecting both benefits and costs over the life of the project and discounting both to present day, will achieve a benefit-to-cost ratio of more than three to one with the break-even point occurring in 1982. These benefits generally can be ascribed to the continuing or constant transit user, to motorists using the transit system, to motorists not using transit, and to the business community. The federal government as the region's principal employer is a prime beneficiary.

(3) Introduction of Metro into the National Capital region will have broad, positive implications for the social environment and overall well-being of the region. By increasing urban capacity while allowing orderly suburban growth, by opening accessibility to employment opportunities for the disadvantaged, by providing adequate transportation for the young and aged and others dependent upon public transportation, by broadening educational opportunities, and by making cultural and recreational sites more accessible, transit will create additional substantial, if non-measurable, benefits.

(4) Implementation of the adopted regional rapid rail transit system is a sound and profitable investment for the federal establishment and for the local governments of the Washington region. Congress and the local area leaders have long recognized social and economic benefits that would accrue from the implementation of rapid rail transit.

#### BENEFITS

Among the general benefits cited in the past are the following:

- Promotion of orderly growth in suburban areas along well-defined and carefully planned lines.
- Greater ease of movement into and out of downtown Washington and throughout the region.
- Lessening of surface traffic congestion and pollution in the city and on the major thoroughfares of the region.
- More efficient utilization of parking spaces in the central city.
- Access to jobs in the suburbs for residents of the inner city, and greater work force selection for suburban employers.

A stimulus to tourism in the National

Capital area.

 Attraction of new business and industry and expansion of job opportunities.

 Creation of thousands of jobs by the construction of the system and its operation.

Opening of new population centers.

 De-emphasis of the dependence on surface vehicles for movement in the heart of the city.

• Better and more efficient use of existing transportation facilities, both public and private.

Broadening of tax bases.

Enhancement of real estate values

throughout the region.

• A recognition of Washington's leadership role in matters of public interest, and a reaffirmation of the growth of what is already the nation's fastest growing major metropolitan region.

In addition to the three-to-one local economic benefit return for the National Capital area, Metro will benefit cities and states far beyond Washington.

The \$2.98 billion project will purchase approximately \$2.3 billion of structural and finish materials and services, \$200 million worth of rapid transit vehicles, \$215 million in rights-of-way, and put into the economy \$272 million in payroll and supporting materials for engineering and administration. (Escalated dollars).

Because the Washington region is not an industrial and manufacturing area, much of the mechanical, electrical, construction, and other materials will be produced in cities and states across the nation. An examination of the major categories will indicate quantities and dollars involved, and the great range of benefitting industries:

Cement	(millions)
1.5 million cubic yards	\$ 25.5
Reinforcing Steel — 175,000 tons	50.3
Structural Steel — 120,000 tons	59.6
Lumber-150,000,000 board feet	36.4
Running Rail — 480 miles	5.3
Contact Rail — 240 miles	2.8
Mechanical Equipment	140.0
Electrical Equipment	115.2
Vehicles — 556 cars	199.0
Train Control, Electronics	
and Communications	100.0
Total	\$734 1

This is only a start. In addition there is the multiplier effect—new jobs and purchases creating new jobs and purchases. The precise extent is impossible to predict, though some economists estimate that the original will be doubled or tripled.

#### **SUBCONTRACTS**

Metro will let some 730 prime contracts. These are now generating hundreds of subcontracts, the first of thousands. This multiplier effect, too, will be felt throughout the nation.

The National Capital region will fulfill as many of these contracts as possible. But because few heavy construction contractors are headquartered here, many of the largest prime contracts are won by non-local firms. The same is generally true for engineering and design contracts.

Metro is beginning to spur another economic effect. The demand on the market for labor, contractors, subcontractors, and services is creating new programs to develop small and minority business enterprises. These, in turn, create new jobs and new opportunities.

# **English and Spanish Bus Maps Available**

WMATA has produced a highly detailed bus atlas believed to be the only metropolitan transit map in the world which shows every street on which every bus route operates. It is intended to be used in conjunction with one or more of the 165 bus timetables distributed by WMATA.

The atlas, entitled "From Here to There by Metrobus," sells for a dollar, which represents two-thirds of the cost of producing it. A one-sheet map, entitled "Getting About on Metrobus," condenses much of the information contained in the atlas and is available, free, from the transit authority.

#### STARTING FROM SCRATCH

After the public took over the private bus companies in 1973, the task of depicting one of the world's most complicated bus systems in graphic form fell to Allen Long of WMATA's Office of Community Services.

"To begin with," he recalls, "there was little to work from since no map had ever been printed showing the combined routes of the four regional bus systems. The map jointly produced by D.C. Transit and the WV&M was outdated. WMA had no map. AB&W was the only company with a reasonably current map of its system, which it produced shortly before its acquisition by WMATA on February 4, 1973."

The original plan was to produce only a

The original plan was to produce only a single-sheet map, but the difficulties of graphically depicting approximately 1,150 Metrobus routes, clearly, on such a map were formidable. About 140 separate bus routes operated along Constitution Avenue alone; 125 routes on Pennsylvania Avenue, 90 on H Street, and 95 on K Street.

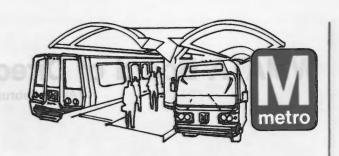
"We began by studying bus maps from other cities," says Long, "but they were not very useful for this region." WMATA discovered that most cities have a grid pattern of streets, with bus routes, therefore, usually running north and south or east and west. There is relatively little overlap of bus routes in a grid system and many transfer points where routes cross. A modest number of routes can serve this type of city and the routes are relatively easy to depict on a transit map.

"The spoke pattern of D.C. streets," Long explains, "requires the overlapping of several routes as they approach the central city." The regional bus system for the capital area must serve an area of more than 1,200 square miles, which requires the enormous number of routes operated by Metrobus. The routes serve the hundreds of outlying origin and destination points in the D.C. region and most of the routes must be funneled into the central city.

By comparison, the Baltimore transit map shows a system which operates over a grid network, covers an area of only 275 square miles and requires only 28 bus routes.

#### 'TOPSY' TAKES OVER

WMATA further discovered that the routes themselves did not represent a carefully planned or even a logical system. They were the product of decades of haphazard growth, and at the time of public acquisition, of four separate bus companies. Each company was limited by its franchise against pick-ups in some areas, and drop-offs in other areas. The suburban bus companies were prohibited from providing direct through service to patrons who needed to travel from the suburbs to points beyond the center city or vice-versa. Many of the existing routes had "grown like Topsy," with little planning or



coordination with routes of the other companies. Central downtown points such as Federal Triangle, Lafayette Park and Farragut Square became overcrowded terminal points for the various bus lines and interchange points for passengers switching from one line to another.

When WMATA, the public agency, inherited the private bus companies early in 1973, it inherited this irregular and difficult pattern which had developed over this century.

Recognizing this problem, WMATA engaged a consulting firm, Wilbur Smith and Associates, to propose a bus route system that would cut bus transfers to a minimum. WMATA also began holding public hearings to ask for criticism and comments on suggested route improvements.

The community services staff of WMATA was faced with a tough decision; should WMATA produce a map of "what is" while changes were underway and thus produce a map that would inevitably contain inaccuracies the first day of its distribution, or, should WMATA wait for the changes resulting from the public hearings and from the consultant's report and thus delay any map until late 1974?

The authority chose to go ahead with the map, on the philosophy that a map that is 90 per cent accurate is better than no map at all. The map will be updated after the anticipated route changes are made in 1974.

#### ALMOST ANYBODY CAN READ IT

The criteria for the map, says Long, was that it be legible to a person wearing bi-focals and that it be understandable to any person of average intelligence.

"One day, someone jokingly suggested that we put the map out in comic book form" says Long. "That's what started us thinking about the atlas format, in which one or two major routes with their variations would be traced, in detail, on a single spread, from points of origin to points of destination."

In the spring of 1973, an 18-year-old American

University student, Frederick Simms, arrived in Long's office seeking summer employment.

Simms' qualifications were unique. He had been making bus route maps as a hobby since he was six years old. He learned to read, in part, by collecting bus transfers beginning at the age of three, and he continued adding to this collection until he was 16. At age 11, through a series of letters, he met Alfred Savage, maintenance director for D.C. Transit who now holds a similar position for Metrobus.

Savage taught Simms a great deal about the internal operations of a transit system. When Simms was 16, D.C. Transit hired him as a traffic clerk. He was paid \$2.64 per hour to stand at various corners to note the passage time and passenger load of each bus.

Simms became the compiler of the Atlas.
Simms quickly discovered that there was only one reasonably accurate source material for determining the actual course of existing routes—the route books issued to the drivers. He began the mind-boggling task of tracing each of 1,150 routes through the D.C. metropolitan region.

At first, he used bus stop locations and descriptive material which had been used in the old D.C. Transit map, until he discovered that the former map had not included changes in street names, nor were all of the street names spelled correctly. He also discovered that the destinations listed in the route names and in the bus signs were frequently not the actual destinations of a particular route.

#### SEARCHING, SEARCHING

For example, a bus route identified as W-15, Indian Head Hwy., had long since discontinued service along most of Indian Head Highway and was destined, instead, to Allentown and Old Branch Roads in Camp Springs, Md. In this and similar instances, Simms footnoted the outdated route designation to show the actual destination on the route.

By diligent checking, cross-checking, and

riding buses through their complete routes, Simms tracked down incorrect or misspelled street names, destinations of various bus routes, and corrected other discrepancies between actual route and map.

Simms' work was double-checked by WMATA's planning office. In some cases, WMATA changed route number designations when there was duplication of route numbers between two of the former companies. These route number changes are designated in the front of the atlas.

The 1,150 Metrobus routes were subdivided, for the purpose of the atlas, into 61 major routes (designated by the lead number or the lead letter), two of which appear on each double-page spread. All the variations of that major route designation are then included on the same page.

WMATA can't afford to give the atlas away, since each costs \$1.50 to produce. However, the authority considered it an obligation to distribute, without charge, something that would help people use the bus system.

After working for several months with the atlas, the WMATA staff devised a system of condensing much of the information contained in the atlas to a single-sheet, color-coded map which could be given away to the public.

The single sheet actually contains three maps. Two are of the downtown area, one showing rush hour service and the other showing all-day service. These are color coded, with each of the four colors representing a different suburban destination area. The third map is a single color regional map showing ultimate destination points of nearly all of the routes.

#### BUY THEM HERE

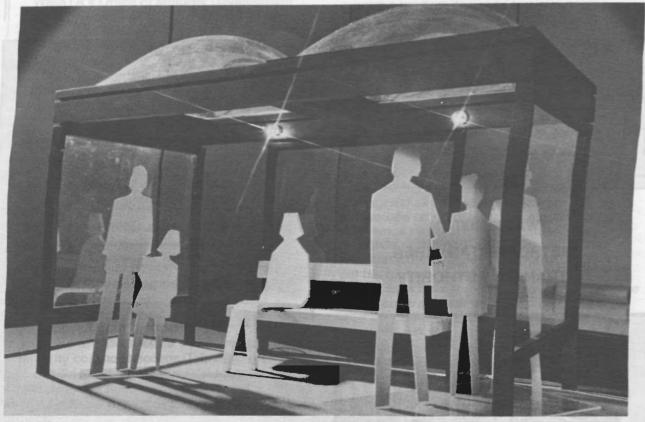
The atlas may be purchased at the following

locations: WMATA Office of Marketing 600 Fifth St., N.W. Metro Sales Office 1422 New York Ave., N.W. Pentagon Sales Office Pentagon Concourse Western Division Office 5230 Wisconsin Ave., N.W. Northern Division Office 14th & Buchanan Sts., N.W. Bladensburg Sales Office 28th & Douglass Sts., N.E. Southeastern Division Office First & M Sts., S.E. Maryland Division Office 4421 Southern Ave., Coral Hills Washington Terminal Office 10th & Pa. Ave., N.W. Royal Street Office

Royal Street Office
600 North Royal St., Alexandria
Four Mile Run Office
Glebe Rd. & Rt. 1, Arlington
Arlington Division Office
707 North Randolph St., Arlington

Mobile Sales Office Schedule: 6:45AM - 9:45 AM 11:00 AM - 2:00 PM Monday: 13th & Pa., Ave., N.W. Mt. Ranler Terminal Tuesday: Chevy Chase Terminal 6th & D Sts., S.W. Wednesday: Friendship Hgts. Term. 13th & Pa. Ave., N.W. Thursday: 13th & Pa. Ave., N.W. 13th & Pa. Ave., N.W. Friday: Chevy Chase Terminal 13th & Pa. Ave., N.W.

Schedules of individual routes (showing time points) are available at the WMATA Office of Marketing, 600 Fifth St., N.W., phone 637-1261.



BUS SHELTERS—The transit authority is to install 200 Metrobus passenger shelters in 1974. Each shelter is surrounded by transparent windscreens on three sides and features a double bubble top. The shelters will be well illuminated at night.

## **WMATA Board of Directors**

(As of February, 1974)



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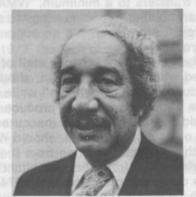




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# **Mass Transit Financing**

Voters in five suburban Washington jurisdictions established a new national standard for support of rapid rail transit in November, 1968 with more than 70 per cent approving referenda to authorize the issuance of bonds for Metro construction.

Citizens in Prince George's County, Md. and Fairfax and Arlington Counties, Falls Church and Fairfax City in Virginia voted 71.4 per cent endorsement of the bond issue. A total of 290,226 votes were cast on transit questions, with 207,138 voting "yes" for Metro. The questions differed in each jurisdiction.

#### MARYLAND

In Prince George's County where public local law approved earlier by the Maryland General Assembly had been petitioned to referenda, voters were asked to approve the issue of up to \$88 million as needed for transit development costs.

#### **VIRGINIA**

The next largest single authorization was Fairfax County, where voters overwhelmingly authorized the issuance of bonds up to \$61.9 million. Arlington County authorized \$54 million. Fairfax City voters approved \$2.6 million and Falls Church \$1 million.

No other referenda were required in the region. The District of Columbia's \$208.7 million share required Congressional approval for the

amount in excess of the \$50 million authorized by Congress in 1965. Authorization for Montgomery County's \$116.7 million share was granted by the county council earlier in 1968. The Alexandria City Council is empowered to authorize bond issues without public referenda.

#### REASSESSMENT-I

By late 1970, inflation and other circumstances beyond authority control increased costs significantly above original projections. Interest rates assumed adequate when the financial plan was adopted were below those required by the investment community. Congressional delay in appropriating the District of Columbia share of funds had increased the toll of escalation.

When WMATA re-examined Metro operating schedules, capital costs and net income, it was apparent that the system could not be constructed within the previously-approved financial plan. The cost of the system had increased from the original \$2.5 billion to \$2.98

At a workshop in January, 1971, local jurisdictions made good faith pledges to make up the deficit. Part of the plan called for the federal government, according to the two-thirds federal/one-third local cost sharing formula, to make up \$300 million of the deficit.

This was accomplished with approval of an

interest rate subsidy with the federal bond guaranty legislation in July, 1972. The remaining \$150 million, or the local share, is due starting in 1975. WMATA had sold \$820 million in bonds through March, 1974. In 1970, the Maryland General assembly created a Department of Transportation which has paid part of the Montgomery and Prince George's County capital cost allocations for the bus and rail

#### REASSESSMENT-II

In March, 1974, WMATA was awaiting results of a new net income analysis which would forecast ridership and revenue for the bus and rail systems based on land use data, population and employment trends, operators' wages and other factors.

The transit authority also had a study underway for development of a new capital cost estimate and construction schedule. Shortages of fuel, cement and reinforcing steel caused the cost of Metro to go up several per cent as of February, 1974.

The new cost estimate will reflect recent bidding experience—unit prices which have escalated rapidly because of supply shortages

and inflation.

From this information, WMATA will develop a new financial plan on which to base its planning for the next five years.

# **Minority Development Office: Fair Hiring** Watchdog

WMATA's Office of Minority Development promotes the fair hiring and advancement of minority persons both within WMATA and among its contractors. It also promotes the development of minority individuals and firms to compete for Metro jobs.

Charles A. Dowdy, head of the office, reports success in 1973 in monitoring WMATA's affirmative action program for the hiring and promotion of qualified members of minority groups. He reports that as of March, 1974, minorities constitute 40 per cent of the headquarters staff and 20 per cent of the professionals.

About 50 per cent of the known minority architectural and engineering firms that have expressed an interest in WMATA design work are performing Metro work, Dowdy reports.

Construction contract awards are a different story. Few minority-owned firms are qualified to do the heavy construction work required for Metro, Dowdy says. Through February, 1974, only about 30 minority-owned firms are doing any construction work for WMATA and 25 of these firms are small-scale sub-contractors.

Minority construction firms, he says, often lack bonding capabilities, capital for necessary equipment, and the managerial and technical abilities needed to successfully bid on a project.

#### **MINORITY RESOURCE CENTER** WMATA provided the start-up money for a

unique venture designed to correct this situation. The WMATA board approved \$100,000 to set up an independent agency, the Minority Contractor Resource Center, which is to help minority-owned firms qualify for contract awards for Metro and other construction projects. The center's staff and WMATA are seeking federal funds to keep the center operating.

The resource center, located at 1750 K St. N.W. with a staff of six directed by Frank Kent, began operations in January, 1974.

Despite their technical expertise, many firms have bonding problems because they lack managerial skills, according to Kent. He says inadequate record keeping is a common problem among several companies. The center responds to this problem by supplying the financial experts to help a minority contractor put his records in order.

Kent says the center also provides assistance for the accurate estimating of project costs so firms may develop accurate and competitive bids, legal help so companies can gain a full understanding of contracts and contractual responsibilities, and other types of technical assistance needed by individual firms.

Developing qualified minority contractors for the construction of rapid transit systems could, in the long term, have a great impact on the economy of the minority communities throughout the country, Kent says.

"It appears," he says, "that urban mass transit will be a major priority in this country for the next 25 years. If minority firms become qualified as prime contractors in the construction of these systems, it could represent a whole new phase in the civil rights movement. It could bring minorities into the American mainstream."

Although initial funds for the center came from WMATA and the center's staff expects to deal primarily with Metro contractors, the staff also is prepared to assist "any contractor who walks through the door," according to Kent.

#### **WASHINGTON PLAN**

WMATA enforces fair hiring practices on the part of any Metro contractor, whether or not the company is minority owned. Dowdy's office determines whether or not contractors are in compliance with the minority hiring requirements of the Washington Plan. The plan, developed by the U.S. Department of Labor, specifies certain increasing percentages of minority personnel to be used in specific crafts. If a contractor is unable to meet the percentages set forth in the plan, he must prove that minority workers in that field are simply not available.

When the pool of minority construction labor is not sufficient to meet the quotas of the Washington Plan, Dowdy's office seeks to increase regional training programs so that the Washington Plan goals can be met.

# And Now, a 1979 Tour...

This composite artist's rendering shows design features that will be typical in the Metro system. At upper left, the escalator entrance to an underground station is marked, at curbside, by a 12-foot tall bronze-colored pylon. The parapet surrounding the entrance is faced with white granite. At upper right, the station mezzanine features fare gates, an elevator (in left background) to take handicapped persons to the train platform, and a kiosk which houses the station attendant. A person in a wheel chair prepares to use the specially designed elevator to a station mezzanine. The elevator is enclosed by glass on three sides for maximum safety. At right, the passageway leading to the station mezzanine features vending machines for change and farecards, walk-up telephone stalls, and regional and local maps along the left wall. A bronze-colored handrail guides pedestrians along the wall at right.



A 12-foot bronze-toned pylon with a backlighted M marks the station entrance at 14th and Eye Streets, N.W.

Viewed from above, the entrance appears as a square-cornered U with escalators angled into the U from its open end. The white granite facing of the entrance extends above ground to form a low parapet (wall).

Today is Saturday, April 14, 1979 and you are a visitor from 1974 to Washington's nearly complete Metro system. Metro is already a major attraction for Washington tourists.

The Metro system covers 98 miles in Washington, D.C. and its Maryland and Virginia suburbs. The first phase of the system began operating nearly four years ago. Now, the system is nearly complete with a few finishing touches needed on some of the suburban lines.

As you approach the escalators at the 14th Street entrance to the McPherson Square station, round inserts imbedded in the rubber handrail enable you to discern which way the escalators are moving.

As you step into a passageway at the bottom of the escalator, you find a row of seven-foot-high bronze-colored vending machines on your right. The machines dispense farecards in exchange for money. The cash value of the card is magnetically coded and visually marked on the card. Depending on the amount of money you deposit, your card may be worth a one-way ride or it may be worth up to \$20 in transportation.

Beyond the machines, three-sided walk-up telephone stalls are mounted walst high and back-to-back on the wall. System and neighborhood maps cover the outside panels of the booths. The maps are useful for finding the correct route to any point in the Metro system, or for finding any point within the immediate neighborhood of the station.

Acoustic tiles in the 9½-foot-high ceiling silence echoes. Direct incandescent lighting beams down from recessed cylinders in the ceiling. On the floor are six-sided quarry tiles of two reddish hues—rust and dark flash.

#### MAJOR DESIGN THEMES

Although you have yet to enter the main portion of the station, you have been introduced to five major design themes common throughout the Metro system:

Unpainted sealed concrete walls, a simple and ruggedly attractive design feature easy to maintain.

Recessed wall with railing, a feature designed to prevent people-wall contact and thereby reduce the opportunity for vandalism and graffiti.

Acoustic tiles in the ceiling, one of the many features designed to keep sound levels to a minimum.

Bronze or bronze-colored metal on the outside pylon, the escalators, the vending machines and the handrails. Bronze is the basic metal color used in the stations, excluding the polished aluminum color of the rail cars themselves.

Reddish hued tiles form the basic floor material used throughout the underground portion of the system.

As you leave the passageway, you enter the station mezzanine. The station is about 600 feet long, 60 feet wide, and 30 feet high measuring from the track surface to the peak of the vaulted ceiling. From the mezzanine, there are no columns or other obstructions to block your view.

A glass and metal enclosed kiosk is centered

on the mezzanine with fare gates on either side. From his vantage point, the attendant inside can monitor most of the station activity by direct observation. For the areas of the station and passageways he cannot see directly, he can see via closed-circuit television. He also monitors, electronically, the operation of the vending machines and the fare gates.

The waist high fare gates are closed until you slide your farecard into the slot on top of the gate. The machine electronically determines that your card is valid and it magnetically marks the card with the station location and the time. It does not deduct any fare from the card, since that is done by the exit gates at the end of the trip.

Escalators on both sides of the mezzanine operate to and from the train platforms below. This station has side platforms. Other stations have center platforms. The up and down escalators are located in tandem fashion along either side of the mezzanine.

#### ARCHED CEILING

As you step from the escalator onto the station platform, you direct your attention to the coffered arch which forms the walls and ceiling of the stations. The coffers vary in depth, from % inch deep at the bottom to as much as 2 feet, 6 inches deep across the ceiling at some stations.

Since half the Metro stations are underground and must bear the weight of thousands of tons of earth while withstanding normal vibration from the streets overhead, designers chose the classic arch because of its strength.

The original designers felt that the massive and timeless quality of the vault design was in keeping with the capital's monumental architecture.

The station platform is separated from the wall by about three feet, with a precast concrete parapet along the platform edge nearest the wall. Granite benches extend from the parapet at intervals.

The separation between walls and station platform serves a dual purpose. First, it provides a convenient channel for placement of the indirect fluorescent lighting which illuminates the walls of the station. Second, it

maintains a distance between the walls and people which helps to discourage graffiti specialists.

#### **PYLONS CARRY INFORMATION**

Bronze-colored pylons, clad in porcelain enamel and similar to, but smaller than those marking the station entrance, are spaced at wide intervals along the subway platform. The pylons serve as information posts, with the information written vertically in white letters. A pylon near the center of the platform lists each of the stations ahead.

At center platform stations, the pylons also serve as outlets for the heating and air conditioning systems. The air is expelled through the square tops of the pylons.

A row of footlights, imbedded in a foot-wide strip of white granite along the edge of the station platform, begins to pulsate. This signals the imminent arrival of a train. You hear none of the rumbles, clickety-clacks and squeals that announce train arrivals in the older rail systems.

The latest in sound reduction technology has been used throughout the system. The track itself is made from continuous-welded rail, which eliminates the clickety-clack caused by metal wheels hitting track joints. The track is anchored to the reinforced concrete track bed by resilient rubber-like fasteners which absorb vibration and sound. Acoustic tile is used beneath the station platform next to the tracks to deaden sound generated by the train wheels as the cars enter and leave the station.

The whole track bed becomes a "floating slab" in areas which, because of a variety of factors, are highly sensitive to noise or vibration. Vibration is all but eliminated by mounting the track bed on elastomer or fiberglass pads. This also reduces the sound to a level that is either inaudible, or barely audible above the normal sounds in and around the buildings.

The granite strip on the platform edge is especially useful to the visually handicapped since, by its contrast in texture to the tile used on the rest of the platform, it warns the person that he is near the platform edge.

A four-car train, consisting of two sets of "married pairs" (cars connected back to back) enters the station. A train can be composed of

### Floating Slabs, Padded Rails Keep Metro Quiet

Metro will be the first transit system in the nation to use cushioned tracks and floating concrete track slabs to reduce wayside noise and vibration.

Floating slabs will be installed where noise levels from the trains will be higher than established criteria for each particular area. In such cases, the concrete track slab will be placed on three-inch synthetic rubber or fiberglass pads which will absorb much of the vibration and reduce the noise level about 10 decibels.

#### WELDED RAILS

Metro's trains will run on continuous welded steel rails which will be cushioned by ¾ inch sound and vibration absorbent pads where necessary throughout the entire 98 miles. The floating track slabs will be used in special cases such as where Metro's alignment is close to hospitals or other facilities where vibration-

sensitive equipment will be used. They are also to be used under special trackwork such as crossovers and switches.

Where Metro is close to buildings, floating slab installation has the effect of increasing the distance between Metro and buildings by about 180 feet in rock and 50 feet in soil.

#### AIR SPRINGS

In addition to the floating slabs and padded rails, Metro cars will "float" on air springs or some other suspension system which will eliminate much of the vibration transmitted from the wheels to the track.

Air springs are balloon-like bags which work like a bellows and are installed between the wheels and the car body. Pressure inside the springs varies according to the weight of the car and the people inside, with air compressors releasing the air and filling the bags as necessary. Most modern passenger buses use air springs.



two, four, six, or eight cars.

The cars are of a sculptured contemporary design in polished aluminum highlighted by the red, white and blue Metro color bands at the front. A large vertical window in front allows you a clear view of the train's attendant. The tinted panoramic side windows are linked by a wide bronze colored vinyl band to tie the design together.

Three sets of side doors slide open along the length of each 75-foot car. You step into the lead car onto a heavy-duty brownish-orange carpet. The 81 padded seats are either orange, yellow or brown. The 10-foot wide car has a standing room capacity of 94 in addition to the 81 seats.

As you sit behind the train's attendant, you notice with some surprise that the doors close and the train begins its acceleration with apparently no action on his part. The electronic equipment at Metro's operations control center downtown regulates the speed and spacing of your train. The attendant is there to override the electronics should it become necessary, and to monitor the opening and closing of the doors.

Except for the sense of acceleration and deceleration, you have practically no sense of motion as the train swiftly moves to the Metro Center station. The train, indeed, is a "sideways elevator."

The train averages 35 miles per hour, including stops, along the entire line. Between some stations, the train travels at 75 miles per hour.

#### METRO CENTER

After a trip which takes less than a minute, you arrive at Metro Center. From this point, it would take only 30 minutes to reach the most distant point in the rail system, Springfield, Va. It would take 29 minutes to reach Franconia, Va.; 26 minutes to reach either Rockville, Md. or Vienna, Va.; 23 minutes to reach New Carrollton, and 22 minutes to reach either Glenmont or Greenbelt Road, Md., or Huntington, Va.

Trips to points within the District of Columbia would, of course, take much less time. You are within a 10-minute ride of Anacostia, Fort Totten or Tenley Circle, and within a nine-minute

ride of Potomac Avenue. If you were headed for Arlington, you could reach Rosslyn in six minutes, Clarendon in nine minutes, or Crystal City in 12 minutes. In nearby Maryland, Bethesda would be a 14-minute ride and Silver Spring a 15-minute ride away.

You step off the train onto the center platform at the Metro Center station. Two sets of three parallel escalators each are in operation near the center of the station. You take one of the escalators to the upper train level to catch a red-line train to Rhode Island Avenue.

The vaulted ceilings of the upper and lower level station platforms cross under 12th and G Streets, N.W.

Other transfer stations in the rail system are located in Gallery Place at 7th and G Streets N.W., L'Enfant Plaza at 7th and D Streets S.W., and Fort Totten in northeast Washington.

After arriving at the upper platform, you board an eastbound red-line train bound for the aerial station at Rhode Island Avenue in northeast Washington. The trip will take less than seven minutes including stops at Gallery Place, Judiciary Square, and the Union Station-Visitor Center.

Upon leaving the Union Station-Visitor
Center, the train breaks into daylight and then
appears to become airborne as the track bed,
supported by reinforced concrete columns
which are not visible to the train passenger,
rises to a level that varies between 10 and 30
feet above the ground. The train passes over
New York Avenue and the old Baltimore and
Ohio Railroad yard, which now also serves as a
storage and inspection yard for Metro.

#### RHODE ISLAND AVENUE

Soon, the Rhode Island Avenue station comes into view. As seen from the perspective of an approaching train, the arched canopies extending on either side of the station platform's central columns convey an impression of winged flight. The canopies, which extend along 300 feet of the center platform's 600 foot length, are of unpainted sealed concrete.

The station platform is surfaced with six-sided multi-hued brick. Also present is the white granite strip with imbedded signal lights along the platform edge.

As you alight onto the platform, you notice that the sun is shining through a transparent strip running the length of the shelter's ceiling between the double arches of the canopy. The open strip between the canopy arches is covered by a long rounded skylight of hard, transparent plastic. Incandescent lights, located at intervals within the skylight, illuminate the platform at night. Pylons with double light globes illuminate the platform beyond the ends of the shelter.

Escalators grouped near the center of the elevated platform take passengers to the ground level. The single kiosk on the lower level is flanked by the fare gates.

When you insert your farecard in the exit gate, the machine notes both the time and the place that you entered the system and deducts the appropriate fare, printing the remaining value on the farecard. The fare gates can deduct fare based on the time you have spent in the system as well as the distance you have travelled if you remain in the system longer than the ample free time that is allowed.

The time penalty is designed to prevent people from riding the system all day while paying only for the distance between the point where they entered the system and the point where they left the system.

where they left the system.
You leave the station through metal gates and walk onto the sidewalk in the Metrobus terminal area. At this station you will also find a special vehicle lane for cars dropping off or picking up passengers and a larger parking lot.

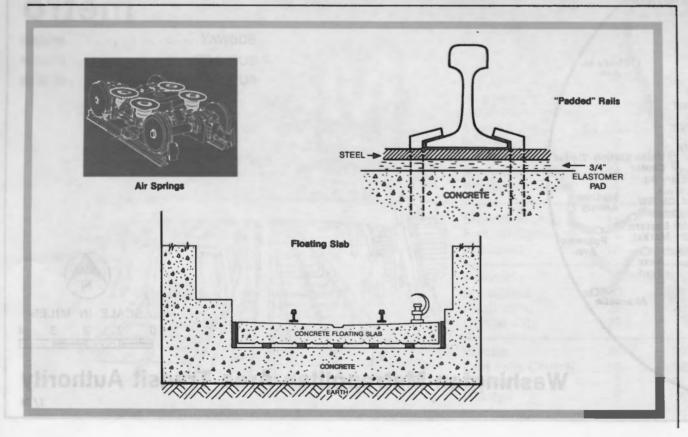
#### AND, NEXT TIME ...

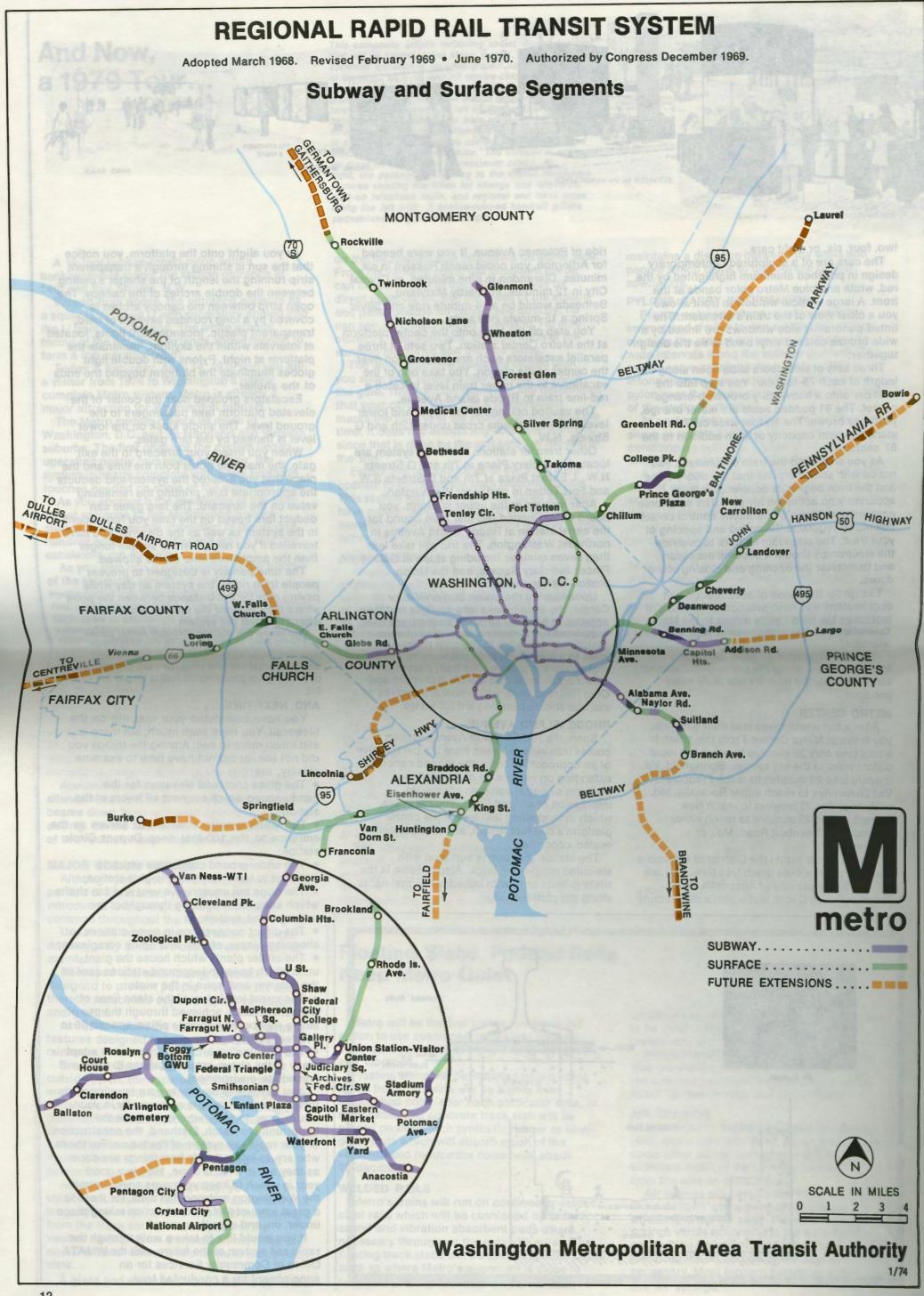
You have completed your first trip on the Metrorail. You have seen much, but there is still much more to see. Among the things you did not see, or did not have time to examine closely, are:

- The glass enclosed elevators for the handicapped which connect all levels of the station;
- The white granite bowl which serves as the entrance to the 100-foot deep Dupont Circle station;
- The underground concourse which is adjacent to the Friendship Heights station;
- The huge but unobtrusive vent and fan shafts which keep air circulating throughout the underground system;
- The direct connections in some stations to shopping plazas, stores, and office complexes;
- The chiller plants which house the giant units which keep underground stations cool in the summer and warm in the winter;
- The street level view of the clean lines of the aerial tracks, achieved through the use of single reinforced concrete pillars spaced 80 to 110 feet apart; and
- The imaginative architecture used to adapt many of the above-ground stations to their immediate environment.

Just as there is novelty in your imaginary trip forward in time, there is also novelty in your return, now, to 1974, where you have the opportunity to watch, firsthand, the construction of your rapid rail system of the future. For those who are as interested in how things are done as they are in what is done, 1974 is a good year in which to keep your eyes open around the Washington metropolitan area, for there is a great amount Metro construction taking place under, on, and over the ground.

If you would like to take a walk through the rapid rail system of the future, call the WMATA Office of Community Services for an appointment for a conducted tour.





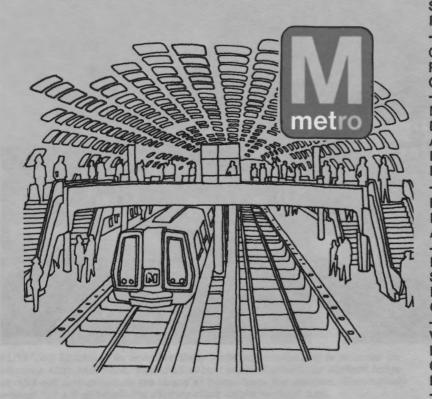
METRO CENTER—The bi-level Metro Center transfer station is under 12th and G Streets, N.W. This photograph looks northward along the axis of the 12th Street level. Escalators will be installed in the opening in the foreground to take passengers to and from the 12th Street train platform below. The juncture of the 12th Street and G Street station arches may be seen at center. The G Street station platform and trackbed run at right angles (lower center). About 186,000 passengers will use the station daily in 1990.



ESCALATOR UNDER CONSTRUCTION—Metro escalators will feature bronze cladding. Escalators between mezzanines and platforms will have glass sides for easy visibility and passenger safety. Metro designers many years ago decided to simplify the architecture to provide long sightlines and a minimum of obstructions to discourage crime. This escalator is at Judiciary Square station.

# **Typical Train Times Between Stations**

**Peak Period Travel Times** 



ne gies ee enganduu	Metro Center	Gallery Place	L'Enfant Plaza	Dupont Circle	Rosslyn	Pentagon	Capitol South
Rockville	26	27	31	23	29	35	33
Grosvenor	19	20	24	16	22	28	26
Bethesda	14	16	19	11	18	24	22
Tenley Circle	10	11	15	7	13	19	17
Glenmont	22	20	24	25	29	28	28
Silver Spring	15	13	17	18	22	21	21
Fort Totten	10	9	12	14	18	17	16
Greenbelt Road	22	20	22	25	30	28	26
<b>Prince Georges Plaza</b>	17	15	17	20	25	22	21
Columbia Heights	7	5	7	11	15	11	11
New Carrollton	23	23	19	27	29	26	17
Deanwood	16	16	12	20	22	19	10
Addison Road	20	20	16	24	26	23	14
Minnesota Avenue	14	14	10	18	20	17	8
Potomac Avenue	9	9	5	13	15	12	3
Branch Avenue	19	16	14	23	26	21	18
Federal Center, S.W.	16	14	11	20	23	18	15
Anacostia	10	8	5	14	17	12	9
Franconia	29	26	24	32	26	20	28
Springfield	30	27	25	33	27	21	29
Huntington	22	22	19	22	16	13	23
Crystal City	12	9	7	13	6	3	11
Vienna	26	29	30	26	20	26	33
East Falls Church	15	18	19	15	9	15	22
Clarendon	9	12	13	9	2	9	15
Rosslyn	6	9	10	6	_	6	12

# Marketing Office Seeks to Improve Mass Transit Product for Customer



"We are one of the largest retailers in the Washington metropolitan area," says John E. Warrington, acting director of WMATA's new Office of Marketing.

WMATA's marketing program, approved by its board of directors in November 1972, is based on the idea that the authority sells a retail product—mass transit, and that the sophisticated techniques developed by private industry to promote product use are applicable to the promotion of mass transit.

"It is the first duty of marketing to improve the product rather than merely to sell it," Warrington says. He explains that the marketing concept formalizes the necessity for doing business in a manner that satisfies three fundamental requirements: (1) that the business serve customer needs in such a way as to assure customer satisfaction; (2) that the business be conducted in a manner to generate sufficient return on investment to assure continuity and stable growth; and (3) that the business of marketing be recognized as the responsibility of all functions and principals of the business.

To achieve the above requirements, the Office of Marketing is divided into four branches: Consumer Affairs, Merchandising, Sales, and Youth Services.

#### CONSUMER AFFAIRS

The Consumer Affairs branch, employing a majority of the 100 employees in marketing, is designed to fulfill requirement (1) of the marketing concept—customer satisfaction. When Metrobus passengers need to know about a particular bus route or schedule, they call the customer information section of Consumer Affairs which has 54 transit information operators. About 26,000 such calls are made each week.

Not all who call customer information are able to get through when they need information because of the heavy backlog of calls at various periods of the day. In order to reduce the high number of "lost calls," marketing plans to install, within two years, computerized information retrievers which will enable operators to respond much faster and more accurately to questions of callers.

To bring some measure of early relief to the beleaguered information operators, three non-computerized information retrieval units will be in operation in 1974 on an experimental basis. These should reduce substantially the "wait" time currently experienced by many callers.

When Metrobus customers have a complaint or a suggestion, they may call the Consumer Assistance Section of Consumer Affairs. This section, one of the latest developments at WMATA, also handles requests for timetables and, more often than you might think, commendations.

Four consumer representatives handle calls and correspondence numbering nearly 1,000 per week and take follow-up action on behalf of the consumer. The representatives keep logs of each transaction. At the end of each month the information is fed into a computer for a breakdown of the calls. The Marketing office studies the computer printouts to determine which areas of Metrobus service require special attention.

#### MERCHANDISING BRANCH

The Consumer Research Section of the Merchandising Branch supports the other branches with special studies and attitudinal surveys. This section, for example, recently made a study to find out who the Metrobus users are, what they think of the system, and what emphasis they place on needed improvements. Such studies are expected to help WMATA set priorities in meeting the needs of its passengers.

The graphics section of Merchandising focuses its energies on the production of

improved timetables and other passenger informational aids.

Prime-time television commercials are the most visible products of the Merchandising Branch. The goal of the commercials is to make the public aware that a new corporate attitude exists on the part of the public bus owner—one that is sensitive and responsive to customer needs and desires.

Just as marketing programs in private industry are designed to produce profit, Metrobus marketing is designed to produce the equivalent of profit for a deficit-financed public corporation—off-setting revenues.

The Merchandising branch and the Sales branch respond to item (2) of the fundamental requirements of the marketing concept—that the business be conducted in a manner to generate sufficient return on investment to assure continuity and stable growth.

Merchandising sells advertising, such as carcards aboard Metrobuses. It handles revenue from vending machines located on Metrobus property and it is developing plans for vending concessions throughout the system. The authority expects advertising revenues of at least \$150,000 for fiscal 1974 (July 1973-June 1974) and anticipates much higher revenues for future years.

At present, two advertising firms handle Metrobus advertising, both on a short-term basis. Merchandising anticipates substantial future revenues for its advertising sales upon execution of long term contracts, one each for the rail and bus systems.

#### SALES BRANCH

The Sales branch sells charter service contracts for the lease of Metrobuses and bus tickets to Metrobus passengers. The Sales branch expects about \$4.4 million in revenue during fiscal 1974 for its charter and contract operations alone.

Selling bus tickets to passengers is perhaps



ARCHED CANOPY TO PROTECT PASSENGERS—This double arched canopy extends 300 feet along the passenger platform at Rhode Island Avenue station. Aerial and surface stations will feature the canopies with windscreens to protect passengers from the elements. Between the two arches is a skylight. Light globes installed between the arches will provide illumination at night.

## **How Station Plans Develop**

the most obvious function of the Sales branch. The objective of the Consumer Sales section is to "market Metrobus where the customer is." During the current fiscal year, this section plans to establish 250 off-site sales offices, and to generate \$7 million in ticket sales revenue through these outlets. With 155 tickets offices operating in the first quarter of fiscal 1974 (July, August and September), consumer sales realized revenue for that period of \$2,013,693.

#### YOUTH SERVICE BRANCH

The Youth Service branch, unlike the other marketing branches, has a narrow focusthe reduction of vandalism aboard Metrobuses used for school trips. Through special programs and contests within the schools with awards presented to outstanding homerooms and to individual students, Youth Services promotes overall good citizenship as the most effective means to reduce vandalism against WMATA property.

The youth services specialists have less difficulty than most in getting and holding the attention of youngsters who recognize them because of their "other" job. They are Middle Linebacker Harold McLinton, Flanker Roy Jefferson and Cornerback Ted Vactor of the Washington Redskins.

Along with every other WMATA office, the (3) of the marketing concept—"that the business of marketing be recognized as the

marketing office works to achieve requirement responsibility of all functions and principals of the business.' Metrobus customers rightfully expect efficient, dependable, and courteous service. Providing this kind of service is the best "marketing" plan that WMATA, or any serviceoriented industry, can produce. All divisions of WMATA are involved in marketing as they work to improve service so that more people will choose to ride Metrobuses.

Metro . . . a city and its suburbs unite with the federal government to plan, finance and construct a rapid rail transit system-first for the nation's capital . . . abstract dots on maps transformed to concrete and steel structures. In the transformation the citizen has an active role to play if he so chooses.

Station sites, as well as basic alignments for the 98-mile transit system were developed after intensive staff, governmental and regional citizen effort prior to March 1, 1968.

On that date, the region, through the Washington Metropolitan Area Transit Authority Board, adopted the transit system essentially as it is known today, although basic routes, stations and alignments had been discussed continually since 1962.

From the 1968 plan, called the ARS (Adopted Regional System) the WMATA staff and consultants develop site plans, general plans and final designs for specific facilities to be constructed.

#### PEOPLE COME FIRST

In planning the transit system, the main emphasis is on people, and the relief of any city's major problem—getting people to and from their jobs. Station locations are selected after considering existing and projected land use, historic bus and automobile travel patterns and the focal points of the arterial street system. Access to the stations continues to be an extremely important consideration.

Station sites are based on review of available regional socio-economic data such as population, employment and land use forecasts.

Routes are based on specific studies, including analysis of alternative routes, ridership and revenue forecasts, operating costs, preliminary engineering studies, environmental impact, and estimated capital costs as well as ideas from citizens.

Prior to 1968, WMATA analysis of the specific tests resulted in a composite and compromise system composed of the best routes. This was

tested further, and minor adjustments made. Finally, a proposed regional system was presented to the public in 1967 and 1968 in a series of briefings and hearings, leading to the board's adoption of the 98-mile system on March 1, 1968.

#### SITE PLANS

Using the ARS as a basis, WMATA develops a site plan for each station and alternatives. The site plan locates the necessary bus bays, parking, plots the actual station configuration including locations of platform and access points, and the projected traffic circulation around the station.

The site plan then is reviewed within the WMATA organization, at a joint meeting of representatives of the offices of operations and maintenance, planning, engineering, real estate and architecture.

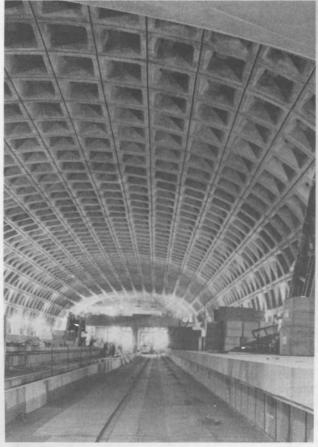
Representing local jurisdictions, staff members of the regional transit planning bodies (Northern Virginia Transportation Commission, Washington Suburban Transit Commission and the local transportation department staffs) participate in the development process.

Members of the WMATA Office of Community Services relay citizen desires obtained at formal and informal meetings on the stations and

After further internal review, the station site plans are reviewed by the local jurisdictions through the transportation planning bodies, planning commissions and the planning and public works staffs.

#### **PUBLIC HEARINGS**

The public is encouraged to comment on station plans at the scheduled public hearings. Testimony presented at the hearings is reviewed by the WMATA board. After board approval the plans are transmitted to a section designer for final design—incorporating any changes as a result of the board decision after the public hearing.





FLOATING SLABS—The concrete Metar trackbed (foreground) is mounted on vibration absorbent pads. Sound absorbent panels beneath the platform ledge at right will further reduce the sound of trains inside the stations. Continuously welded rail will eliminate the clickety-clack on the railroad track.

NEARING COMPLETION—Finish work continues on the Judiciary Square station. This side platform facility is among six stations to be opened in 1975. Passengers will pass through fare collection gates on the mezzanine (center) and descend to the train platforms on escalators seen under construction on either side of the

# Bus Lanes Prove Successful, More in Planning Stages

Bus Lanes Prove Successful, More in Planning

"Washington's only existing public transit system—the bus system— is nearing death," a highly regarded Washington Center for Metropolitan Studies report warned in 1970. Today, only four years later, the bus system, instead of dying, is being reborn.

The Washington metropolitan area has become a testing ground—and a successful one—for improving public transit via coordinated bus and rail rapid transit.

One experiment which is working well and mushrooming is the priority or preferential bus lane project. The idea had its beginnings years ago when the federal National Capital Transportation Agency (forerunner of WMATA) undertook a study to determine the feasibility of regional mass transit. Completed in late 1962, the study included a recommendation for frequent express bus service on Shirley Highway (I-95) between Route 236 (Duke Street) and the Pentagon. The agency suggested no special facilities for bus operations on the highway although plans were being made at the time for substantial roadway expansion.

In 1964, representatives from a handful of area agencies got together to determine what, if any, special bus facilities might be included in the expansion. On the basis of their investigation, the highway plans were revised.

#### A PROJECT IS BORN

By the late 1960s, the Shirley Highway Express Bus on Freeway Project was underway. Sponsored by the Department of Transportation Urban Mass Transportation Administration (UMTA), the Federal Highway Administration, and the Northern Virginia Transportation Commission, the project tested the feasibility of an exclusive bus lane in the median strip of a freeway; bus priority lanes in the downtown distribution area; fringe parking facilities;

new-look/new-feature buses; and extension of bus service to additional residential areas.

How Station

Plans Develop

Bus ridership climbed from 2,096 in September, 1969 to 16,200 in January, 1974 in peak traffic hours. Based on surveys taken since the Shirley project began, the increase in ridership has been accompanied by a decrease of more than 3,000 automobiles using the road during peak periods between the fall of 1969 and 1971. According to an UMTA interim report published in November, 1973, the exclusive busway carried between 500 and 1,000 more people than the two Shirley Highway automobile lanes combined in March and June 1972.

Time savings appear to be substantial for many travelers in the Shirley Highway corridor. Also, adherence to schedules has substantially improved since the implementation of the highway preferential bus lane. UMTA estimates that the region has been spared more than 1,700 tons of pollutants annually because of the reduction of auto usage resulting from the bus lane project.

#### IT'S CATCHING ON

Preferential lane treatment is not new to this area. It was tried on a small scale in the District of Columbia in the mid-1960s. They were then called simply bus lanes, and no evaluation of effectiveness was made. With the Shirley Highway project as a catalyst, 23 miles of bus priority lanes have been established in the city and, in 1974, more (20 to 25 miles) are being planned. Preferential lanes are also being planned in the Maryland and Virginia suburbs.

A preferential bus lane, as the name implies, is a lane reserved in varying degrees for bus usage. The curb bus lane, the easiest and least expensive to establish, is open only to buses (and possibly taxis) and to automobiles making right turns or loading or discharging

passengers. Costs for this type of preferential lane range from \$850 to \$1,000 per mile.

A second type is the exclusive express laneopen to buses only and usually located in the center of a street. A curb lane can be used if right turns are restricted. Cost estimates for this type (depending on location, equipment installed, such as overhead signals, etc.) run from \$175,000 to \$250,000 a mile in the Washington area.

A third preferential lane is the busway, which requires the construction of a new lane, perhaps on an existing roadway or a new road utilizing abandoned railroad rights-of-way. The Metropolitan Washington Council of Governments (COG) estimates a price of about \$400,000 per mile "exclusive of right of way land acquisition."

#### DISTRICT OF COLUMBIA

In 1974, 19 bus priority lanes exist on 12 streets in the District of Columbia. During peak traffic hours (7 to 9 a.m. and 4 to 6 p.m. Monday through Friday) 3,225 bus trips are made providing transportation for 161,000 persons who would otherwise require 107,000 automobiles. (Auto ridership in 1974 averages 1.4 persons per car and is declining annually.)

The 1970 census reports that 16 per cent of area residents commute by bus compared to a 22 per cent total for the metropolitan area in

Existing preferential bus lanes in the District of Columbia as of January, 1974 are as follows:

H Street, N.W.—North side between 14th
 Street and Connecticut Avenue (a.m. and p.m.)

• 16th Street, N.W.—East side between H and U Streets (p.m.); west side between Florida Avenue and L Street (a.m.)

• 7th Street—West side between Constitution Avenue, N.W. and Independence Avenue, S.W. (a.m. and p.m.)

• 14th Street—East side between C Street, S.W. and New York Avenue, N.W. (a.m and p.m.); west side between Pennsylvania Avenue, N.W. and D Street, S.W. (p.m.)

 9th Street Expressway—West side between Constitution Avenue and bus turnout south of Independence Avenue (all hours.)

 Independence Avenue, S.W.—North side between 6th and 12th Streets (p.m.).

 Pennsylvania Avenue, S.E.—North side between Sousa Bridge and 2nd Street (a.m.); south side between 2nd Street and Sousa Bridge (p.m.)

 M Street, N.W.—North side between 29th Street and Bank Alley (p.m.)

 Benning Road, N.E.—North side between 34th and Morse Streets, (a.m.); south side between 15th and 34th Streets (p.m.).

 H Street, N.E.—North side between Florida Avenue and 2nd Street (a.m.); south side between 2nd Street and Maryland Avenue (p.m.).

 Constitution Avenue, N.W.—North side between 6th and 15th Streets, (a.m. and p.m.); south side between 15th and 9th Streets (a.m. and p.m.)

 Connecticut Avenue, N.W.—West side between Maryland line and Calvert Street (a.m.); east side between Calvert Street and Maryland line (p.m.).

#### PROPOSED D.C. LANES

• Planned for spring, 1974:

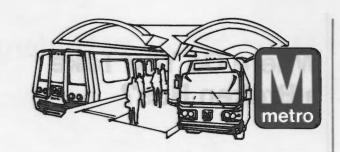
1) M Street to Rosslyn Circle—exclusive bus lane using Key Bridge, four lanes outbound, two inbound (p.m.)

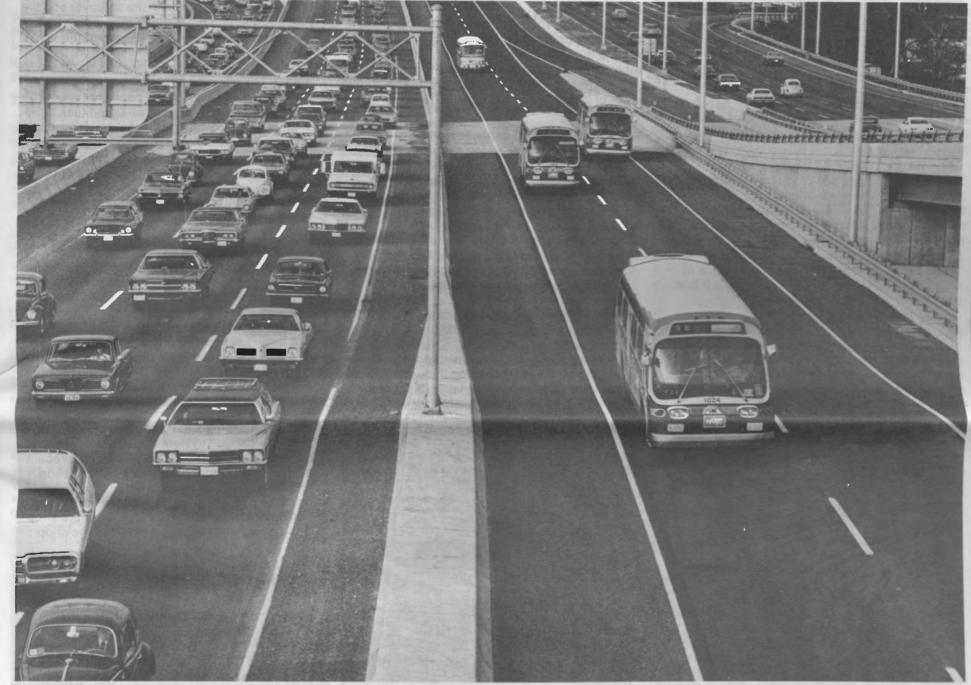
2) South Capitol Street (lane will be added in median north of Portland Street to Douglass



NEW METROBUS—The region bought 620 of these AM General buses in 1974.

The first of the plush buses began regular service in February, 1974, and had become a common sight on Washington area streets by the following month. The bus features carpeted floors, walls and ceilings and fabric-covered contoured seats.





SHIRLEY EXPRESS LANE—Buses speed Virginia commuters to and from work over Shirley Highway's express bus lane. The exclusive lanes have been the "inspiration" for many throughout the nation.

Bridge. Bridge will be widened one lane later).

- Also planned for 1974:
- 1) Georgia Avenue, N.W.
- 2) Pennsylvania Avenue, S.E.
- 3) H Street, N.E.
- 4) 11th Street, N.W.

#### MARYLAND

There are no preferential bus lanes in the Maryland suburbs as of early 1974. However, local governments have expressed an interest in the idea through the Maryland National Capital Park and Planning Commission. A feasibility study conducted by Peat, Marwick, Mitchell and Co. suggests the following locations for preferential bus lane treatment (in order of priority):

- New Hampshire Avenue between Eastern Avenue and Metzerott Road.
- Georgia Avenue between Eastern Avenue and Viers Mill Road.
- 16th Street between Eastern and Georgia Avenues.
- Baltimore-Washington Parkway from Route 450 (Annapolis Road) to the District line.
- Wisconsin Avenue between Western Avenue and Battery Lane.

- Rockville Pike between Grosvenor Lane and Viers Mill Road.
- Connecticut Avenue between Bradley Boulevard and Viers Mill Road.
- Kenilworth Avenue between Baltimore-Washington Parkway and Greenbelt Road.
- Colesville Road between Georgia Avenue and Sligo Creek Parkway.
- Colesville Road between Sligo Creek Parkway and White Oak.
- Bladensburg Road between Eastern Avenue and Annapolis Road.
- Annapolis Road between Bladensburg Road and Route 495.

#### VIRGINIA

The first bus priority lane in the region, in the Shirley corridor, has been a catalyst for creation of several other priority lanes in Northern Virginia.

The Arlington County Board appropriated \$150,000 for a bus preferential lane on Wilson Boulevard from Lexington Street to Rosslyn. This became operational in January 1974.

The lane will eventually connect with the proposed bus lane on Key Bridge. A bus-only

roadway on North Moore Street between Key Bridge and Lee Highway opened in January, 1974 for outbound trips.

Another preferential lane in the planning stage is Arlington Boulevard from Seven Corners to Rosslyn, to tie in with the Wilson Boulevard and Key Bridge/M Street bus lanes. This project will require the construction of an additional lane, currently scheduled to open in fall, 1974. Priority lanes are also under consideration for Columbia Pike, North 10th Street and several other Arlington streets.

A commuter bus lane in Alexandria utilizing North Washington Street and East Abingdon Drive opened in July, 1973. The National Park Service also designated one lane of the George Washington Memorial Parkway-14th Street Bridge ramp for buses. The Alexandria Department of Traffic plans a study for a second bus lane in the Mount Vernon Avenue corridor.

#### **ALTERNATIVES**

A related idea being evaluated is the use of preferential lanes for car pools of four or more persons. This has been accomplished in the Shirley Highway corridor and is being studied for South Capitol Street.

# Where Do You Take a Broken Bus?



If you own a large bus fleet and one of your buses breaks, you may (a) fix it yourself; (b) take it to a commercial repair shop, or (c) take it back to the dealer. (Check a as the only correct answer).

At the beginning of 1974 WMATA owned and operated 1,779 buses (the fleet will exceed 2,000 this year with new acquisitions). As a consequence, WMATA operates one of the largest fix-it shops in the Washington metropolitan area.

The WMATA bus shop located near Bladensburg Road three blocks north of the New York Avenue intersection has enough floor area, 150,000 square feet, to accommodate more than 2½ football fields. A more practical measure of its capacity is represented by the 70 buses which the shop can handle daily.

The shop has some of the characteristics of a factory in that it could, if it had to, build a bus from the chassis up.

WMATA buys its buses directly from the factory. A bus warranty, unlike the warranty on an automobile, covers labor performed on the bus by the owner. This type of warranty is necessary since there are no local transit bus dealers or repair shops, and the bus factory is more than a thousand miles away.

The Bladensburg shop employs 160 skilled workers and nine supervisors, all under the

direction of Alfred Savage, WMATA's Director of Maintenance.

Buses enter the shop for engine replacement, body work or paint. Repairs and adjustments are handled at each of the eight bus garages located throughout the metropolitan area.

The shop is divided into numerous sub-shops, each of which handles a specific repair problem.

#### AIR CONDITIONING MAINTENANCE

The air-conditioner repair shop is one of the busiest sub-shops, even in mid-winter. The backlog of broken air-conditioners from the summer has this shop working at full capacity all winter in its attempt to get ready for the next summer.

Savage is quick to cite air-conditioning units as the bus component most frequently in need of repair. "Bus air-conditioning," he says, "is a short life component in a long-life vehicle."

"The engine," says Savage, "may run 500,000 miles with luck, but the air-conditioner may last only one season." The main problems are compressors and clutches which do not withstand the normal vibration, movement, and speed variations of a bus running its regular routes. (The speed of the compressors vary according to the speed of the engines.)

Vandalism rates high as a cause for repair.

The hardest hit bus components are seats and windows. Vandalism costs the taxpayer and the bus passenger \$250,000 annually. Fifty thousand dollars of that goes toward the upholstery repair sub-shop, which constantly repairs bus seats slashed, marked, or otherwise defaced by vandals. "The upholstery used on these seats," says Savage, "does not wear out or rip as a result of normal wear and tear."

Most of the remaining vandalism costs go to the carpentry shop, which cuts Abcite-coated acrylic to replace broken or damaged side windows. The coating resists most types of damage.

The carpentry sub-shop also repairs the wood component of the bus, the subfloor, which is seldom seen by passengers.

#### PAINT SHOP KEEPS BUSY

A full-scale paint shop is changing the color of all Metrobuses from the colors of the previous bus companies to the Metro red, white and blue scheme. The shop applies decals for the stripes and the Metro logo.

A large section of the Bladensburg shop is assigned to the complete overhauling and rebuilding of bus engines. Defective bus engines are promptly replaced by rebuilt engines so that no single vehicle needs to remain shopbound for long.

Savage explains that the shop operates on a "unit-exchange" system under which any defective part on a bus is replaced by a rebuilt part or, in some cases, a new part. The shop repairs or rebuilds defective parts for future use on other buses. The parts are then stored in a huge stockroom which is centered in the shop building for easy access from all of the shop



Mike Holley, mechanic, overhauls an engine blower in the small units shop of the Bladensburg bus shop. When he is finished, the blower will be stored in a huge supply room to be used, later, as a replacement part





Seen here is a portion of WMATA's bus shop. Overall, the shop encloses an area equal to more than two-and-a-half football fields. The small units shop, which overhauls bus parts for later use as replacement, is in the foreground. The machine shop is in the background.

Manuel P. Mello rebuilds a transformer unit for the fluorescent lighting system on the Metrobüses.

# A New Look for Metrobus Operators

areas.

Skilled workers in the body sub-shop transform bent, bashed and bruised bus bodies back into shape. The damage represents inevitable street encounters; bus versus car, bus versus solid object, or, in a few embarrassing instances, bus versus bus.

#### **TEST TRACK**

The shop has its own "stationary test track" where buses can be road tested without ever leaving the building. The rear wheels of the bus spin at any desired speed on rollers while mechanics, stationed in a rectangular pit beneath the bus, run tests on the vehicle's performance.

Other functions are performed by the welding shop, a blacksmith, an electronics shop, a machine shop, and an auto and truck repair shop for the fleet of 125 cars and service vehicles operated by WMATA.

The bus shop does not perform routine maintenance procedures. Maintenance workers in each of the eight WMATA garages wash and clean the buses on an average of three times per week. They also adjust the brakes about twice a week, and perform daily inspections. The bus operators assist this process by filling out a 67-item check sheet, at the end of each day's run, listing anything needing repair.

Some of the Metrobuses are 24 years old. As far as WMATA is concerned, this puts them 10 years past retirement age. Upon delivery of 620 new buses in 1974, hundreds of the older buses will be replaced. At the end of this process, no operating Metrobus will be older than 14 years,

according to Savage.

Beginning in summer, 1974, Metrobus operators will be wearing their new blue uniforms, designed by Leonard Fisher and Associates, New York, and manufactured by the Howard Uniform Co. of Baltimore, Md.

The new uniforms feature a navy blue waist-length jacket for men and a navy blue blazer-length jacket for women, combined with matching blue trousers for men and blue-gray slacks for women. Specially woven material featuring red Metro logos on a blue field has been fashioned into ties for men and scarves for women.

A blue visored cap with Metro logo in red complete the new Metrobus look for men. Women will wear a soft pill-box style hat, also in blue with the red logo.

For summer wear, operators may choose a light blue open-necked shirt which may be worn in or out of the trousers. The shirt features safari pockets in front and it is worn without tie or scarf.

For colder weather, operators may choose longer length blue jackets with zip-out thermal linings. The jacket is worn with tie or scarf.

Each of the uniform tops features the Metrobus logo on both sleeves.

The new designs resulted from a survey taken among all Metrobus operators, who supplied specifics about the number of pockets they would like to have, style of jackets and pants and the types of fabrics they and their spouses preferred.

Based on this survey, the designer submitted several alternative styles to a committee of 20 operators who then made made the final style choice.



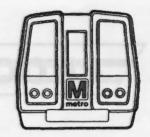
The new Metrobus uniform for women operators features a navy blue blazer-length jacket, blue-gray slacks, and a soft pill-box style blue hat. The red and white Metro logos are on the hat and sleeves.



Joseph F. Cassell overhauls an oil-cooled generator, which provides the current needed to charge bus batteries.

Metrobus operators model the specially designed blue uniforms they will begin wearing in the summer of 1974. The operators in the center, Lillie McClary and James Loyd, wear the standard men's and women's uniform. The uniform worn by Gary Collins, on the left, features a cold weather jacket with zip-out lining. Cleo Williamson, at right, wears the open-necked shirt for warm weather.

# Metro 'Cools It' Underground



Everybody talks about the weather. Metro plans to do something about it.

That something will be to air-condition each of the 53 underground Metro stations.

Like most new rapid rail transit vehicles, Metro trains also will be equipped with airconditioning. Washington, however, will be the first U.S. city to offer riders refrigeration-cooled and dehumidified underground stations. CLEANER AIR

A unique cooling-filtering-ventilating system, designed for maximum economy consistent with rider comfort, will assure Metro patrons of cleaner air than is normally inhaled by urban residents.

Although most cities with underground transit stations can maintain "tolerable conditions" solely by means of ventilation, this is impossible in the National Capital region because of the hot, humid days from June through September.

A detailed check of weather bureau records going back to 1931 showed that Washington had a "normal" maximum daily temperature averaging 83.5 degrees during the June-September period—higher than that of any other U.S. or Canadian city now building or already served by rapid rail transit. This includes New York, Chicago, Boston, Cleveland, Philadelphia, San Francisco, Toronto and Montreal.

#### LOCALLY ...

The 83.5-degree average meant many days with the mercury soaring into the 90s—and

occasionally topping 100 degrees—too warm for ventilation alone to provide a comfortable atmosphere in Metro stations.

As a further illustration of the local problem, Washingtonians, over a year's time, keep their air-conditioners on full capacity about seven per cent longer than homeowners and apartment dwellers in Atlanta.

The evening rush hour will present the greatest challenge to maintaining comfortable temperatures. Without adequate cooling of both trains and stations, most area residents who are accustomed to air-conditioned cars and buses would avoid use of Metro during the muggy summer months.

New high-performance trains present the biggest single obstacle to keeping stations cool, in that they give off far more heat than earlier, slower models.

Summertime temperature of underground stations—most but not all of which will be located in the District of Columbia—will be maintained at 80 degrees with 55 per cent humidity, for "optimum comfort."

#### REFRIGERATION PLANTS

These conditions will be achieved by locating at strategic points throughout the Metro network a series of central mechanical refrigeration plants. Each plant will pipe chilled water to one or as many as four stations.

Within the stations—but well out of sight—powerful fans will blow both fresh and recirculating air over cooling coils and through

ducts into the areas occupied by waiting passengers. Each station will be equipped to handle a cooling load of up to 4.2 million BTUs per hour—sufficient to serve three and a half floors of the National Press Building.

#### **ENVELOPE COOLING**

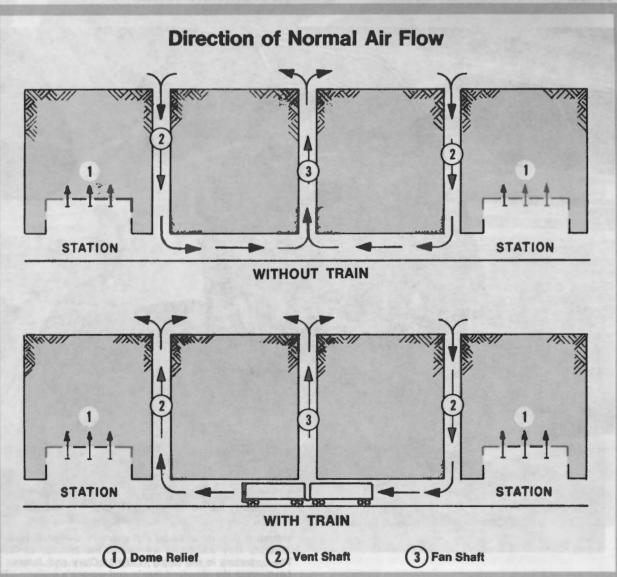
Metro patrons will benefit from two methods of selective cooling. "Envelope" cooling will drape curtains of cool air over selected regions, in the way that bowling alleys are airconditioned up to—but not beyond—the foul line. A flood of cool air, released at an appropriate height, will cascade an airconditioned envelope around Metro patrons.

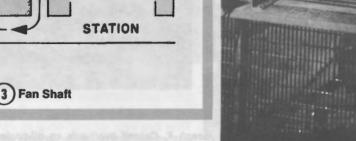
#### SPOT COOLING

"Spot" cooling, the second method, will gently waft jets of cool air directly at the objects or persons to be cooled. This technique is popular in shops and mills, to provide a suitable environment for machinery operators.

The natural separation tendencies that cause warm air to rise and cool air to fall will add to the efficiency of Metro cooling. Elimination of a cool air-hot air intermix will permit most of the former to be recirculated without placing an extra load on refrigeration plants. Hot air will be siphoned off through vents in the dome of each station.

What will all this comfort cost the Metro rider? A half cent per ride—a charge to be built into the general fare structure.





# **Tunnels To be Ventilated**

In the early days of subway tunnel construction, little or no attention was given to ventilation. It was not unusual for subway temperatures to rise to 90 degrees and stay there all summer even though the outside temperature would drop at times to 60 or 70 degrees. Not until the late 1930s, when the "new" Chicago subway system was designed, was any rational analysis for the design of subway ventilating systems made before construction.

Subway ventilation systems must circulate fresh air and replace foul air in addition to dissipating heat that is produced by train motors, passengers and lighting. The system has to perform virtually noiselessly and with relatively low-velocity air movement in station areas and at surface openings.

#### **PISTON ACTION**

Trains moving in tunnels act as pistons, pushing large volumes of air in front and drawing large volumes of air behind. If fresh air were supplied into a subway tunnel at adequate intervals, a ventilation system as a by-product of train operation would be obtained. However, when such volumes of air are pushed into stations, relatively high winds can occur on the passenger platforms. To relieve this blast action, vent shafts are provided in tunnels near the station portals.

An emergency that stops the trains also would stop ventilation of tunnels that rely solely on this type of piston action ventilation. Consequently, a mechanical ventilation system has to be provided. The mechanical system must be designed to carry the entire ventilation load in case of train stoppage, draw smoke and fumes away from passenger areas in case of a fire or other emergency, and, if necessary, supplement the piston action even when trains are in operation. The Metro ventilation system will do all this.

Outside air enters pure ventilation systems through vent shafts from the surface and is exhausted through fan shafts. Air flow is controlled by mechanically operated louvres near the subway end of the vent shaft. At the tunnel level, in the vicinity of a station, the vent shaft expands to form a blast relief chamber.

A fan shaft is similar in its construction to a vent shaft—virtually constant cross section extending from the ground surface to the subway, covered by a grating at ground level. At the lower end of the fan shaft, one or more 60 inch exhaust fans are installed. These remove the air from subway tunnels and exhaust it.

#### REVERSIBLE FANS

Metro's mechanical ventilation system will be of adequate size to handle total tunnel ventilation load but will operate only when tunnel temperatures exceed 95 degrees. In an emergency, however, the vent shaft louvres can be closed and air from station areas drawn through the tunnels to the fan shafts and exhausted. Smoke or objectionable odors thus will be removed from public areas. In conditions requiring smoke flow to be in the opposite direction, the fans can be reversed.

Where possible, vent and fan shaft surface openings will be in areas not accessible to the general public. Fan and vent shafts will have ladders or stairways for access, maintenance and emergency use.

Wilbur Smith Study
Looks to Future

While many members of the Metrobus staff are working on solutions to today's problems, a consultant has been studying the entire bus network with an eye to creating a unified transportation system in 1980 that will take people where they want to go.

Gradual changes to the current Metrobus system will lead eventually to an optimum Metrobus network—a system operating in conjunction with the Metrorail lines, with direct service in areas not covered by the rail system, and excellent short trip designs which may not be as attractive by train.

A pre-Metrorail network is being developed by Wilbur Smith and Associates, with the assistance of London Transport Executive and other firms. The consultants are recommending the following as interim steps to the 1980 bus plan:

1. Better service through combination of routes formerly provided by the four privately-owned bus companies. This will include through bus routings and elimination of routes which provide duplicate service. EXAMPLE—A bus which starts in Montgomery County, Md. may continue through the District of Columbia on its regular route and then pick up a portion of a trip formerly operated by the Prince George's County, Md. bus line. Thus a passenger who wants to make the trip would not have to transfer.

2. More service through downtown by linking routes that formerly terminated at different points downtown. This will eliminate some transfers and better utilize city streets by providing less bus turning movements and shorter layover times. EXAMPLE—A bus might be through routed from Silver Spring, Md. to Alexandria, Va. with stops in downtown Washington.

3. Downtown routes concentrated on selected streets with bus priority treatment. This gives the advantage of more frequent service on a particular street and eliminates some passenger confusion. Bus traffic will be eliminated completely on some streets and

concentrated on others. EXAMPLE—Metrobuses now run on 10th, 11th, 12th, 13th and 14th Streets, N.W. Under this plan, buses would run on two or three of the streets only. This can provide more frequent service on the street with bus routes and eliminate some congestion on the streets which then would not have bus service.

4. Bus service for growth areas. EXAMPLE—Communities which have expanded rapidly in the last several years will receive service because of population growth and increase in new housing.

5. Better distribution of bus service to major travel corridors. EXAMPLE—Where traffic checks indicate buses are passing up passengers because the vehicles are full, extra service will be added to relieve the overloading.

#### **IMPLEMENTATION**

After final recommendations have been received by WMATA, the next steps include jurisdiction review, public hearings and decisions by the WMATA board of directors. This takes six months or longer. After that, several more months will be required to develop the new bus schedules and hire and train new operators to perform the service. About 18 months will be needed to phase the new service in.

#### OTHER TASKS

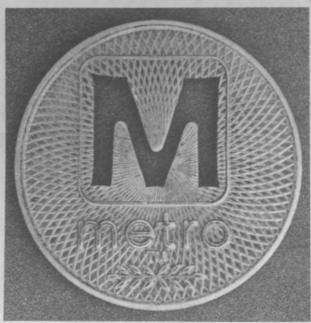
In addition to working out the optimum 1974-1975 bus system, the Wilbur Smith team has received the following assignments:

1. Develop a unified fare system for today's bus system and investigate promotional fare systems to increase ridership.

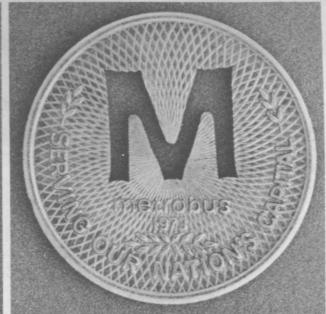
2. Conduct a management study on how the bus system should be operated.

3. Develop new fringe parking and express bus service in corridors not served by Metro.

4. Develop transportation alternatives for Bicentennial visitors: fringe parking lots, passes, shuttle bus service to the National Visitor Center, etc.



The Metrobus token, pictured above, is worth 40 cents and may be used in combination with change or tickets for rides worth more than 40 cents. The tokens are available in envelopes of 10 for \$4 at all outlets which formerly sold Tok-Tiks. The sale of commuter tickets will continue.



## WMATA Has Dual Challenge: Improve Bus System While Building Rapid Rail Looks to Future

(continued from page 1)

#### 50 YEARS OF TALK

Metro is the product of 50 years of talk and nearly two decades of specific Congressional and citizen efforts to relieve oppressive polluting traffic congestion and to improve the physical character, economic growth and well-being of the National Capital region.

A four-year Congressionally-authorized \$500,000 Mass Transportation Survey in 1959 recommended more highways and the introduction of rapid rail transit in the region. After joint Senate-House hearings at which scores of civic organizations testified, the Congress in 1960 created an independent temporary federal agency, the National Capital Transportation Agency, to begin physical, financial, and organizational planning for a

Funded steadily by Congress, the federal NCTA in 1962 submitted plans for an 83-mile rapid rail system. In 1965 the Congress approved the heart of the network-a 25 mile system-and made the project real by authorizing \$100 million in federal and \$50 million in District of Columbia funds to start construction.

In 1967 the federal agency was replacedas Congress had intended—by an interstate agency, the Washington Metropolitan Area Transit Authority

(WMATA). WMATA represents, and is uniquely responsible and responsive to, the District of Columbia and the Virginia and Maryland suburbs.

#### THE REGION AGREES

In unprecedented action on March 1, 1968, the eight participating jurisdictions of the region, through WMATA, reached agreement on specific routes and a financial cost-sharing plan for a 98-mile truly regional modern rapid

rail system.

The same year, Congress revived often-talked of legislation for public acquisition of all privately-owned bus companies. The action, however, didn't come to final vote until late in 1972.

In December, 1969, Congress passed and sent to the White House legislation authorizing federal participation in the 98-mile regional system to the extent of \$1.1 billion over a 10year period.

A week later—on December 9, 1969—the historic and unprecedented action was signed into law by President Richard M. Nixon.

And on the same day the region broke ground for Metro.

In the years since groundbreaking, the transit authority has gained valuable experience in construction and construction management which is shared almost daily with other transit systems in planning or early construction

A study of costs in 1970 led to the judgment that construction costs for the 98-mile system would be about \$3 billion. Recent experience in an inflationary economy has indicated that costs may rise several per cent above \$3

These and other factors led, in April of 1971, to a recommendation by President Nixon that the federal government guarantee WMATA revenue bonds. The measure was subsequently passed by Congress, and bond issues totaling \$820 million through March, 1974 were sold at favorable interest rates.

The bond funds have been used for Metro construction. The cost of acquiring the bus companies in early 1973, about \$106 million, was contributed by the federal government and the local political jurisdictions on a two-thirds/one-third basis. Metrobus operating subsidies have come from the jurisdictions.

# **Rohr Builds Metro Trains**

Advanced principles of aerospace technology and modern manufacturing methods will make Metro rapid rail vehicles among the best in the nation.

A \$91.6 million contract for 300 Metro cars was let June 22, 1972 to Rohr Industries, Chula Vista, Calif. The firm, which produced 250 vehicles for the Bay Area Rapid Transit District (San Francisco), has extensive experience in aerospace manufacturing. In recent years. Rohr has turned to bus manufacture and research and development of tracked air cushion vehicles and personal rapid transit

Metro's cars will be built under the most stringent noise and vibration standards in the industry today. Vehicles will be tested against the most quiet cars in service at time of delivery, and will be required to be at least as quiet and vibration-free.

The cars will be of sculptured, contemporary design in polished aluminum. Large vertical windows in front will allow clear view by attendant and passengers. Tinted panoramic side windows will be linked with a wide bronze band to dramatize the speed of the train. Padded seats in natural colors, heavy-duty carpeting in earth tones, fluorescent lighting and air conditioning will provide a comfortable environment for passengers.

Louis T. Klauder & Associates, Philadelphia, and Sundberg-Ferar, Inc., Southfield, Mich., designed the car.

## **Principal Consultants** and Contractors

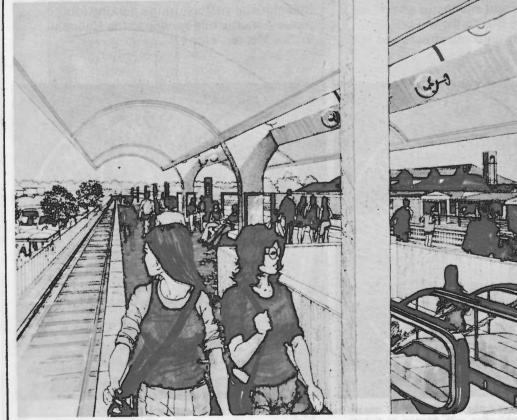
**Bechtel Associates** Construction De Leuw, Cather & Co., Inc. Engineering Harry Weese & Associates **Architecture** 

Mueser, Rutledge, Wentworth & Johnston Wallace, McHarg, Roberts & Todd

Environmental Metro Insurance Administrators

Insurance Kuhn, Loeb & Co. and Dillon, Read & Co.

Mudge, Rose, Guthrie & Alexander **Bond Counsel** 





-This rendering shows the King Street station in Alexandria with the George Washington Masonic Memorial in the background. The original station location plans were altered slightly to allow future passengers a clear view of the memorial from the platform.

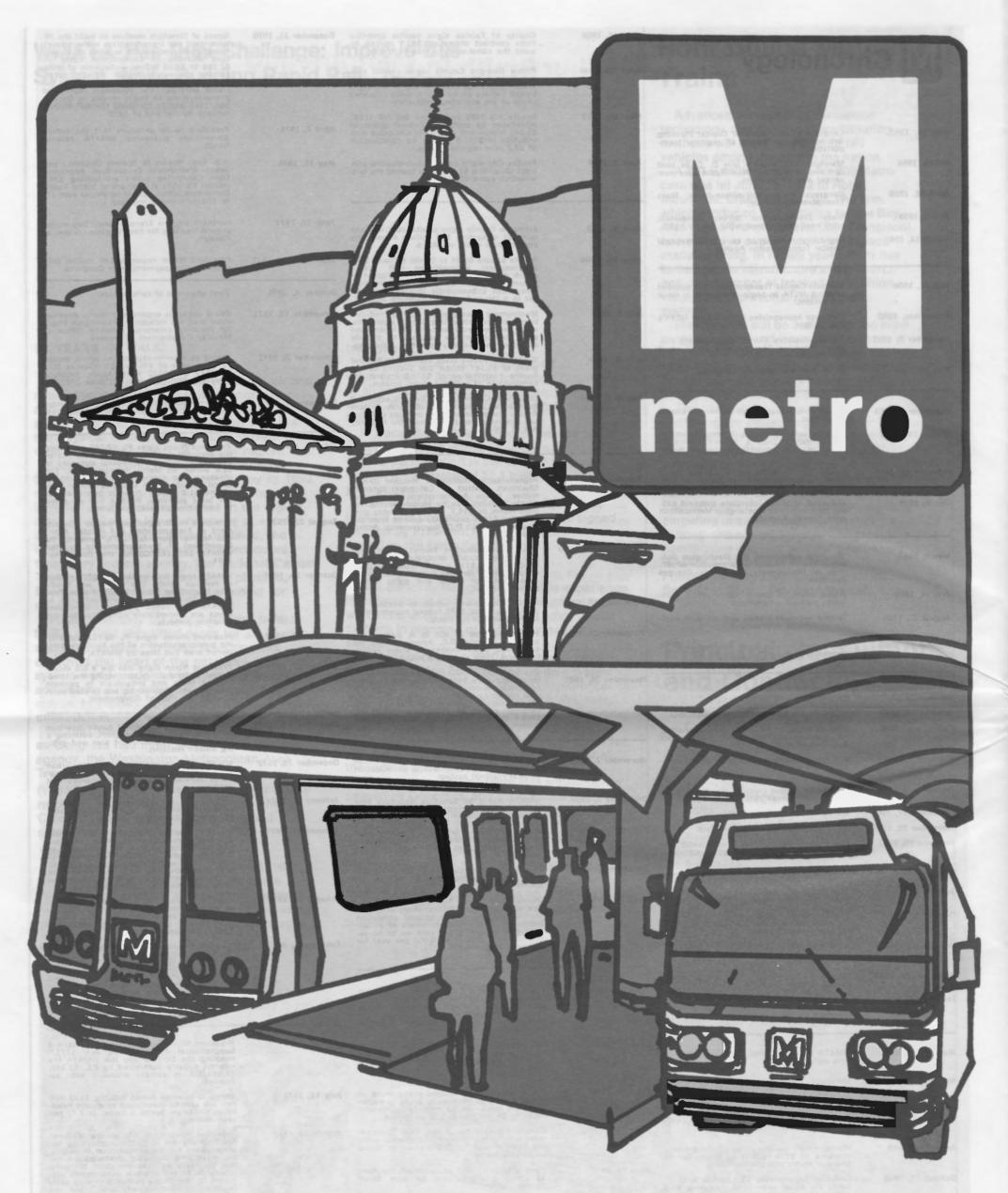
M	and the second second second second	April 16, 1969	County of Fairfax signs capital contribu- tions contract obligating \$61.9 million to- ward the construction costs of Metro.	December 31, 1970	Board of Directors resolves to build the 98- mile rapid rail transit system without sacri- ficing quality or service in spite of 19 per-
IVI Ch	ronology	April 29, 1969	Prince Georges County signs capital contributions contract obligating \$86.6 million		cent increase in construction costs
metro			toward the construction of Metro and signs transit service contract to provide allocated share of any operating deficiency.		tionary pressures, higher interest rates, appropriation delays and inter-agency decision holdups. The resolution reaffirmed previous plans to begin service in December, 1973 and to complete the full 98-mile
		May 16, 1969	Senate Bill 2185 and House Bill HR 11193 introduced to authorize Federal grant of	April 7, 1971	network by the end of 1979.  President Nixon proposes that the federal
July 19, 1952	Congress passes National Capital Planning Act authorizing studies of regional transportation.		\$1.147 billion and District of Columbia con- tribution of \$216.5 million for construction of 97.7 mile regional Metro.		government guarantee WMATA revenue bonds.
March, 1954	Maryland and Virginia Join D. C. in joint commission to study Washington area passenger carrier facilities.	June 3, 1969	Fairfax City signs capital contributions contract obligating \$2.6 million toward the construction costs of Metro.	May 11, 1971	U.S. Rep. Robert N. Giaimo (D-Conn.) proposes amendment to overturn Appropriations Committee action withholding \$34.2
April 22, 1955	Congress funds half-million-dollar Mass Transportation Survey.	Marin Control			million FY 1971 D.C. share of Metro funds. Committee action upheld by House vote 219 to 170, continuing impasse.
July 1, 1959	Mass Transportation Survey completed; cites need for regional rapid rail by 1980.	June 4, 1969	Arlington County signs capital contributions	June 17, 1971	Northern Virginia Transportation Day marks ground-breaking for first Virginia station, at
March 14, 1960	Legislation introduced to create National Capital Transportation Agency.	June 19, 1969	contract obligating \$54 million toward the construction costs of Metro.  Senate passes by 84 to 2 vote a Fiscal 1969	September 28, 1971	President Nixon requests \$38 million D.C.
lub 14 1050	Medianal Conidal Transportation Ast annual	Julie 15, 1505	supplemental appropriation (MR 11400) which contains \$18.7 million in District of Columbia funds for Metro construction.		supplemental payment from Congress.
July 14, 1960	National Capital Transportation Act enacted creating NCTA to begin developing a rapid rail system.	tute 1 1000	(This item subsequently deleted from the bill in a House-Senate Conference action.)	October 4, 1971  November 18, 1971	First shipment of rails arrives.  Board approves expanded minority develop-
September, 1960	Congress appropriates \$250,000 for NCTA's first budget.	July 1, 1969	Montgomery County signs capital contribu- tions contract obligating \$110.4 million to- ward the construction costs of Metro and signs transit service contract to provide	140Veilider 16, 1971	ment program including "Washington Plan" for minority enterprise; WMATA Office of Minority Development is created.
November 3, 1962	NCTA completes Transit Development Program proposing 83 miles of regional rapid rail transit.	July 8, 1969	allocated share of any operating deficiency.  Senate Bill 2185 passes authorizing Federal	December 2, 1971	Voting as a committee of the whole, House by teller vote of 196 to 183 releases D.C.
May 27, 1963	NCTA plan submitted to Congress.		grant of \$1.147 billion and District of Co- lumbia contribution of \$216.5 million for construction of regional Metro system.		FY 1971 and 1972 Metro funds, breaking impasse. Roll call vote is 195 to 174.
December 9, 1963	House of Representatives recommits transit	August 9, 1969	District of Columbia City Council votes 6-2 to approve construction of Three Sisters Bridge and other highway projects carrying	December 9, 1971	Board completes formal naming of stations, changing 20 from names adopted with system in 1968.
March, 1964	Virginia establishes the Northern Virginia Transportation District, a commission of		out provisions of the Federal-Aid Highway Act of 1968.	July 13, 1972	
	members from governing bodies of North- ern Virginia.			July 13, 1972	President Nixon signs PL 92-349 amending the National Capital Transportation Act of 1969 to provide for a federal guaranty of \$1.2 billion on Metro revenue bonds, The
February 10, 1965	Legislation to authorize a 25-mile basic rapid transit system introduced in Congress.	September 24, 1969	Representative William H. Natcher (D-Ky), Chairman, District of Columbia Subcom- mittee, House Appropriations Committee,		measure also provides a 25 per cent in- terest subsidy which supports \$300 million of the \$1.2 billion. Prior to enactment of the bond guaranty, WMATA had obligated
March, 1965	Maryland approves interstate compact call- ing for creation of Washington Metropolitan Area Transit Authority.		breaks the impasse by recommending appropriation of \$18.7 million in Metro construction funds previously deleted from the	August 22, 1972	or committed all available funds.  President Nixon signs into law the "Depart-
	Area Transit Authority.		Fiscal Year 1969 D.C. Supplemental Appropriation bill.	August 22, 15/2	ment of Transportation and Related Agencies Appropriations Act, 1973," enabling the Department of Transportation to pay the
March, 1965	Maryland establishes the Washington Sub- urban Transit District, a commission of offi-	September 29, 1969	Washington Suburban Transit Commission (WSTC) signs capital contributions contract obligating the \$197 million from Montgomery and Prince Georges Counties toward the	O-t-b 10 1072	WMATA \$131,181,000 for the fiscal year 1974.
July 15, 1965	cials of Montgomery and Prince Georges Counties.  House approves transit authorization legis-		construction of Metro and signs transit service contract.	October 10, 1972	WMATA opens bids on the first \$225 million in revenue bonds. Low bidder was syndi- cate headed by Merrill Lynch, Pierce, Fen- ner & Smith at a net interest cost to
August 25, 1965	lation without amendment.  Senate approves transit authorization legis-	November 18, 1969	House passes and sends to Senate, bill containing fiscal 1970 federal appropriation of \$43.2 million for Metro.		WMATA of 7.36486 per cent. Bond proceeds are immediately committed to construction projects.
October 14, 1965	lation without amendment.  House appropriates funds for start of NCTA	November 24, 1969	House, by vote of 305 to 9, passes and sends to Senate, D.C. appropriations bill containing \$18.7 million in Metro money	October 21, 1972	President Nixon signs Pt. 92-517 authorizing public acquisition of the four privatelyowned area bus lines by WMATA.
	program.		for fiscal 1969 and \$21.6 million in Metro funds for fiscal 1970.	October 27, 1972	President Nixon signs into law a bill estab- lishing Federal policy concerning the selec-
October 20, 1965	Senate appropriates NCTA funds.	November 24, 1969	House approves Senate-passed bill (S.2185) authorizing federal participation in the 98-mile regional system — to extent of \$1.147 billion over 10-year period. Measure also includes additional D.C. authorization of		tion of firms and individuals to perform architectural, engineering and related services for the Federal Government.
October 31, 1965	NCTA begins \$6.1 million program.		includes additional D.C. authorization of	December 4-8, 1972	WMATA holds the regional public hearings on the bus acquisition program, outlining a \$106.5 million improvement plan and gain-
February 4, 1966	Virginia approves interstate compact calling for creation of Washington Metropolitan Area Transit Authority.				ing citizen reaction.
February 15, 1966	D.C. Commissioners endorse interstate compact legislation.	December 2, 1969	Congress passes and sends to White House legislation authorizing federal participation in total regional system.	December 28, 1972	WMATA files an application with the Urban Mass Transportation Administration for two-; thirds federal funding of the improvement program.
November 6, 1966	Legislation signed creating the Washington Metropolitan Area Transit Authority.	December 9, 1969	WMATA Board of Directors approves first	January 11, 1973	Urban Mass Transportation Administration approves Metrobus capital improvement
			Metro construction contract — for an esti-		
November 17, 1966 November 22, 1966	Maryland executes compact.  D.C. and Virginia execute compact.	December 9, 1969	Metro construction contract — for an esti- mated \$33.7 million.  With high-ranking federal, state and local	January 14, 1973	grant for \$70.3 million.  WMATA deposits check for \$38.2 million
	Maryland executes compact.		Metro construction contract — for an esti- mated \$33.7 million.	January 14, 1973	grant for \$70.3 million.  WMATA deposits check for \$38.2 million and files a declaration of taking with clerk of the U.S. District Court for the District of Columbia and acquires the assets of D.C. Transit, Inc. and Wv&M Coach Co. Public
November 22, 1966 February 20, 1967	Maryland executes compact.  D.C. and Virginia execute compact.  Washington Metropolitan Area Transit Authority officially comes into existence.		Metro construction contract — for an estimated \$33.7 million.  With high-ranking federal, state and local officials in attendance, Metro ground-breaking ceremonies are held in Judiciary	January 14, 1973	grant for \$70.3 million.  WMATA deposits check for \$38.2 million and files a declaration of taking with clerk of the U.S. District Court for the District of
November 22, 1966 February 20, 1967 July 12, 1967	Maryland executes compact.  D.C. and Virginia execute compact.  Washington Metropolitan Area Transit Authority officially comes into existence.  Legislation introduced to modify and improve the 1965 transit system.	December 9, 1969	Metro construction contract — for an estimated \$33.7 million.  With high-ranking federal, state and local officials in attendance, Metro ground-breaking ceremonies are held in Judiciary Square.  President Nixon signs tegislation authorizing federal participation in 98-mile regional system.  Montgomery County becomes first jurisdiction to raise funds for its share of Metro	January 14, 1973 January 24, 1973	grant for \$70.3 million.  WMATA deposits check for \$38.2 million and files a declaration of taking with clerk of the U.S. District Court for the District of Columbia and acquires the assets of D.C. Transit, Inc. and WV&M Coach Co. Public bus operations begin at 2 a.m. Final price of the two companies is to be determined when condemnation case is settled.  WMATA opens bids on second federally guaranteed bond issue, First Boston Bank heads syndicate to purchase \$220 million
November 22, 1966 February 20, 1967	Maryland executes compact.  D.C. and Virginia execute compact.  Washington Metropolitan Area Transit Authority officially comes into existence.  Legislation introduced to modify and improve the 1965 transit system.  The Washington Metropolitan Area Transit Authority assumes responsibility from NCTA for transit development.	December 9, 1969  December 9, 1969	Metro construction contract — for an estimated \$33.7 million.  With high-ranking federal, state and local officials in attendance, Metro ground-breaking ceremonies are held in Judiciary Square.  President Nixon signs legislation authorizing federal participation in 98-mile regional system.  Montgomery County becomes first jurisdiction to raise funds for its share of Metro capital costs by selling general obligation bonds — \$21.6 million in bonds at an annual rate of 6.0996 per cent — to be redeemed at a rate of \$720,000 per year for	January 24, 1973	grant for \$70.3 million.  WMATA deposits check for \$38.2 million and files a declaration of taking with clerk of the U.S. District Court for the District of Columbia and acquires the assets of D.C. Transit, Inc. and Wv&M Coach Co. Public bus operations begin at 2 a.m. Final price of the two companies is to be determined when condemnation case is settled.  WMATA opens bids on second federally-guaranteed bond issue. First Boston Bank heads syndicate to purchase \$220 million issue at net interest cost to WMATA of 7.3847 per cent.
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City of Falls Church signs capital contributions contract obligating \$800,000 toward the construction costs of Metro.

March 29, 1969

Series D revenue bonds totaling \$225 million sold to investment syndicate headed by Salomon Brothers at 8.15 per cent net interest cost.

Senate passes conference report on 1971 supplemental appropriations bill with D.C.'s \$34.2 million for Metro construction.



**METRO**... the dream of the people of the region for decades, is coming your way. Construction is well underway, with the initial opening set for 1975. In the meantime, service improvements continue as the Metrobus system expands to serve the growing needs of the region.