Title: "Transit Operations Institute: A Management Development Seminar for Women in the Transit Industry"

Sponsor: DOT/Urban Mass Transportation Administration
Washington, D.C. 20590

Type Agreement: Grant No. GA-11-0015

Award Period: From 7/1/83 To 7/31/84

Sponsor Amount:
- Estimated: $
- Funded: $
- Total to Date: $17,607

Cost Sharing Amount: $

Cost Sharing No:

Title vests with GIT; however, none proposed.

Restrictions:
- Foreign travel must have prior approval — Contact OCA in each case.
- Domestic travel requires sponsor approval where total will exceed greater of $500 or 125% of approved proposal budget category.

Comments:

Copies To:
- Project Director
- Research Administrative Network
- Research Property Management
- Accounting
- Procurement/EES Supply Services
- Research Security Services
- Reports Coordinator (OCA)
- Research Communications (2)
- GTRI Library
- Project File
- Other I. Newton
GEORGIA INSTITUTE OF TECHNOLOGY

OFFICE OF CONTRACT ADMINISTRATION

SPONSORED PROJECT TERMINATION/CLOSEOUT SHEET

Date: 1/22/85

Project No. D-48-615

School/Center: Architecture

Includes Subproject No.(s) N/A

Project Director(s) Catherine Ross

Sponsor DOT/Urban Moss Transportation Administration

Title "Transit Operation Institute: A Management Development Seminar for Women in the Transit Industry"

Effective Completion Date: 10/15/84

(School/Center) 10/15/84 (Performance)  

Contract Closeout Actions Remaining:

☐ None

☑ Final Invoice or Final Fiscal Report

☐ Closing Documents

☐ Final Report of Inventions

☐ Govt. Property Inventory & Related Certificate

☐ Classified Material Certificate

☐ Other

Continues Project No. ____________________________  Continued by Project No. ____________________________

YES TO:

Project Director
Arch Administrative Network
Arch Property Management
Accounting
Measurement/EES Supply Services
Arch Security Services
Projects Coordinator (OCA)

Library
GTRI
Research Communications (2)
Project File
Other A. Jones

M. Heyser
PROGRESS REPORT

Title:
Transit Operations Institute: A Management Development Seminar for Women in the Transit Industry

Grant Number:
GA-11-0015

Time Period:
July 7, 1983 through October 31, 1983

As anticipated, the initial period has involved a substantial portion of time being allocated to the organizing and implementing of an administrative structure and the hiring of personnel. Currently, one graduate research assistant has been employed and candidates for an administrative assistant's position are being interviewed.

To a large extent, the success of the upcoming Institute is dependent on the amount of exposure it receives. In order to increase this, the following steps have been taken:

1. The Georgia Tech news service was used and news releases describing the project were mailed to all cities in the southeastern region in which an active transit system operates.
2. News releases and photos were mailed to women's magazines and trade journals.
3. Six hundred flyers, describing the upcoming Institute, were mailed to transit authorities, Women's Transportation Seminar (WTS) members, elected officials, transportation organizations, and interested persons in the southeast region.
4. The Atlanta and Washington chapters of WTS printed stories about the Institute in their newsletters.
5. The Georgia Tech Whistle, campus newspaper, carried a feature article on the Institute.
6. The MARTA Transit Times ran an article on the Institute. Copies of the Transit Times are forwarded to other authorities routinely.

In addition to the above efforts, a great deal of telephone contact has been made.
February 6-10, 1984 has been selected as the week during which the training institute will be conducted. The Howard Johnson's Midtown Hotel has set aside a block of twenty-five rooms for participants. The hotel is conveniently located and has extremely reasonable rates. Georgia Tech's campus is within walking distance and the Tenth Street rail station is within two minutes walk. In addition, MARTA headquarters and the Brady Avenue Bus Operating Facility are nearby.

The selection committee has been identified, contacted, and sent materials outlining their role in the Institute. The committee is composed of the following persons:

Ms. Judy Meade, University Research and Training Program, UMTA, Washington, D.C.

Ms. Bobbie Ibarra, Director of Planning, Metro Dade Transportation Administration, Miami, Florida

Dr. Catherine Ross, Georgia Tech Graduate City Planning Program, Atlanta, Georgia

Ms. Ann Johnson, Manager Research and Analysis, Metropolitan Atlanta Rapid Transit Authority, Atlanta, Georgia

Mr. Robert Stanley, Director, Planning and Policy Analysis, APTA

Each committee member has agreed to seek funds from her/his agency to travel to Atlanta and finalize the selection process.

A number of meetings have been held with MARTA officials to seek input and inform them as planning progresses. This is especially true for Mr. William Nix who is the Assistant General Manager, Transit Operations. Ms. Johnson attended a meeting of the senior staff convened by Mr. Ken Gregor, General Manager. At this meeting, all were briefed on the Institute and progress to date, and Mr. Gregor assured Ms. Johnson of the continuing support throughout the Authority for this project.

A detailed schedule of the week's activity is being developed and currently we are identifying persons within MARTA to do various presentations. Consultants have been advised of the scheduled dates and we are currently identifying time slots during the week when they will make presentations.

A letter of information, outlining the Institute's schedule and content, has been drafted for the MARTA Board of Directors. In addition, a preliminary list of guest officials has been developed. These persons are to be invited to attend and, in some instances, participate in the opening session. The list contains such names as Secretary Dole, Mayor Andrew Young, etc.

While much remains to be done, many activities are under way and progressing nicely.
A great deal must be accomplished during the time period November through January 1984. Central among these are:

1. Finalize Institute schedule
2. Finalize the brochure and application
3. Finalize selection of technical personnel
4. Develop materials for technical sessions
5. Convene the selection committee and select participants
6. Finalize consultants' responsibilities
7. Develop registration procedures
8. Develop evaluation packages
9. Develop list of guest officials

It is difficult to identify problems because thus far things have gone relatively smoothly. The only negative observation might be that tasks, especially start-up, have taken longer to get accomplished than originally anticipated.
LIST OF ATTACHMENTS

1. Flyer mailing list
2. Copies of flyer
3. Atlanta Chapter WTS newsletter article
4. Georgia Tech Whistle article
5. MARTA Transit Times
6. News release
The organizational phase of the institute was completed with the hiring of administrative assistant, Susan Goodrick. The actual preparation for the Institute is virtually complete as the week of the Institute, February 6th through 10th, rapidly approaches.

The brochure and application forms were completed and mailed in November. Response to the brochure was strong. Forty-six women in from Region IV applied. Numerous inquiries were also received from outside Region IV.

The selection committee met on December the 6th. Members had been sent a list of applicants prior to the meeting enabling them to do some preliminary screening. Committee members were asked to base their choices on the following criteria: geographic distribution, age, race and or heritage representativeness, variety of job types and employing agencies; and validity of reasons for attendance or relative potential for managerial development.

Twenty-five participants and a list of alternates were selected. These twenty-five were notified of their selection and asked to accept or decline by January 17th. Only one applicant declined and an alternate was selected. (See attachment 1, List of Participants)

Participants received a packet containing information on lodging arrangements, the schedule of events and a map of important locations. (See attachment 2, Orientation Packet) Participants will be staying at the Midtown Howard Johnson, which is very close to Georgia Tech.

Seminars will be held on the Georgia Tech campus, at the Summit Building (MARTA) and in the field at various MARTA facilities. A reception for participants and members of the transit community and Georgia Tech officials will be held at MARTA headquarters in the Summit Building. (See attachment 3, Reception Guest List)
During the months of December and January, the actual schedule and content of the sessions of the Institute were finalized. Highlights of the schedule include:

Monday, Feb 6th - An overview of transit systems
   Speaker, Lucy Freedman, (evening)
   On site visit to MARTA transit station

Tuesday, Feb 7th - Seminar, Women in Transit and Non-traditional Career Roles
   Speaker, Lucy Freedman
   On site visit to transit facilities

Wednesday, Feb 8th - Lecture series, Topics include: scheduling evaluation and regional interaction, subsidies, customer services, federal requirements, individual and board of director responsibilities.
   Reception for participants, MARTA and Georgia Tech officials.

Thursday, Feb 9th - Extensive on-site visits to MARTA maintenance yards
   Seminar, personnel and safety training of staff

Friday, Feb 10th - Speaker, Sarah Lopez
   Awards luncheon
(See attachment 4, Schedule of Events)

Arrangements with the two consultants Lucy Freedman and Sarah Lopez have been finalized.

Lucy Freedman of Baltimore, Maryland, is slated to speak at dinner on Monday night, February 6th and on Tuesday morning, February 7th. Ms. Freedman is president of Affective Education systems and has extensive experience in presenting programs in management, career development, affirmative action, assertive communications, communications skills for scientific and technical personnel.

Sarah Lopez of Atlanta, Georgia is scheduled to speak on Friday morning, February 10th. Her topics will include management/personal issues, time management, conflict resolution, bureaucracies, communication, women's issues and job requirements. Ms. Lopez is trained in psychotherapy and psychology. She has worked extensively with women in the areas of individual, couples and group therapy.
A variety of informative packets have been developed by graduate research assistants. The packets cover such topics as personal and professional growth, time management, and transportation education. A series of technical materials have been developed for each of the seminar topics. Where appropriate, technical materials reinforcing concepts presented during on-site visitations have been developed. Material will be organized and placed in a binder for the convenience of participants. Each participant will receive a copy.

A series of evaluation forms has been developed. Participants will be asked to evaluate selected seminar topics for content and form and they will be asked to evaluate the Institute in its entirety. (See attachment 5, Evaluation Materials)

Media coverage continues with another news release on January 31st. (See attachment 6, News Release)

At this moment, a few small logistical tasks remain.

Awards certificates for participants
Restaurant and meeting spaces will be reconfirmed
All packets and information will be finalized and reproduced for participants and presenters.
Mabel Boseman
Training Specialist
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5225

June L. Burridge
Transportation Analyst I
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5321

Mary C. Cannon
Transportation Planner
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5298

Darice Gamble
Contract Administrator
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5467

Susan D. Gore
Executive Director
Coastal Rapid Public Transit Authority
P.O. Box 1740
Conway, South Carolina 29526
803-248-7277

Mildred M. Headdy
Finance Supervisor
Sarasota County Area Transit
5303 Pinkney Avenue
Sarasota, Florida 33583
813-922-0702

Carolyn S. Heffner
Administrative Assistant
Palm Beach County Transportation Authority
Bldg. S-1440, P.B.I.A.
West Palm Beach, Florida 33406
305-686-4558
Joyce H. Johnson
Administrative Officer
Transportation Institute
North Carolina State A&T University
302 Merrick Hall
Greensboro, North Carolina 27411
919-379-7745

Pamela F. Kennedy
Assistant Director
Pee Dee Regional Transportation Authority
P.O. Box 2071
Florence, South Carolina 29503
803-665-2227

Flora Lankford
Bus Operator
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5426

Cora McFarland
Budget Analyst
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5119

Patricia B. Mizell
State Ridesharing Coordinator
S.C. Department of Highways and Public Transportation
P.O. Box 191
Columbia, South Carolina 29202
303-758-2972

Pauline Newman
Community Relations Officer
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5073

Ana C. Pino
Special Assistant to Secretary
Puerto Rico Department of Transportation
P.O. Box 41269 Minillas Station
San Juan, Puerto Rico 00940
09-726-6625
Carolyn Read
Acting Property Manager
MTDA
44 West Flagler Street, 12th Floor
Miami, Florida 33130
305-579-4240 or 5698

Susan E. Rutledge
Administrative Assistant: Maintenance
Charlotte Transit System
707 Brevard Street
Charlotte, North Carolina 28202
704-374-2420

Barbara S. Saunders
Administrative Assistant
Department of Transportation/Transit Division
P.O. Box 590
Raleigh, North Carolina 27602
919-755-6363

Judy Seidner
Special Projects Administrator
MTDA
44 W. Flagler Street
Miami, Florida 33130
305-579-3802

Robin M. Sobrino
Special Projects Manager
MTDA
44 W. Flagler Street
Miami, Florida 33130
305-579-5580

Thelma J. Sublett
Associate Transportation Planner
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5028
Glenna Watson  
Acting Assistant General Manager/Operations  
Central Ohio Transit Authority  
1600 McKinley Avenue  
Columbus, Ohio 43222  
614-275-5804

Renee Wheeler  
Transit Market Analyst  
MTDA  
44 W. Flagler Street  
Miami, Florida 33130  
305-579-4505

Valerie Whiteside  
Transit Customer Representative  
MTDA  
3300 N.W. 32nd Avenue  
Miami, Florida 33152  
305-638-6600

Bettina Wood  
Transportation Coordinator  
Alabama Council on Human Relations, Inc.  
P.O. Box 409  
Auburn, Alabama 36831-0409  
205-821-8336
Dear &name&:

It is our pleasure to inform you that you have been selected as one of 25 participants in the Transit Operations Institute to be held in Atlanta, Georgia, February 6-10.

The enclosed "Confirmation of Attendance" card should be returned no later than January 18, 1984. You may indicate on the card if you need a roommate and we will do our best to meet your request. However, there are no guarantees as this will depend on whether or not anyone else requests a roommate.

Accommodations for participants will be at the Howard Johnson's Midtown. The hotel will accept a check (with proper identification), money order and all major credit cards.

Using the enclosed map, you should have no problem finding the hotel's location of 100 10th Street. If driving, come north or south on I-75/85 and take the 10th Street exit. Proceed east and the hotel will be on your right. If flying, you can take the "Airport Shuttle", located at the Transportation Level of the airport, at a cost of $5.25.

Winter weather in Atlanta is unpredictable so either check with the National Weather Service before packing or come prepared for anything. We recommend an all-weather raincoat with a zip out lining and an umbrella. Appropriate daytime dress for Monday, Tuesday and Thursday will be casual slacks and comfortable shoes (flat if possible). On Wednesday and Friday, office attire will be suitable. If the schedule allows for time to change, appropriate evening attire will be dress slacks, dress or suit with medium or flat heeled shoes.

The week's activities will begin Sunday evening, February 5, with an informal orientation/social hour from 7-8 p.m. Seminar materials will be handed out and this will be an opportunity to become acquainted with your fellow classmates.
Registration will be held Monday morning from 8-8:30 a.m., at Georgia Tech. Swann Building, 3rd floor. Bring a check or money order in the amount of $100 made payable to Georgia Institute of Technology.

You will be responsible for your own transportation from the hotel to registration (refer to enclosed map). You can take the train at the Midtown Station to the North Avenue Station (one stop) and proceed west on North Avenue 3 blocks. The Swann Building is located on the corner of North Avenue and Cherry Street. Another suggestion would be to share a cab.

In addition to enclosing a map, we are providing an overview of the week's activities so you'll know what to expect. A more detailed map and schedule will be handed out Sunday evening at the informal orientation session.

Congratulations on your selection! We're looking forward to having you here in Atlanta as a part of this exciting educational opportunity.

Sincerely,

Dr. Catherine L. Ross
Assistant Professor

Ann F. Johnson
Technical Coordinator/MARTA

CR/AJ/sg

Enclosures
WOMEN'S TRANSIT INSTITUTE

Week Schedule - Summary

Sunday evening: Hotel
Informal Orientation and Refreshments

Monday:
Tech
Registration, Welcome
Program Overview
Transit Overview
*Luncheon -- Georgia Tech
Bus Transportation
Brady
Bus Maintenance
Radio Room
Dinner with speaker (Diplomat)

Tuesday:
Transit Management history, education
Women in non-traditional roles (Lucy Freedman)
Tech
Career planning and problems
Lunch - the Varsity
Rail Transportation
Rail Maintenance
Avondale
Rail Central Control'
Zone Center/Security
Dinner - Claudette's?
Review session, rail and bus operations

Wednesday:
Scheduling bus and rail services
Assigning operator work-units
Evaluating patronage
Revenues, costs, fares, subsidies
Summit
Public interaction, Federal requirements
Board of Directors
Lunch at ?
*Reception with Program Presentors and Guests at Summit Club

Thursday:
Field
Observe free intermodal check - Arts Center Station
Breakfast break
Stores, Materials management
Brownsmill
Heavy (bus) maintenance
Lunch at ?
Laredo
Bus Operator Training
Bus, Rail Safety
Field
Tour through construction (Lindberg? Lenox?)
Shopping/free time at Lenox Square
Dinner on own

Friday:
Tech
Financial and Support Systems to transit operations
Management and personal development issues (Sarah Lopez)
Johathan's
*Awards Banquet, conclusion

* Meals provided by Institute program
MAP OF IMPORTANT LOCATIONS

* Howard Johnson's Midtown - 100 10th Street, near the corner of 10th and Spring Streets.

* Swann Building - Georgia Tech Campus, corner of Cherry Street and North Ave.

* Summit Building - Within Walking distance from MARTA Civic Center Station
CONFIRMATION OF ATTENDANCE

I will definitely attend the Transit Operations Institute, February 6-10, 1984. ___Yes ___No

Please reserve the following room accommodations:
___Single($33) ___Double($37) ___Triple($41)

My roommate(s) is/are ____________________________

Form of payment: ___Agency ___Self ___Agency/Self ___Other Explain other ____________________________

Date of Arrival_______ Time of Arrival__________

Date of Departure________

Signature ____________________________

PLEASE RESPOND BY JANUARY 18, 1984
Dear &name&:

As you probably know, Georgia Tech and MARTA are joining forces to present the "Transit Operations Institute for Women", the first management development seminar for women in the transit industry, February 6-10, 1984.

One of the week's events will be a reception on Wednesday, February 8th, from 5-6:30 p.m., at the Summit Club, on the 2nd floor (street level) of the Peachtree Summit Building, 401 W. Peachtree Street. We invite you to attend this event which will provide an informal atmosphere for an exchange of ideas and experiences.

Please let us know if you can attend by calling Susan Goodrick at 894-2350 or by dropping Ms. Goodrick a note in c/o Georgia Tech, Graduate City Planning Program, Atlanta, Georgia 30332, by Monday, January 30, 1984.

Sincerely,

Dr. Catherine L. Ross
Assistant Professor/Georgia Tech
Program Director

Ann F. Johnson
Manager/Research and Analysis/MARTA
Technical Director

AJ/CR/sg
James A. O'Connor
Regional Administrator - Region IV
Urban Mass Transportation Administration
1720 Peachtree Road, N.W. - Suite 400
Atlanta, Georgia 30309

Kay Regan
Office of Financial Management & Special Projects
Urban Mass Transportation Administration
1720 Peachtree Road, N.W. - Suite 400
Atlanta, Georgia 30309

L. Dennis Ballou
AGM/Transit System Development
HARTA
401 W. Peachtree Street
Atlanta, Georgia 30325
William C. Nix
AGM/Transit Operations
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365

John S. Schadl
AGM/EEO
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365

Juanita C. Spivey
Office Administrator
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
Amos Beasley, Jr.
Board of Directors
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365

J. David Chestnut
Board of Directors
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365

John G. Glover
Board of Directors
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
Blanche R. Henderson
Board of Directors
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365

G.W. Hogan
Board of Directors
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365

Clay C. Long
Board of Directors
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
R. Charles Loudermilk
Board of Directors
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30335

William L. Fash
Dean
College of Architecture
Georgia Institute of Technology
Atlanta, Georgia 30332

David S. Sawicki, Ph.D
Director
Graduate City Planning Program
Georgia Institute of Technology
Atlanta, Georgia 30332
Clifford R. Bragdon
Director/Continuing Education
Georgia Institute of Technology
Swann Building
Atlanta, Georgia 30332

Joseph M. Pettit
President
Georgia Institute of Technology
Carnegie Building
Atlanta, Georgia 30332

Tom Duvall
Director of Transportation
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30335
J.H. Huggins  
Director of Bus Maintenance  
MARTA  
401 W. Peachtree Street  
Atlanta, Georgia 30305

Ken Rabren  
Assistant Director for Bus Maintenance  
MARTA  
401 W. Peachtree Street  
Atlanta, Georgia 30305

Bill Callier  
Assistant Director for Rail Transportation  
MARTA  
401 W. Peachtree Street  
Atlanta, Georgia 30305
Gerard Heineman
Director of Rail Maintenance
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30305

Debbie Harris
Card Distribution
Southern Railways
99 Spring Street
Atlanta, Georgia 30303

Bob Brennan
Director, Public Information
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30305
Jill Bryant
Assistant Director, News Bureau
Georgia Tech
Alumni Faculty House
Atlanta, Georgia 30332

Marcus E. Collins, Sr.
Board of Directors
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
"WOMEN IN TRANSIT INSTITUTE"

SCHEDULE OF ACTIVITIES

February 5-10, 1984
SUNDAY

INFORMAL ORIENTATION
7:00 p.m. - 8:00 p.m.
Place: Howard Johnson Hotel, Executive Suites I & II
Refreshments: Wine and Cheese
MONDAY

REGISTRATION (OWN TRANSPORTATION)
8:00 a.m. - 8:30 a.m.
Place: Swann Bldg., Ga. Tech., Classroom A (3rd Floor)
Purpose: Pay Registration Fee ($100.00)
Receive: Name Tags, MARTA TransCards, Meal Tickets

CLASSROOM SESSION #1

WELCOME AND ORIENTATION TO ATLANTA
8:30 a.m. - 9:15 a.m.

PROGRAM OVERVIEW
9:15 a.m. - 9:40 a.m.

BREAK
9:45 a.m. - 10:00 a.m.

TRANSIT OVERVIEW
10:00 a.m. - 11:30 a.m.
Purpose: Transit Slide Show, Definitions, MARTA System Development,
U.S. Transit Community.

PREVIEW OF AFTERNOON
11:30 a.m. - 11:45 a.m.

LUNCHEON
12:00 p.m. - 1:00 p.m.
Place: Swann Bldg., Ga. Tech., Classroom D

BOARD BUS AND TRAVEL TO GARAGE
1:05 p.m. - 1:25 p.m.

BUS TRANSPORTATION
1:30 p.m. - 2:30 p.m.
Place: Brady Avenue Garage
Purpose: Dispatch, Blockouts, Sign-Ups, Extra Board,
Supervision, Displine, and Public Interaction.

BREAK
2:30 p.m. - 2:45 p.m.

(Monday continued next page)
MONDAY (continued)

BUS MAINTENANCE
2:45 p.m. - 3:45 p.m.
Place: Brady Avenue Garage
Purpose: Servicing and Cleaning, Routine Inspections,
Minor and Intermediate Repairs, Block-Outs,
Tire Shop, Storeroom.

RADIO ROOM
3:45 p.m. - 4:30 p.m.
Place: Brady Avenue Garage
Purpose: Automatic Surveillance of Fluid Systems, Transportation
Supervision, Maintenance Supervision, Bus System Security,
MARTA Traffic Watch.

BOARD BUS AND RETURN TO HOTEL
4:45 p.m. - 5:00 p.m.

BOARD BUS AND TRAVEL TO RESTAURANT
6:15 p.m. - 6:30 p.m.

DINNER WITH REVIEW SESSION AND SPEAKER
6:30 p.m. - 8:30 p.m.
Place: Diplomat Restaurant
Speaker: Lucy Freedman

BOARD BUS AND TRAVEL TO HOTEL
8:30 p.m. - 8:45 p.m.
TUESDAY

CLASSROOM SESSION #2 (OWN TRANSPORTATION)
8:00 a.m. to 12:15 p.m. *
Place: Swann Bldg., Georgia Tech. - Classroom A
Purpose: Women in Transit, Women in Non-Traditional Roles; Operators, Planners, Consultants; Career Pathing, Discrimination.

*Break at approximately 10:00 a.m.

WALK TO VARSITY DRIVE-IN
12:15 p.m. - 12:30 p.m.

LUNCH AT VARSITY DRIVE IN
12:30 p.m. - 1:30 p.m.

TRAVEL TO AVONDALE STATION ON MARTA RAPID RAIL
1:30 p.m. - 2:00 p.m.

TAKE TRAIN INTO YARD AREA
2:00 p.m. - 2:20 p.m.
Place: Avondale Station Platform, To Be Announced.
Purpose: Observe yard activities, to disembark from end door of car to ground level.

CAR MAINTENANCE BUILDING
2:30 p.m. - 3:30 p.m.
Purpose: Car Maintenance, Signal Maintenance, Maintenance of Right-of-Way.

BOARD BUS AND TRAVEL TO CENTRAL CONTROL
3:30 p.m. - 3:40 p.m.

CENTRAL CONTROL
3:40 p.m. - 5:00 p.m.
Purpose: System Structures and System Surveillance (Rail Transp.) Electronic System Maintenance (Fare Gates, CCTV, Radios).

ZONE CENTER/SECURITY
5:00 p.m. - 5:30 p.m.
Purpose: Rail System Security, CCTV Center.

(Tuesday continued next page)
Schedule of Activities

TUESDAY (continued)

BOARD BUS AND TRAVEL TO DINNER
5:30 p.m. - 5:50 p.m.

COCKTAILS AND DINNER
5:50 p.m. - 7:30 p.m.

BOARD BUS AND RETURN TO HOTEL
7:30 p.m. - 8:00 p.m.
WEDNESDAY

COFFEE AND DANISH
8:00 a.m. - 8:15 a.m.
Place: Peachtree Summit Bldg. (Located at Civic Center Station), 23rd Floor, Conference Room 23-E.

INTRODUCTION
8:15 a.m. - 8:45 a.m.

SCHEDULING
8:45 a.m. - 9:30 a.m.
Purpose: Bus and Rail Scheduling Process, Run Cutting/Labor Contract, Special Services.

EVALUATION AND REGIONAL INTERACTION
9:30 a.m. - 10:15 a.m.
Purpose: Traffic Checking, Shelters, Planning.

BREAK
10:15 a.m. - 10:30 a.m.

ANALYSIS AND SUBSIDIES
10:30 a.m. - 11:15 a.m.
Purpose: Routine Analysis, Major Projects, Fares and Subsidies.

CUSTOMER SERVICES
11:15 a.m. - 12:00 p.m.
Purpose: Public Hearings, Service Requests, Public Information.

LUNCH (ON OWN)
12:00 p.m. - 2:00 p.m.
Suggestion: Rapid Rail to Peachtree Center.

OVERVIEW AND FEDERAL REQUIREMENTS
2:00 p.m. - 2:45 p.m.

QUESTIONS
2:45 p.m. - 3:30 p.m.

BOARD OF DIRECTORS
3:30 p.m. - 4:00 p.m.
Purpose: Individual Responsibilities and Board Responsibilities.

(Wednesday continued on next page)
WEDNESDAY (continued)

INDIVIDUAL DISCUSSIONS
4:00 p.m. - 5:00 p.m.

RECEPTION
5:00 p.m. - 6:30 p.m.
Place: Summit Club, Peachtree Summit Building, 2nd Floor.
Purpose: Casual conversation with Institute Personnel and
Tour Presentors. Hors d'ourves and two punches served,
cash bar available.
THURSDAY

BOARD BUS
7:00 a.m. - 7:10 p.m.

TRAVEL TIME TO ARTS CENTER STATION
7:15 a.m. - 7:30 a.m.

ARTS CENTER STATION
7:30 a.m. - 8:30 a.m.
Place: Arts Center Station
Purpose: Observe Bus and Rail Operations, and Free-Intermodal counts by Traffic Checkers.

TRAVEL FROM ARTS CENTER STATION TO BREAK
8:30 a.m. - 9:00 a.m.

BREAK AT MCDONALD'S RESTAURANT
9:00 a.m. - 9:20 a.m.

BROWNS MILL ROAD GARAGE
9:30 a.m. - 11:30 a.m.
Place: Browns Mill Garage and Hamilton Blvd. Facility
Purpose: Heavy Maintenance; Materials and Supplies Purchasing Procedures.

BOARD BUS AND TRAVEL TO LUNCH
11:30 a.m. - 11:45 p.m.

LUNCH AT MORRISON'S CAFETERIA
11:45 a.m. - 12:40 p.m.

TRAVEL TIME TO LAREDO DRIVE GARAGE
12:45 p.m. - 1:15 p.m.

LAREDO DRIVE GARAGE
1:15 p.m. - 3:30 p.m.
Place: Laredo Drive Garage
Purpose: Transfer Room; Bus and Rail Operator Training and Safety Instruction.

BREAK
3:30 p.m. - 3:45 p.m.

(Thursday continued on next page)
THURSDAY (continued)

BUS TOUR THROUGH CONSTRUCTION AREAS
3:45 p.m. - 5:15 p.m.
   Purpose: View Rail System Construction.

TRAVEL TIME TO LENOX SQUARE MALL
5:15 p.m. - 5:30 p.m.

SHOPPING, ETC.
5:30 p.m. - 6:30 p.m.

BOARD BUS AND RETURN TO HOTEL (OPTIONAL)
6:30 p.m. - 7:00 p.m.
FRIDAY

CLASSROOM SESSION #3

TRANSIT MANAGEMENT DEVELOPMENT
8:00 a.m. - 9:00 a.m.
Place: Swann Bldg., Ga. Tech, Classroom A

9:00 a.m. - 12:30 p.m. *
Speaker: Sarah Lopez

*Break approximately 10:00 a.m.

BOARD BUS AND TRAVEL TO BANQUET
1:00 p.m. - 1:15 p.m.

AWARDS BANQUET
1:15 p.m. - 2:45 p.m.
Place: Sierra Room, Top of Merchandise Mart (Peachtree St./Harris St.)

BOARD BUS AND RETURN TO HOTEL
2:45 p.m. - 3:00 p.m.
1. Please rate the objectives, as listed below, according to their importance to you, using the following ratings: A=of great importance; B=of some importance; C=of little importance; D=of no importance.

2. Then indicate at the right the extent to which these objectives were achieved by placing an 'x' in the appropriate column.

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>IMPORTANCE RATING</th>
<th>EXTENT ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve your general knowledge about the transit industry.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To provide knowledge of one major transit agency (MARTA) as a generalizable example or comparison with other agencies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To provide information regarding career possibilities in urban transportation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learn where and how necessary experience can be gained, as a basic qualification for more responsible, non-traditional positions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve your confidence level as you consider occupying a higher position.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify modes of behavior which influence more successful office relationships.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve the amount of work for women.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OBJECTIVE

To increase the understanding of the role played by mentors in improving a woman's professional growth and attainment.

To make participants aware of the general absence of casual work-oriented information and support networks for women.

To improve access to participation in the y-to-day information networks.

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>IMPORTANCE RATING</th>
<th>EXTENT ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very much so</td>
<td>To some extent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
</tbody>
</table>
Circle the appropriate answer

1. The physical setting was... excellent
   good
   fair
   poor

2. The length of time spent on this topic was...
   more than enough
   about right
   needed more time
   absolutely too long

3. The presenters were...
   well prepared & interesting
   adequately prepared & interesting
   adequately prepared but boring
   poorly prepared

4. The organization of the information was...
   excellent
   good
   fair
   poor

5. The usefulness of the information was...
   immediately useful
   may be useful later
   is not useful

6. The appropriateness of the information was...
   very appropriate
   appropriate
   inappropriate
Circle the appropriate answer

1. The physical setting was...
   - excellent
   - good
   - fair
   - poor

2. The length of time spent on this topic was...
   - more than enough
   - about right
   - needed more time
   - absolutely too long

3. The presenters were...
   - well prepared & interesting
   - adequately prepared & interesting
   - adequately prepared but boring
   - poorly prepared

4. The organization of the information was...
   - excellent
   - good
   - fair
   - poor

5. The usefulness of the information was...
   - immediately useful
   - may be useful later
   - is not useful

6. The appropriateness of the information was...
   - very appropriate
   - appropriate
   - inappropriate
Circle the appropriate answer

1. The physical setting was...
   - excellent
   - good
   - fair
   - poor

2. The length of time spent on this topic was...
   - more than enough
   - about right
   - needed more time
   - absolutely too long

3. The presenters were...
   - well prepared & interesting
   - adequately prepared & interesting
   - adequately prepared but boring
   - poorly prepared

4. The organization of the information was...
   - excellent
   - good
   - fair
   - poor

5. The usefulness of the information was...
   - immediately useful
   - may be useful later
   - is not useful

6. The appropriateness of the information was...
   - very appropriate
   - appropriate
   - inappropriate
Circle the appropriate answer

1. The physical setting was...
   excellent
good
fair
poor

2. The length of time spent on this topic was...
more than enough
about right
needed more time
absolutely too long

3. The presenters were...
   well prepared & interesting
   adequately prepared & interesting
   adequately prepared but boring
   poorly prepared

4. The organization of the information was...
   excellent
good
fair
poor

5. The usefulness of the information was...
immediately useful
may be useful later
is not useful

6. The appropriateness of the information was...
   very appropriate
   appropriate
   inappropriate
**EVALUATION: TRANSIT OPERATIONS INSTITUTE**  
February 6-10, 1984

Check the appropriate answer

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>TO SOME EXTENT</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did the Institute meet your expectations based on the advanced announcement?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Were there other topics you would like to have discussed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Which sessions did you find most helpful?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Which sessions were least helpful?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Were the physical facilities...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Did you find the meals to be...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Were the hotel accommodations...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tech & MARTA Team Up
To Look at Women in Transit

ATLANTA--Women transit professionals from the southeast will arrive in Atlanta Feb. 5 to participate in a week-long seminar focusing on the non-traditional roles of women within the transit system. The "Transit Operations Institute: A Management Development Seminar for Women in the Transit Industry" is made possible by a $74,607 grant from the Urban Mass Transportation Administration to Georgia Tech and is being presented in cooperation with the Metropolitan Atlanta Rapid Transit Authority. The institute runs through Feb. 10.

The women will be exposed to all facets of the transit industry, with MARTA serving as a study guide to a "typical" transit agency. The women will hear lectures, panel discussions, receive on-site briefings and tours, and focus on transit systems operations, management strategies, problems facing women in their professional roles in a traditionally male-oriented industry, and relationships among peers, supervisors and subordinates.

Dr. Catherine L. Ross, an assistant professor in Georgia Tech's College of Architecture, is project director of the institute. Ann F. Johnson, manager of the Research and Analysis Branch in the Department of Transit Operations at MARTA, is project coordinator for MARTA and has provided technical and operational expertise in planning and scheduling the transit institute. Both women are members of the Women's Transportation Seminar, a national professional organization for women in the transportation field.

Ross and Johnson hope that ongoing funding can be established for the institute and that it will become a routine training tool for the transit industry. The women will be instructed at MARTA's various garages and stations, MARTA headquarters in the Peachtree Summit Building and at Georgia Tech. Some of the transit institute highlights follow.

Monday, February 6
Tuesday, February 7

Topic: Classroom Session - 8 a.m. - 12:15 p.m., Swann Building - Rm. A (Georgia Tech campus on Cherry Street at North Avenue)

Topic: Take Train into Yard Area at Avondale Station - 2 - 2:20 p.m., Avondale Station Platform
Purpose: Observe yard activities, to disembark from end door of car to ground level.

Topic: Car Maintenance Building - 2:30 - 3:30 p.m., Avondale Station
Purpose: Car Maintenance, Signal Maintenance, Maintenance of Right of Way.

Topic: Central Control - 3:40 - 5 p.m., Avondale Station
Purpose: System Structures and System Surveillance (Rail Transportation) Electronic System Maintenance (Fare Gates, CCTV, Radios).

Topic: Zone Center/Security - 5 - 5:30 p.m., Avondale Station
Purpose: Rail System Security, CCTV Center.

Wednesday, February 8

Topic: Analysis and Subsidies - 10:30 - 11:15 a.m., Peachtree Summit Building (located at Civic Center Station), 23rd Floor, Conference Rm. 23-E.
Purpose: Routine Analysis, Major Projects, Fares and Subsidies.

Thursday, February 9

Topic: Browns Mill Road Garage, 9:30 - 11:30 a.m., Browns Mill Garage and Hamilton Boulevard Facility
Purpose: Heavy Maintenance, Materials and Supplies Purchasing Procedures.

Friday, February 10

Topic: Transit Management Development, 9 a.m. - 12:30 p.m., Swann Building (Georgia Tech campus on Cherry Street at North Avenue), Rm. A
Speaker: Sarah Lopez, local consultant

###
PROGRESS REPORT

Title:
Transit Operations Institute: A Management Development Seminar for Women in the Transit Industry

Grant Number:
GA-11-0015

Time Period
January 31, 1984 through April 30, 1984

During the four days remaining before the Institute's official beginning last minute tasks such as confirming meeting rooms and dinner reservations, creating necessary signage, perusing Institute notebooks for completeness and so on were handled.

An unusual twist in pre-Institute publicity came in the form of an opportunity for Dr. Catherine Ross, Project Director, and Ann F. Johnson, Technical Monitor, to be the guests of Ike Newkirk on his radio talk show "Openline" on Sunday morning, February 5, 1984. Both women answered a variety of questions from callers contributing to the public's awareness of the Institute's purpose and goals.

The Institute opened with a Sunday evening get-acquainted session, which included introduction of the attendees (See Attachment A) and distribution of the basic workbook for the week. The week's time was divided roughly between classroom sessions at Georgia Tech and technical tours at MARTA. (See Attachment B) The classroom sessions covered management/personal-development issues, women in the transit industry, and concepts in formal education. (See Attachment B) The technical tours covered bus operations, rail operations and security, bus heavy maintenance, safety and instruction, and bus/rail intermodal activity, scheduling, analysis of service, traffic checking, and a visit with a Board Member. (See attachment C)

The concluding banquet was held on Friday, February 10, and featured remarks from Ken Gregor, General Manager/MARTA, Dr. Ross and Ms. Johnson. Each attendee received two certificates and personal photographs documenting their participation in the Institute. One certificate was from Georgia Tech's Office of Continuing Education certifying the 4.0 CEU's awarded; and the other was a special dual-agency certificate issued by both MARTA and Georgia Tech documenting completion of this unique educational experience. (See attachment D)

The response to the Institute was overwhelmingly positive. The participants were generally pleased and delighted at the experience they had had; many made suggestions of changes or modifications they would like to see included in future
sessions. Attached are copies of letters received from some of the participants upon their return to their home agencies as well as a listing of informal remarks and comments made by various individuals during the week of the Institute. (Attachment E)

Media coverage was adequate. (Attachment F)

Plans during the final period of this project include paying bills, reviewing expenditures, compilation and analysis of evaluations, mailing of a follow-up survey to the participants after a six-month interval and the preparation of the Final Report.

Problems were few and minor. Two women who sent in their confirmation cards did not attend. They did not notify us as to their change of plan. We feel this could have been avoided if a deposit, refundable up to two weeks prior to the Institute, had been required.

Georgia Tech Department of Continuing Education's services were sometimes disappointing. The person assisting with our program had only been on the job for a few days. The taking and relaying of messages by CE personnel was minimal. The classroom was too cold.
Participants

Abel Boseman
Training Specialist
ARTA
01 W. Peachtree Street
Atlanta, Georgia 30365
04-586-5225

June L. Burridge
Transportation Analyst I
ARTA
01 W. Peachtree Street
Atlanta, Georgia 30365
04-586-5321

Mary C. Cannon
Transportation Planner
ARTA
01 W. Peachtree Street
Atlanta, Georgia 30365
04-586-5298

Rice Gamble
Contract Administrator
ARTA
01 W. Peachtree Street
Atlanta, Georgia 30365
04-586-5467

Susan D. Gore
Executive Director
Cantal Rapid Public Transit Authority
O. Box 1740
Conway, South Carolina 29526
03-248-7277

Jared M. Headdy
Finance Supervisor
Sarasota County Area Transit
103 Pinkney Avenue
Sarasota, Florida 33583
3-922-0702

Kolyn S. Heffner
Administrative Assistant
St Palm Beach County Transportation Authority
19g. S-1440, P.B.T.A.
St Palm Beach, Florida 33406
5-686-4558

Attachment A
Page 1 of 4
Joyce H. Johnson
Administrative Officer
Transportation Institute
North Carolina State A&T University
302 Merrick Hall
Greensboro, North Carolina 27411
919-379-7745

Pamela F. Kennedy
Assistant Director
Pee Dee Regional Transportation Authority
P.O. Box 2071
Florence, South Carolina 29503
803-665-2227

Flora Lankford
Bus Operator
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-506-5426

Cora McFarland
Budget Analyst
MARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-506-5119

Patricia B. Mizell
State Ridesharing Coordinator
S.C. Department of Highways and Public Transportation
P.O. Box 191
Columbia, South Carolina 29202
803-758-2972

Pauline Newman
Community Relations Officer
ARTA
401 W. Peachtree Street
Atlanta, Georgia 30365
404-586-5073

C. Pinero
Special Assistant to Secretary
Puerto Rico Department of Transportation
C.O. Box 41269 Minillas Station
San Juan, Puerto Rico 00940
9-726-6625
Carolyn Read
Acting Property Manager
MTDA
44 West Flagler Street, 12th Floor
Miami, Florida 33130
305-579-4240 or 5698

Susan E. Rutledge
Administrative Assistant; Maintenance
Charlotte Transit System
707 Brevard Street
Charlotte, North Carolina 28202
704-374-2420

Barbara S. Saunders
Administrative Assistant
Department of Transportation/Transit Division
P.O. Box 590
Raleigh, North Carolina 27602
919-755-6363

Judy Scoggin
Special Projects Administrator
TDA
4 W. Flagler Street
Miami, Florida 33130
305-579-3802

Robin M. Sobrino
Special Projects Manager
TDA
4 W. Flagler Street
Miami, Florida 33130
305-579-5500

Melva J. Sublett
Associate Transportation Planner
ARTA
1 W. Peachtree Street
Atlanta, Georgia 30365
4-586-5028

Attachment A
Page 3 of 4
"WOMEN IN TRANSIT INSTITUTE"

SCHEDULE OF ACTIVITIES

February 5-10, 1984
SUNDAY, FEBRUARY 5, 1984

INFORMAL ORIENTATION
7:00 p.m. - 8:00 p.m.
Place: Howard Johnson Hotel, Executive Suites I & II
Refreshments: Wine and Cheese
MONDAY, FEBRUARY 6, 1984

REGISTRATION (OWN TRANSPORTATION)
8:00 a.m. - 8:30 a.m.
Place: Swann Bldg., Ga. Tech, Classroom A (3rd Floor)
Purpose: Pay Registration Fee ($100.00)
Receive: Name Tags, MARTA TransCards, Meal Tickets

CLASSROOM SESSION #1

WELCOME AND ORIENTATION TO ATLANTA
8:30 a.m. - 9:15 a.m.

PROGRAM OVERVIEW
9:15 a.m. - 9:40 a.m.

BREAK
9:45 a.m. - 10:00 a.m.

TRANSIT OVERVIEW
10:00 a.m. - 11:30 a.m.
Purpose: Transit Slide Show, Definitions, MARTA System Development,
U.S. Transit Community.

PREVIEW OF AFTERNOON
11:30 a.m. - 11:45 a.m.

LUNCH
12:00 p.m. - 1:00 p.m.
Place: Swann Bldg., Ga. Tech., Classroom D

BOARD BUS AND TRAVEL TO GARAGE
1:05 p.m. - 1:25 p.m.

BUS TRANSPORTATION
1:30 p.m. - 2:30 p.m.
Place: Brady Avenue Garage
Purpose: Dispatch, Blockouts, Sign-Ups, Extra Board,
Supervision, Discipline, and Public Interaction.

BREAK
2:30 p.m. - 2:45 p.m.

(Monday continued next page)
MONDAY, FEBRUARY 5, 1984 (continued)

BUS MAINTENANCE
2:45 p.m. - 3:45 p.m.
Place: Brady Avenue Garage
Purpose: Servicing and Cleaning, Routine Inspections, Minor and Intermediate Repairs, Block-Outs, Tire Shop, Storeroom.

RADIO ROOM
3:45 p.m. - 4:30 p.m.
Place: Brady Avenue Garage

BOARD BUS AND RETURN TO HOTEL
4:45 p.m. - 5:00 p.m.

BOARD BUS AND TRAVEL TO RESTAURANT
5:30 p.m. - 6:00 p.m.

COCKTAILS AND DINNER WITH REVIEW SESSION AND SPEAKER
6:00 p.m. - 8:45 p.m.
Place: Sandpiper Restaurant
Speaker: Lucy Freedman

BOARD BUS AND TRAVEL TO HOTEL
8:45 p.m. - 9:00 p.m.
Women in Transit Institute
Schedule of Activities

TUESDAY, FEBRUARY 7, 1984

CLASSROOM SESSION #2 (OWN TRANSPORTATION)
8:00 a.m. to 12:15 p.m. *
Place: Swann Bldg., Georgia Tech. - Classroom A
Purpose: Women in Transit, Women in Non-Traditional Roles; Operators, Planners, Consultants; Career Pathing, Discrimination.

*Break at approximately 10:00 a.m.

WALK TO VARSITY DRIVE-IN
12:15 p.m. - 12:30 p.m.

LUNCH AT VARSITY DRIVE-IN
12:30 p.m. - 1:30 p.m.

TRAVEL TO AVONDALE STATION ON MARTA RAPID RAIL
1:30 p.m. - 2:00 p.m.

TAKE TRAIN INTO YARD AREA
2:00 p.m. - 2:20 p.m.
Place: Avondale Station Platform, To Be Announced.
Purpose: Observe yard activities, to disembark from end door of car to ground level.

CAR MAINTENANCE BUILDING
2:30 p.m. - 3:30 p.m.
Purpose: Car Maintenance, Signal Maintenance, Maintenance of Right-of-Way.

BOARD BUS AND TRAVEL TO CENTRAL CONTROL
3:30 p.m. - 3:40 p.m.

CENTRAL CONTROL
3:40 p.m. - 5:00 p.m.
Purpose: System Structures and System Surveillance (Rail Transp.) Electronic System Maintenance (Fare Gates, CCTV, Radios).

ZONE CENTER/SECURITY
5:00 p.m. - 5:30 p.m.
Purpose: Rail System Security, CCTV Center.

(Tuesday continued next page)
TUESDAY, FEBRUARY 7, 1984 (continued)

BOARD BUS AND TRAVEL TO DINNER
5:30 p.m. - 5:50 p.m.

COCKTAILS AND DINNER
5:50 p.m. - 7:45 p.m.

BOARD BUS AND RETURN TO HOTEL
7:45 p.m. - 8:00 p.m.
**WEDNESDAY, FEBRUARY 8, 1984**

**COFFEE AND DANISH**
8:00 a.m. - 8:15 a.m.
Place: Peachtree Summit Bldg. (Located at Civic Center Station), 23rd Floor, Conference Room 23-E.

**INTRODUCTION**
8:15 a.m. - 8:45 a.m.

**SCHEDULING**
8:45 a.m. - 9:30 a.m.
Purpose: Bus and Rail Scheduling Process, Run Cutting/Labor Contract, Special Services.

**EVALUATION AND REGIONAL INTERACTION**
9:30 a.m. - 10:15 a.m.
Purpose: Traffic Checking, Shelters, Planning.

**BREAK**
10:15 a.m. - 10:30 a.m.

**ANALYSIS AND SUBSIDIES**
10:30 a.m. - 11:15 a.m.
Purpose: Routine Analysis, Major Projects, Fares and Subsidies.

**CUSTOMER SERVICES**
11:15 a.m. - 12:00 p.m.
Purpose: Public Hearings, Service Requests, Public Information.

**LUNCH (ON OWN)**
12:00 p.m. - 2:00 p.m.
Suggestion: Rapid Rail to Peachtree Center.

**OVERVIEW AND FEDERAL REQUIREMENTS**
2:00 p.m. - 2:45 p.m.

**QUESTIONS**
2:45 p.m. - 3:30 p.m.

**BOARD OF DIRECTORS**
3:30 p.m. - 4:00 p.m.
Purpose: Individual Responsibilities and Board Responsibilities.

(Wednesday continued on next page)
WEDNESDAY, FEBRUARY 8, 1984 (continued)

INDIVIDUAL DISCUSSIONS
4:00 p.m. - 5:00 p.m.

RECEPTION
5:00 p.m. - 6:30 p.m.
Place: Summit Club, Peachtree Summit Building, 2nd Floor.
Purpose: Casual conversation with Institute Personnel and
Tour Presentors. Hors d'ourves and two punches served,
cash bar available.
THURSDAY, FEBRUARY 9, 1984

BOARD BUS
7:00 a.m. - 7:10 p.m.

TRAVEL TIME TO ARTS CENTER STATION
7:15 a.m. - 7:30 a.m.

ARTS CENTER STATION
7:30 a.m. - 8:30 a.m.
   Place: Arts Center Station
   Purpose: Observe Bus and Rail Operations, and Free-Intermodal counts by Traffic Checkers.

TRAVEL FROM ARTS CENTER STATION TO BREAK
8:30 a.m. - 9:00 a.m.

BREAK AT McDONALD'S RESTAURANT
9:00 a.m. - 9:20 a.m.

BROWNS MILL ROAD GARAGE
9:30 a.m. - 10:00 a.m.
   Place: Browns Mill Garage
   Purpose: Materials and Supplies Purchasing Procedures.

10:00 a.m. - 11:30 a.m.
   Purpose: Heavy Maintenance

BOARD BUS AND TRAVEL TO LUNCH
11:30 a.m. - 11:45 p.m.

LUNCH AT MORRISON'S CAFETERIA
11:45 a.m. - 12:40 p.m.

TRAVEL TIME TO LAREDO DRIVE GARAGE
12:45 p.m. - 1:15 p.m.

LAREDO DRIVE GARAGE
1:15 p.m. - 3:30 p.m.
   Place: Laredo Drive Garage
   Purpose: Transfer Room; Bus and Rail Operator Training and Safety Instruction.

BREAK
3:30 p.m. - 3:45 p.m.

(Thurday continued on next page)
THURSDAY, FEBRUARY 9, 1984 (continued)

BUS TOUR THROUGH CONSTRUCTION AREAS
3:45 p.m. - 5:15 p.m.
Purpose: View Rail System Construction.

TRAVEL TIME TO LENOX SQUARE MALL
5:15 p.m. - 5:30 p.m.

SHOPPING, Etc.
5:30 p.m. - 6:30 p.m.

BOARD BUS AND RETURN TO HOTEL (OPTIONAL)
6:30 p.m. - 7:00 p.m.
FRIDAY, FEBRUARY 10, 1984

CLASSROOM SESSION #3

CHECK OUT OF HOTEL AND PLACE BAGGAGE IN SAFE ROOM

TRANSIT MANAGEMENT DEVELOPMENT
8:00 a.m. - 9:00 a.m.
   Place: Swann Bldg., Ga. Tech, Classroom A
   Purpose: Transit Education - Formal and Informal, Transportation
            Professional Organizations, Women in the Transit Industry.

9:00 a.m. - 12:30 p.m. *
   Purpose: Management/Personal Development Issues, Time Management,
            Conflict Resolution, Bureaucracies, Communications,
            Women's Issues, Job Requirements, Role Playing, Evaluation.
   Speaker: Sarah Lopez

*Break at approximately 10:00 a.m.

EVALUATIONS
12:30 p.m. - 1:00 p.m.

BOARD BUS AND TRAVEL TO BANQUET
1:00 p.m. - 1:15 p.m.

AWARDS BANQUET
1:15 p.m. - 2:45 p.m.
   Place: Sierra Room, Top of Merchandise Mart (Peachtree St./Harris St.)

BOARD BUS AND RETURN TO HOTEL
2:45 p.m. - 3:00 p.m.
Women's Transit Institute -- Technical Tours  
February 6-10, 1984  
MARTA "Presentors"

Monday_morning_Welcome_Session

Clay Long, Board Chairman *
William C. Nix, AGM for DTO *
Bruce Emory, Deputy AGM for DTO
Lindy Welch, Customer Services (slide show presentation)
Ann Johnson, Project Technical Coordinator

Monday_afternoon_Brady_Avenue

Walter McElroy, Transportation
Ann Freeman, Transportation*
Dan Grimes, Transportation
Mary Ray, Dispatcher

Jimmie Evans, Maintenance
Erika McCart, Traffic Watch
B.L. Phillips, Radio Room

Tuesday_afternoon_Avondale

T.O. Duvall, Bus & Rail Transportation
W.E. Callier, Rail Transportation
Shirley Johnson, Rail Transportation
Gloria Woods, Rail Transportation

George Payne, Communications
Jean Alexander, Communications
Sgt. Barbara Austin, Communications
Bill McCoy, Rail Maintenance

Wednesday_Summit_Building

M.C. York, Director SP&S
Harold Bolt, Scheduling
James P. Brown, Jr., Planning
Ann Johnson, Analysis

Annie Harris, Analysis
David Williamson, Planning & Analysis
Roger Dottin, Customer Services
Lyndon Wade, Board of Directors

Thursday_many_locations

Wilfred Beal, Evaluation & Monitoring
James Rafferty, Materials and Supplies
John Bruce, Operator Training and Safety
John Noga, Operator Training and Safety
Homer Clemmons, Operator Training & Safety

Edward Manning, Transportation
Marion E. Reese, Jr., Transfers
R.J. Malcom, Bus Heavy Maintenance
David Manuel, Const'n Tour Guide

Other_Functions

Kenneth M. Gregor, General Manager (luncheon speaker & overall Authority support)
Bob Brennan, Mak Gebre-Hiwet, Irv Mullins and Rod Ratcliffe (publicity, in cooperation with Georgia Tech)
Eileen Cioe, Lauren Salmon, Bob Harvey, and Joy Williams (meals and printing assistance support)
Velma Ludaway and Kathie Golden (graphics work)

*Denotes persons scheduled but unable to make presentations for various reasons.
This is to certify that

has successfully completed the

carried out by the

DEPARTMENT OF CONTINUING EDUCATION

Atlanta, Georgia
RECOGNITION IS HEREBY GIVEN THAT

June Burridge has successfully completed the

TRANSIT OPERATIONS INSTITUTE

a joint educational effort between
GEORGIA INSTITUTE of TECHNOLOGY
and
METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

as sponsored by the Urban Mass Transportation Administration

February 6 - 10, 1984
Atlanta, Georgia

Project Director

Technical Coordinator

President, Georgia Tech

General Manager, MARTA
ATTACHMENT D
Page 3 of 3
February 13, 1984

Catherine L. Ross, Ph.D.
Assistant Professor
Graduate City Planning Program
Georgia Institute of Technology
Atlanta, Georgia 30332

Dear Dr. Ross:


I am writing to you to express my appreciation for the opportunity to attend this unique institute. The objectives with the ultimate goal to improve the breadth of experience for women transit personnel were clearly defined. I offer you my congratulations for your part in the academic and experiential program of activities that were planned and initiated through the use of varying components. It was rewarding to view the joint cooperation of the Georgia Institute of Technology and the Metropolitan Atlanta Rapid Transit Authority.

I sincerely hope that this pilot program will be funded in the future and that many more women across the United States will have this opportunity to further their career goals and to assist in furthering the goals of the transit industry.

I consider it my personal responsibility to network the transit experience to other women in the Transit Industry and to network other applicable portions to women in non-transit employment.

Sincerely,

Mildred M. Headdy
Finance Supervisor

Attachment E
Page 1 of 7
Dr. Catherine L. Ross  
Assistant Professor  
Graduate City Planning Program  
Georgia Institute of Technology  
Atlanta, Georgia 30332  

Dear Catherine:

I wanted to express, once again, my appreciation for the opportunity to be a part of the very worthwhile Transit Operations Institute.

The program format was extremely well organized and provided a tremendous learning experience for me. I have realized, since returning to my office, that the knowledge gained was even greater than I had thought.

Thank you for your part in making this program a reality. It is my sincere wish that the program will be continued so that others may benefit as I have.

Best wishes and may all your future situations be win-win.

Yours truly,

Barbara S. Saunders  
Administrative Assistant

BSS/pv
February 16, 1984

Dr. Catherine Ross
Assistant Professor
Graduate City Planning Program
Georgia Institute of Technology
Atlanta, GA 30332

Dear Catherine:

I've often wondered how Dorothy felt when she returned from the Wonderful World of Oz and found herself back in Kansas. After the fantastic week at Georgia Tech and MARTA I am now back in Alabama with 6 buses, 2 station wagons and a mini-van. I'm so glad you didn't restrict attendance to the huge transit properties like MARTA, because although I represented the smallest system, the fact that I am directly responsible for every aspect of it from marketing to maintenance made the training invaluable to me. I learned as much from informal sessions with my classmates as I did from the presentation and field inspections.

The tremendous amount of planning and coordination put into this project by UMTA, MARTA, Georgia Tech, and most especially by you and Ann are really going to pay off now that we are all back home. The enthusiasm we brought with us was justified: the work that you put into it made this the most important transportation seminar I have ever attended, and it's going to benefit me personally, my agency's system, and hopefully the transit industry. Thanks again for your dedication which made the program such a success.

Sincerely,

Bettina Wood
Transportation Coordinator
Lee County Transit

BW/pdt

Attachment E
Page 3 of 7
FEB 16 1984

Dr. Catherine L. Ross
Program Director
Assistant Professor
Georgia Institute of Technology
Graduate City Planning Program
Atlanta, Georgia 30332

Dear Catherine:

It was a real pleasure meeting and working with you during the week in Atlanta. As I look back on those days, it is hard to believe it happened and that we were fortunate to be pioneers in the field!

I learned so much from you and sincerely hope that we will make the effort to continue our association and exchange information on an on-going basis. Women in transportation share a set of unique problems that only we can fully appreciate.

Please don't hesitate to contact me if I can provide you with any assistance.

Sincerely,

Pamela F. Kennedy
Assistant Director

Attachment E
Page 4 of 7
March 2, 1984

Dr. Catherine Ross  
Assistant Professor  
Graduate City Planning Program  
Georgia Institute of Technology  
Atlanta, Georgia 30332

Dear Catherine:

It was a pleasure meeting you at the Transit Operations Institute. You can't imagine the impression and enthusiasm I left Atlanta with. It was a great experience for me, meeting such fascinating people in the Seminar and at MARTA.

I wish you much success in making this Institute into a permanent national program for all women in the transit industry. I can envision this program expanding into all facets of transportation in the future. With your dedication to the field and women there is no doubt that it can be done.

I was very impressed by you and what you have accomplished over the years. It just inspires me even more in my career endeavors. I had so much confidence within myself when I left there and I knew I could make it no matter what.

I hope that we can keep in touch and whenever there is something of interest in transportation that you feel I would benefit from, please contact me.

Sincerely,

Renee Wheeler  
Transit Market Analyst I

RW:mjm
Verbal comments made by Participants in the Women's Transit Institute, February 5-10, 1984.

Attendance at this Institute has probably saved my job; I was so depressed over problems there that I was on verge of quitting; but now I see things in better perspective.

Appreciate the incredible opportunity to see roles of traffic checker, break mechanic & board member all at once.

I didn't even realize there existed a formal body of knowledge regarding transportation issues; Dr. Ross opened a whole new horizon on the topic for me.

Will take broader (multimodal) perspective for transit work now.

Ann Johnson knew entire system; for any topic mentioned, her answer was not merely a single response but a full discussion.

Glad to see "Who should Attend" section of brochure; something for us finally. (Lower-to-mid level)

Valuable to see Ann Johnson and Catherine Ross in daily dress for work—not a petty issue since no role models available for many women in smaller agencies.

In this one week, I have learned more regarding personal development than in a year or more otherwise; this has had more impact on me than I could possibly explain.

Over and over again comments detailing the tremendous value in seeing all of the elements of providing transit services on the street:
- know own specialized area only; now see all the rest, and how they fit together;
- at small agency have to do so many things that none can be done well;
- appreciate what DTO really is, rather than shallow and vague impression up til now.

Very glad to learn about rail operations since will soon be doing same at our own property.

Up until now, I thought of myself as a "community relations person" and did not realize how much "transportation" I did know; this has opened up a new horizon of career options in my mind.
Impressed with range and variety of positions held by black and white men and women at MARTA.

Glad to be able to tour and ask questions of so many different sections of agency; preparing training program for own agency.

I did not know what Operations department "did" – it was just a general unknown segment until now.

My opinion of bus operators has improved greatly; I'm no longer snobbish toward them.

Interested to learn about backgrounds of people making presentations, especially who did and who did not begin as a bus operator or mechanic.

Expected to come to "learn about transit"; did not expect to have such a good time doing it.
Women transit professionals from the Southwest are in Atlanta this week to participate in a seminar at Georgia Tech that will focus on the non-traditional roles of women within the transit system.

The "Transit Operations Institute: A Management Development Seminar for Women in the Transit Industry" will use MARTA as a study guide of the "typical" transit agency.

Catherine L. Ross, an assistant professor in Georgia Tech's College of Architecture, is project director of the institute.

Participants will hear lectures and panel discussions and receive on-site briefings and tours. They will focus on transit systems operations, management strategies, problems facing women in their professional roles in a traditionally male-oriented industry, and relationships among peers, supervisors and subordinates.

The institute, which lasts until Feb. 10, was made possible by a $74,607 Urban Mass Transportation Administration grant to Georgia Tech. It is being presented in cooperation with MARTA.
Transit Tutoring

Consultant Lucy Freedman (L) and psychologist Dr. Sarah Lopez talk transit with MARTA’s Ann Johnson and Dr. Catherine Ross of Tech’s College of Architecture during the recent Transit Operations Institute management development seminar coordinated by Tech and MARTA. Using MARTA as a study guide to a “typical” transit agency and Tech expertise and classroom space, the women got a technical look at the non-traditional roles of women within the transit system. The session was made possible by a $74,607 grant given to Tech by the Urban Mass Transportation Administration.

Attachment F
Page 2 of 4
(Left) Touring the Brady Avenue maintenance facility are participants in the first Transit Operations Institute, held in Atlanta February 5-10. A management development seminar designed for women in the transit industry, and limited to those in the southeastern region, the Institute attracted 21 women from as far away as Miami and Puerto Rico.

Shown here are seminar organizers Dr. Catherine Ross (left) of Georgia Tech, and Ann Johnson, of MARTA. Seminar attendees said Johnson, "We're delighted with the program. We had terrific cooperation and participation from people all over the system."
Women's Transit Careers Discussed

Under a $74,000 grant from the Urban Mass Transportation Administration (UMTA), the Transit Operations Institute held a five-day seminar for women in the transit industry.

The seminar, which drew participants from some 14 transit properties and other agencies in the southeast, focused on such topics as increased utilization of women, preparation of women for management roles and providing operations experience, the element often lacking in women's transit careers.

All classroom sessions were held on the campus of the Georgia Institute of Technology and workshops were conducted by MARTA facilities. MARTA also provided tours of operating and maintenance facilities.

The tours were primarily designed to provide an overview of such transit operations functions as bus maintenance, rail maintenance and bus/rail operations and supervision. Participants also had an opportunity to look at MARTA's operator training and safety awareness programs and the free intermodal transfer activity at some of the rail stations.

Some of the sessions covered subjects such as educational opportunities within the industry, management development programs and roles females have assumed in non-traditional areas of the transit industry.

The funding by the UMTA Office of University Training and Research is an outgrowth of a proposal jointly drawn by MARTA and the Georgia Institute of Technology.
TRANSIT OPERATIONS INSTITUTE:
A MANAGEMENT DEVELOPMENT SEMINAR
FOR WOMEN IN THE TRANSIT INDUSTRY

Dr. Catherine L. Ross
Associate Professor
Georgia Institute of Technology
College of Architecture
Atlanta, Georgia 30332

AUGUST 1984
FINAL REPORT
VOLUME I

Document is available to the U.S. public through the
National Technical Information Service,
Springfield, Virginia 22161

Prepared for
U.S. DEPARTMENT OF TRANSPORTATION
URBAN MASS TRANSPORTATION ADMINISTRATION
Office of Technical Assistance
University Research and Training Program
Washington, D.C. 20590
This report outlines the results of a one-week Institute designed to provide professional growth and enhancement for women currently employed in the transit industry. Georgia Institute of Technology joined with the Metropolitan Atlanta Rapid Transit Authority (MARTA) to provide an overview of the transit operations side of the industry. The intent was to provide a reasonable representation of the range of functions which are needed and the skills and backgrounds women must claim in order to perform these. The Institute combined on-site tours, pre-tour briefings, panel discussions, lectures and a variety of experiential opportunities in an effort to respond to the needs of women for technical/operational training in the transit industry.

The scope and thrust of the Institute was designed in part to help fill recently expressed needs in the transit industry for new managerial personnel and simultaneously to improve utilization of women throughout all levels of the industry. Issues that were addressed included major actual operations involvement, real and perceived problems regarding women in the field, real skills and experience requirements, and improved self-image for women regarding their own professional validity and their interactions with their peers, supervisors and subordinates. Extensive evaluations of various sessions were conducted and may be used to assist in the conduct of a similar effort.
ACKNOWLEDGEMENTS

The author would like to express her appreciation to all of those employed by the Metropolitan Atlanta Rapid Transit Authority (MARTA) who assisted in the conduct of the Institute. In particular, the tireless effort and enthusiasm put forth by Ann Johnson, Manager of Research and Analysis was pertinent to its success. Of course, all of this was made possible through the commitment and dedication of Mr. Ken Gregor, General Manager, for continued progress in the transit industry.

Funding for this effort was provided by the UMTA University Research and Training Program. The author appreciates the support and participation of the project monitor, Ms. Judy Meade. Her foresight and intelligence contributed immensely to the accomplishment of Institute objectives.
TABLE OF CONTENTS

Section                                                                 Page

1.1 Executive Summary                                                   1
2.1 Introduction                                                        2
2.2 Status of Women in the Industry                                    2
3.1 Institute Time/Task Schedule                                       4
4.1 Institute Design and Curriculum                                    6
4.2 Institute Structure                                                6
4.3 Recruitment and Selection of Participants                          10
4.4 Conduct of Institute                                               12
4.5 Institute Staff                                                    13
4.6 Institute Organization                                             13
4.7 Institute Schedule                                                 14
4.8 Classroom Sessions and On-Site Tours                               14
4.9 Guest Officials                                                    16
5.1 Institute Evaluation                                               16
5.2 Bus Operations                                                     17
5.3 Women in Transit/Non-Traditional Roles                             17
5.4 Rail Operations                                                    18
5.5 Scheduling, Evaluation and Public Intervention                     18
5.6 Accomplishment of Participant Objectives                          18
                       General Evaluation (Objective Accomplishment)                18
5.7 General Evaluation                                                21
5.8 Staff Evaluation                                                   23

FIGURES

Figure                  Page
1                       Time/Task Plan                         5
2                       Format for On-Site Sessions         6

TABLES

Table                  Page
1                       Issues, Objectives, and Methods          7
2                       Positions Held by Institute Participants 12
3                       Sample Daily Schedule                    15
4                       Objective Accomplishment                     19
5                       Evaluation: Transit Operations Institute  22
EXECUTIVE SUMMARY

A week-long Institute, to strengthen the operations/management-development background of women in the transit industry, was held February, 6-10, 1984, in Atlanta, Georgia. Its purpose was to increase the number of women prepared to assume positions of major responsibility within the industry.

Findings of task forces commissioned by the American Public Transit Association (APTA) and the Metropolitan Atlanta Rapid Transit Authority (MARTA) have outlined two major needs in the transit industry: 1) opportunities for women to acquire managerial and technical skills; and 2) a "new talent pool" to fill positions vacated by the collectively aging top level management. This Institute was designed to meet those needs by improving the present managerial skills of women in the industry; illuminating attitudinal barriers to upward mobility and offering solutions to help overcome them; and exposing women to the operational or "nuts and bolts" side of the transit industry. This was accomplished through a unique industry/university approach utilizing MARTA and Georgia Institute of Technology (Georgia Tech). The success of various components as well as the Institute in its entirety was assessed by extensive evaluations which took place during the week.
INTRODUCTION

The need for the Transit Operations Institute became obvious as a direct result of two documented facts: the lack of managerial training opportunities for women and the general low-level status of women in the transit industry. The increased number of female-headed households and increases in the cost of living have contributed to women seeking employment outside the home. While more women than ever before are entering the work force, their particular under-representation in the transit industry has been the subject of much discussion and analysis.

The aim of the Institute was to provide professional growth and enhancement for women currently employed in the transit industry (primarily sub-middle-management level employees). Participants were selected from the southeast, i.e., Georgia, Florida, Tennessee, Alabama, Mississippi, North Carolina, South Carolina, Kentucky and Puerto Rico.

The Institute was designed: to provide an overview of the operations side of the workforce which women have heretofore been hindered in acquiring; to indicate logical career paths; to provide assistance in increasing the number of women entering the industry and moving up the professional/management ladder; and to improve the climate within which men and women work together in the urban transportation field.

The main concern was not to transmit all existing knowledge about every aspect of transit operations activities in one super packed week. Rather, the intent was to provide a reasonable representation of the range of functions which are needed and the skills and backgrounds which women must achieve in order to provide those functions to the industry. The Institute performed a unique role in the industry. There are a few transit-related Institutes or study sessions in operation, but they tend to reflect the historical male-orientation of the field; and the highly-advertised women's career symposia, etc. are very general in nature. Thus, women who currently desire to move ahead in the transit industry have virtually no source of assistance which is both attuned to the specific needs of women in this field, and also is technically proficient.

STATUS OF WOMEN IN THE INDUSTRY

Prior to World War II, representation of women in the transit industry was at best limited, with only a few employees in technical and clerical positions. Women were recruited to perform many traditionally male functions in the industry during the war years, but generally did not progress to managerial functions. At the conclusion of the war, most women were phased out of the industry and their absence was notable until the mid 1960's.

In an effort to evaluate the status of women in the industry the American Public Transit Association (AFTA) established a Women in Transit Task Force in
1979. The task force conducted a survey of 31 transit systems throughout the country and reported its findings in the Women In Transit Task Force Report in October, 1980. (1) The task force found:

1. Females comprised 42.1 percent of the total American work force but only 13.2 percent of the transit work force.
2. Females were most represented in the "office/clerical" category with 59.9 percent of the transit work force.
3. Females were least represented in the "craftsmen" category with 1.4 percent of the transit work force.
4. Females were under-represented (less than 13.2 percent of the work force) in the following categories:
   
<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craftsmen</td>
<td>1.4 percent</td>
</tr>
<tr>
<td>Officials/Managers</td>
<td>7.0 percent</td>
</tr>
<tr>
<td>Technicians</td>
<td>15.9 percent</td>
</tr>
<tr>
<td>Operators/Service</td>
<td>9.8 percent</td>
</tr>
</tbody>
</table>

In addition to the above information, survey results indicated that:

* Sixty-eight percent of the systems surveyed had no females in the craftsmen category.
* All systems had females working in the operators/service category.
* Twenty-three of the systems had 100 percent female employment in the office/clerical category.
* Thirty-seven percent of the transit systems surveyed had no females employed in the officials/managers category. (2)

These findings clearly outline the under-representation of women in the industry with the greatest deficiencies occurring in the craftsmen, officials/managers and the operators/service categories.

Women in the industry identified a number of real or perceived barriers to employment, training, and career mobility. These may be either attitudinal or functional in nature. They perceived a lack of acceptance of women in non-traditional jobs. The barriers most frequently mentioned were continuance of stereotyped ideas, negative attitudes toward women in top management positions, and educational disparities. Along functional lines respondents to the APTA Women's Survey generally expressed a desire for greater exposure to all facets of transit. Such knowledge was seen as a vehicle for enhancing mobility. To this end, the report suggested the need for training programs designed, "to have the maximum impact on the career development and aspirations of women."(3)

In September of 1982, an Announcement from the Urban Mass Transportation Administration's (UMTA's) University Research and Training Program solicited applications to develop training programs for urban transportation managers and professionals.

Perceiving this Announcement as an opportunity to respond to the needs of women in the transit industry and to the APTA report, Dr. Catherine L. Ross, Associate Professor, College of Architecture, Georgia Institute of Technology (Georgia Tech) and Ann F. Johnson, Manager of Research and Analysis, Metropolitan Atlanta Rapid Transit Authority (MARTA), joined forces to author an application from Georgia Tech to UMTA. In July 1984, funding was granted to Georgia Tech to conduct the "Transit Operations Institute: A Management Development Seminar for Women in the Transit Industry." An agreement was struck with MARTA to provide in-kind professional enhancement elements. MARTA was particularly interested in the Institute as a consequence of its concern for the advancement of women in-house.

The Transit Operations Institute's primary objectives were to respond to: the professional/advancement needs of women in the industry; the needs of women for technical/operational training; and fulfill the need for new managerial talent to replace the now-aging top level managers in the transit industry.

INSTITUTE TIME/TASK SCHEDULE

In order to accomplish the objectives specified above, it was determined that a week-long Institute (February 6-10, 1984) would be convened. It was directed towards women, in the Southeastern UMTA Region IV, currently employed by transportation agencies at the middle or sub-middle management level. To initiate activities a time/task plan was developed. This plan encompassed twelve general tasks, each of which involved a number of smaller sub-tasks. The project covered the time period from August 1983 through July 1984. As can be seen, there were varying degrees of immediacy attached to the tasks. The ones that needed to be to be accomplished in the initial few months included:

1. Conduct Administrative Activities - Begin initiating procedures to employ an administrative assistant and graduate research assistants and bring the project on line at Georgia Tech.

2. Detail Institute Schedule - Development of a daily schedule for the Institute.

3. Select Steering Committee - Identification of five persons to evaluate applications and select participants to attend the Institute.

4. Develop Institute Brochure and Announcements - Development of a brochure and a one-page announcement detailing Institute activities and distribution among transit agencies in Region IV.

A timetable for the Institute is shown in Figure 1.
FIGURE I
TRANSIT OPERATIONS INSTITUTE:
TIME/TASK PLAN

<table>
<thead>
<tr>
<th>TASKS</th>
<th>TIME (in months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Select Steering Committee</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
</tr>
<tr>
<td>B. Select Technical Personnel</td>
<td></td>
</tr>
<tr>
<td>C. Develop Evaluation Materials</td>
<td></td>
</tr>
<tr>
<td>D. Develop Materials for Technical Sessions</td>
<td></td>
</tr>
<tr>
<td>E. Detail Institute Schedule</td>
<td></td>
</tr>
<tr>
<td>F. Develop Institute Brochure and Announcements</td>
<td></td>
</tr>
<tr>
<td>G. Conduct Administrative Activities</td>
<td></td>
</tr>
<tr>
<td>H. Select Participants</td>
<td></td>
</tr>
<tr>
<td>I. Develop Participant Packets</td>
<td></td>
</tr>
<tr>
<td>J. Conduct Institute Session</td>
<td></td>
</tr>
<tr>
<td>K. Preparation of Progress Reports</td>
<td></td>
</tr>
<tr>
<td>L. Preparation of Final Report</td>
<td></td>
</tr>
</tbody>
</table>

A S O N D J F M A M J J
INSTITUTE DESIGN AND CURRICULUM

The structure of the Institute was largely determined by the specific objectives it was designed to accomplish. While primary goals have been mentioned previously, there were a number of secondary objectives. Once these were specified, the challenge was one of organizing a program which facilitated their accomplishment. These provided initial thoughts about structure.

Secondary objectives were developed as the direct result of the identification of main issues affecting women in the transit industry. These were not limited to technical considerations, but included attitudinal problems encountered by women and other barriers to their career development. The Institute's secondary goals with corresponding methods for their accomplishment are outlined in Table I.

INSTITUTE STRUCTURE

The Institute combined the capabilities of practitioners, academicians and consultants to meet the extensive goals of providing accurate career development and professional enhancement assistance specifically oriented to the small, but growing group of women in the industry. It provided a close-up study of the operations end of the transit industry, the area which is generally recognized as the most lacking in women's professional backgrounds. In order to accomplish this, Georgia Tech and MARTA entered into a cooperative effort. MARTA provided in-kind services which included personnel to direct technical sessions, tours of its facilities, and the services of an in-house project director. Since the Institute placed great emphasis on hands-on operations, a number of site visits were scheduled to MARTA facilities. These on-site sessions generally followed a common format:

```
Pre-site visit briefing by technical personnel with accompanying handouts

On-site tour and discussion by technical personnel

Post-site discussion and question and answer session
```

FIGURE 2. Format for On-Site Sessions

In addition to the technical information shared, topics were approached from the viewpoint of women who might occupy various positions. In all contexts the Institute highlighted real skills requirements, and real experience requirements, while simultaneously identifying outmoded or traditional job requirements.
<table>
<thead>
<tr>
<th>ISSUE</th>
<th>OBJECTIVE</th>
<th>METHOD FOR RESOLVING PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A lack of knowledge of the transit industry in general</td>
<td>To improve general knowledge about the transit industry</td>
<td>Overview instruction regarding industry in general</td>
</tr>
<tr>
<td>2. A lack of knowledge among lower level transit employees regarding their agency in general, resulting in unclear views about the planning of career paths</td>
<td>To provide knowledge of one major transit agency (MARTA) as a generalizable example for comparison with participants' own agencies</td>
<td>Instruction, visits and discussion of MARTA structure, functioning and interaction</td>
</tr>
<tr>
<td>3. A lack of knowledge among women in transit regarding career possibilities in &quot;non-traditional&quot; job areas</td>
<td>To provide information to women regarding career possibilities in urban transportation</td>
<td>Career guidance, individual women's career stories, and basic job sequence information provided in course session</td>
</tr>
<tr>
<td>4. A lack of appropriate technical background among women as qualification for &quot;non-traditional&quot; jobs</td>
<td>To demonstrate to women participants where and how the necessary experience can be gained, a basic qualification for moving into more responsible positions</td>
<td>On-site visits, verbal discussions regarding length of time needed in various on-line activities in order to more fully master them</td>
</tr>
<tr>
<td>5. Uncertainties among women regarding reaching out for positions of higher level activity and/or responsibility</td>
<td>To improve the confidence-level of women as they consider occupying more responsible positions</td>
<td>Awareness-raising regarding the sources and types of uncertainties women have entertained, combatted by both general and specific information and techniques</td>
</tr>
<tr>
<td>ISSUE</td>
<td>OBJECTIVE</td>
<td>METHOD FOR RESOLVING PROBLEM</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6. The existence of fears and misconceptions among men regarding women in technical and/or authoritative positions</td>
<td>The emergence of the graduates of the institute will provide a growing community of women with documented professionalism</td>
<td>Participants will take their positions throughout the industry with a new sense of their own validity and a broader understanding of the industry itself</td>
</tr>
<tr>
<td>7. The existence of common socialization/training in women's general background which require identifiable &quot;counter socialization&quot; to foster effective career performance in &quot;non-traditional&quot; areas</td>
<td>Identify modes of behavior (some of which are consistently made part of men's socialization process) which produce more successful office relationships</td>
<td>Discussions, panel sessions and individual case histories, along with tools such as role-reversal, etc.</td>
</tr>
<tr>
<td>8. The overabundance of women hired into clerical positions regardless of extent and specialization in their educational background</td>
<td>To improve the correlation between women's educational background and the positions they hold, also increasing the number of men hired into routine clerical positions</td>
<td>Raising the issue of 1) positions that women are normally considered for, whether as initial hire or internal promotion; and 2) the tendency not to hire men into clerical positions even when expressly desired by candidate</td>
</tr>
<tr>
<td>9. Documented under-utilization of women in many areas in public transportation agencies</td>
<td>To attract and retain greater number of women into positions formerly considered &quot;non-traditional&quot; jobs for women, e.g., engineering maintenance, upper management, etc.</td>
<td>Specifically to point out current areas of under-utilization, examining educational and experiential requirements for filling these positions, encouraging interested women to take whatever steps might be necessary to compete for them</td>
</tr>
<tr>
<td>ISSUE</td>
<td>OBJECTIVE</td>
<td>METHOD FOR RESOLVING PROBLEM</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>10. Infrequent opportunities provided for women to travel for job-related educational purposes</td>
<td>To increase the numbers of women traveling for job-related education purposes, and increase the receptivity of those with whom they must come into contact — hotel and travel personnel especially</td>
<td>Reserve a minimum of one-half the participant slots for persons who must travel out-of-town to attend the sessions</td>
</tr>
<tr>
<td>11. The prevailing lack of motivation for women to aspire to positions of authority in the urban transit field</td>
<td>To improve the motivation of women (program participants and their acquaintances) to seek to attain positions of technical activity and increasing responsibility/authority</td>
<td>To have women who can serve as role models address participants. To organize discussion groups; question and answer sessions and intersperse these throughout technical sessions</td>
</tr>
<tr>
<td>12. The lack of mentors to/for women</td>
<td>To increase the number of professional women who 1) have an active mentor and 2) are actively mentoring a younger woman</td>
<td>Provide information about what mentoring is (many times it exists but is not recognized as such); the value of mentoring to effective career growth; the importance of extending an effort to help others, and considerable opportunity for reflection and feedback</td>
</tr>
<tr>
<td>13. General absence of casual work-oriented information and support networks for women.</td>
<td>To improve women's access to and participation in the day-to-day information flow</td>
<td>1) Increase women's awareness of those networks; and 2) of their value the job-effectiveness of those who are included; 3) then experiment with ways to join ongoing networks and/or create new ones</td>
</tr>
</tbody>
</table>
In conjunction with the technical sessions, professionals discussed issues, problems, and skills required in the performance of their various functions throughout MARTA. This information was presented through discussion sessions focusing on both technical and interpersonal aspects of women's careers within the profession. Panel discussions were structured around a presentation by women in various technical areas supported by two or three other panelists. After the presentation, an open discussion ensued. These sessions were monitored by a female psychologist trained in group interaction who helped facilitate interchange. The intended result was an enhanced understanding of what is needed in order to perform adequately in a technical capacity, an improved self-assurance in the participants regarding their own functional capabilities, and some realistic views on setting career goals.

The Institute was held at Georgia Tech in Atlanta, Georgia. The campus is located in close proximity to the administrative offices of MARTA.

RECRUITMENT AND SELECTION OF PARTICIPANTS

Recruitment of participants was accomplished through the use of three primary tools: an initial news release, an announcement flier and a brochure/application.

A news release, published by the Georgia Tech Information Bureau was disseminated to newspapers located in southeastern cities with an operating transit system. In addition, it was forwarded to national trade journals and women's magazines.

An 8 1/2 x 11 inch announcement flier describing the Institute was the second step in the publicity effort. Six-hundred fliers were distributed to transit authorities, Women's Transportation Seminar (WTS) members, elected officials, transportation organizations and other interested persons in the southeast.

A combination brochure/application was designed and printed as a reply mechanism for inquiries elicited by the news release and flier. The format was two-fold, four-panel, two-sided, with the following headings: Summary Schedule, Who Should Attend, Cost Involved, Selection Process (with key dates), and Benefits Gained. One panel served as an application form. Brochures were mailed to transit authorities, WTS members, city governments and a variety of transportation organizations in the southeast.

Although the brochure was effective, the application form, on one panel of the brochure, was not extensive enough. This became evident when the selection committee began its work. The principal consequence of not requesting more information on the application was a reduced ability to evaluate potential participants. The selection process was based on information submitted on the Institute application. This was limited to personal information, data on the number of years in the industry, positions held and reasons for wishing to attend the Institute. There was initial concern that the application form not be too extensive and this subsequently led to a situation where not enough information was requested.

The Atlanta and Washington Chapters of WTS printed articles about the Institute in their newsletters. This brought the Institute substantial publicity and resulted in its being discussed by many potential applicants.
WTS is a national professional organization whose membership is comprised primarily of women who are employed in the transportation sector. Thus, the Institute was brought into a principal network of those toward whom it was targeted.

Both the Georgia Tech Whistle, a campus newspaper, and the MARTA Transit Times carried an article on the Institute. The Transit Times is MARTA’s newspaper and is routinely forwarded to other authorities. As a result, the larger transit community was informed of the upcoming Institute. While the program was given a great deal of national exposure, only women working in the southeast were eligible to participate. However, other women across the United States expressed interest in attending.

An unusual opportunity for pre-Institute publicity presented itself when Dr. Catherine Ross, Project Director, and Ann F. Johnson, Project Technical Coordinator, were invited to be the guests of Ike Newkirk on his Atlanta radio station talk show "Open Line" on Sunday morning, February 5, 1984. In discussing the Institute and responding to the questions posed by listeners, who called in, the public's awareness of the Institute's purpose and goals was heightened. During and after the Institute, articles were printed in the Atlanta Constitution, the Georgia Tech Whistle, the MARTA Transit Times, The Dekalb News/Sun and APTA's Passenger Transport.

Response to the recruitment effort was strong with 46 applications received from the 9 state Region IV area and a few others from other ineligible areas of the country. Selection of participants involved three-steps: 1) appointing a five-member selection committee; 2) developing selection criteria and; 3) convening the selection committee to finalize a class list. Appointment to the selection committee was based on a person’s knowledge of transit, industry experience, organizational affiliation, and interest in human resource development. Committee members were Bobbie Ibarra, Director of Planning, Metro-Dade Transportation Administration, Miami, Florida; Ann F. Johnson, Project Technical Coordinator and Manager of Research and Analysis at MARTA; Judy Meade, University Research and Training Program, UMTA, Washington, D.C.; Catherine L. Ross, Project Director and Associate Professor of Architecture at Georgia Tech; and Robert Stanley, Director of Planning and Policy Analysis, APTA, Washington, D.C. Members agreed to seek funds from his/her agency to travel to Atlanta and finalize the selection process.

Guidelines for selecting Institute participants included:

1. Current work position
2. Geographical area
3. Racial background
4. Extent of experience in industry
5. Management potential
6. Interest in attending

A package of 46 applications was mailed to each of the committee members and they were asked to make a tentative selection of 25 class members and five alternates prior to the selection committee meeting. Only one meeting of the committee was necessary and it occurred on Friday, January 6, 1984, at Georgia Tech, in Atlanta, Georgia. One member, unable to attend, communicated her selections by telephone.
Deliberations took place from 9 a.m. until 4 p.m. Members toured facilities to be used during the course of the Institute and lunched during a two-hour break. The class list was finalized and five alternates were selected.

One week following the selection committee's meeting, participants received a package containing a congratulatory/informational letter; an updated Institute schedule summary, a map highlighting Georgia Tech, MARTA headquarters and the hotel where participants would be housed; and a confirmation of attendance card due back by January 18, 1984. Of the 25 participants notified, only one declined and an alternate was contacted.

Participants came from the following states and territories: Georgia, Florida, Alabama, South Carolina, North Carolina and Puerto Rico. They were employed in the following positions:

### TABLE 2

**POSITIONS HELD BY INSTITUTE PARTICIPANTS**

<table>
<thead>
<tr>
<th>Training Specialist</th>
<th>State Rideshare Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Analyst</td>
<td>Community Relations Officer</td>
</tr>
<tr>
<td>Contract Administrator</td>
<td>Finance Supervisor</td>
</tr>
<tr>
<td>Executive Director</td>
<td>Acting Property Manager</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>Maintenance Manager</td>
</tr>
<tr>
<td>Assistant Director</td>
<td>Special Projects Administrator</td>
</tr>
<tr>
<td>Bus Operator</td>
<td>Special Projects Manager</td>
</tr>
<tr>
<td>Budget Analyst</td>
<td>Transportation Planner</td>
</tr>
<tr>
<td>Transit Market Analyst</td>
<td>Transit Customer Representative</td>
</tr>
<tr>
<td>Acting Assistant General Manager/Operations</td>
<td>Transportation Coordinator</td>
</tr>
<tr>
<td>Special Assistant to Puerto Rican Secretary of Transportation</td>
<td></td>
</tr>
</tbody>
</table>

**CONDUCT OF INSTITUTE**

The scope and thrust of the Institute were designed in part to help fill recently expressed needs in the transit industry for new managerial personnel and simultaneously to improve utilization of women throughout all levels of the industry. Since the purpose of this Institute was to provide the widest possible exposure to all technical aspects of transit operations, a great deal of group movement was required. Further, since one of the most fundamental elements of a transit system is the usage of that system, the group utilized existing public transit (either bus, rail or both) for as many of the trips as possible. In this manner, specific experiences from the "rider" view point could be employed in discussing the transit "provider" functions. Since MARTA was the cooperating transit agency in this project, the group moved between bus operating facilities, the rail central control location, rail maintenance facility, various check points throughout the system, and the central office building by MARTA buses and trains. When public transportation was not available, the group used a charter bus.
The discussion/lecture sessions were held on the Georgia Tech campus at the Continuing Education facilities. A nearby hotel was selected for participant's lodging because of its proximity to Georgia Tech and MARTA's central offices.

Completion of this unique educational experience was recognized by the awarding of 4.0 Continuing Education Units (CEU's), from Georgia Tech, certified by a framed diploma, a dual-agency certificate issued by both MARTA and Georgia Tech and personal photographs documenting participation.

INSTITUTE STAFF

Institute staff members were involved in all aspects of the preparation, execution and follow-up activities associated with the Institute. This included the project director, Professor Catherine Ross, who had overall responsibility for the conduct of the Institute. Ann Johnson, project coordinator for MARTA, had responsibility for structuring of the technical content of the tours and coordination of the MARTA personnel involved in the Institute. In addition to these two primary staff members, two consultants were employed. Lucy Freedman, a human resource development specialist, conducted sessions on women in non-traditional roles; women in transit; career pathing; discrimination and other aspects of management skills development. Sarah Lopez, a practicing clinical psychologist, worked as a facilitator in addition to conducting presentations on time management, conflict resolution, communication within organizations and strategies for evaluation.

Susan Goodrick, administrative secretary, and two Georgia Tech graduate research assistants were also involved in all aspects of Institute activities. This included compiling mailing lists, arranging lodging, meal plans, designating classroom space, making transportation arrangements, making signage and handling communications with applicants, consultants and guest officials.

In addition, MARTA staff assisting included Julie Kell, Staff Analyst in the Department of Transit Operations; June L. Burridge, Transportation Analyst in the Department of Transit Operations; and Lauren Solomon, Affirmative Action Administrator.

INSTITUTE ORGANIZATION

The week-long Institute got underway on Sunday, February 5, 1984, with a get-acquainted session at the hotel which included introduction of the participants and distribution of the classroom and technical session materials.

Materials for the technical and classroom sessions, packaged in a 10 x 11 1/2 x 1 1/2 inch 3-ring notebook, consisted of an official daily schedule, a list of participants and their addresses, forms and information to support technical presentation (e.g., management ladder of operational units toured, and a monthly crime report for MARTA police). Additionally, management-related articles from various publications were included (e.g., Wall Street Journal, Savvy, Management Review). Also, a bibliography of transportation education programs and pertinent books and articles and evaluation forms for individual sessions and for the entire Institute were distributed to each participant. Materials were compiled according to the Institute schedule and indexed by the
day of the week. Volume II of this report contains selected materials from the notebook distributed to participants. It primarily consists of handouts which served as a basis for discussion by technical personnel.

In addition to the distribution of materials, the Sunday evening session was used as an opportunity for participants to mingle and become acquainted with each other. This initial session was attended by the UMTA grant manager as the sponsoring agency (UMTA) representative.

INSTITUTE SCHEDULE

Included in the materials distributed to each participant was a schedule of activities for the week of February 5-10, 1984 (see Table 3, sample daily schedule). Highlights of each day's activities were as follows: Monday - transit overview, tour of bus transportation facilities and introductory remarks by Lucy Freedman, consultant; Tuesday - Presentation on women in non-traditional roles, covering issues mentioned and tours of train car maintenance, central control and zone center/security; Wednesday - meetings at MARTA executive headquarters covering scheduling, evaluation and regional interaction, analysis and subsidies, customer services federal requirements and the board of directors and a reception for the participants, technical presentors and MARTA personnel involved in the planning of the Institute; Thursday - observing bus and rail operations and free-intermodal counts by traffic checkers, tours of bus heavy maintenance, bus and rail operators training center, safety instruction and rail system construction; Friday - transit management development and awards banquet.

CLASSROOM SESSIONS AND ON-SITE TOURS

The detailed daily schedule evolved from an outline contained in the grant application. The philosophy in planning the day-to-day activities was to logically unfold the inner-workings of a transit system by presenting a briefing on each operational unit for the women to gain an understanding of the male-oriented upper-level management mind-set. A number of lecture/group interaction sessions were conducted and monitored by consultants.

Efforts were made to avoid disrupting the learning curve wherever possible and meals were often scheduled together. Group movement between activities was facilitated by public transit, with the exception of a few occasions when time constraints made it impractical and a charter bus transported the group.

Presentations by MARTA personnel technical presenters, were coordinated by Ann Johnson. Seven of the 28 presenters were female. They covered issues such as bus operations, rail operations and security, bus heavy maintenance, safety and instruction, bus/rail intermodal activity, scheduling, analysis of service, traffic checking and the board of directors.

Classroom sessions dealt with issues such as women in non-traditional roles, career-pathing, discrimination, management/personal development, communication and bureaucracies, Transit Educational (formal and informal) and professional transportation organizations. Psychotherapists Lucy Freedman of Silver Spring, Maryland, and Sarah Lopez, of Atlanta, directed some sessions, while others were conducted by the project director and technical coordinator. The two psychotherapists utilized the lecture/group interaction format.
TABLE 3
TRANSIT OPERATIONS INSTITUTE:
A MANAGEMENT DEVELOPMENT SEMINAR FOR WOMEN IN THE TRANSIT INDUSTRY

SAMPLE DAILY SCHEDULE

<table>
<thead>
<tr>
<th>SUNDAY</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal orientation</td>
<td>Georgia Tech Registration</td>
<td>Georgia Tech Lucy Freedman on &quot;Women in</td>
<td>Marta Administration Scheduling</td>
<td>Arts Center Station Observe</td>
<td>Georgia Tech Transit</td>
</tr>
<tr>
<td></td>
<td>Welcome and orientation</td>
<td>Transit&quot; (non-traditional roles)</td>
<td>Evaluation and Regional Interaction</td>
<td>Bus and rail Free-intermodal</td>
<td>Management Management</td>
</tr>
<tr>
<td></td>
<td>Program overview</td>
<td></td>
<td></td>
<td>counts</td>
<td>Development Development</td>
</tr>
<tr>
<td></td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Lunch</td>
<td>Management/</td>
</tr>
<tr>
<td></td>
<td>Transit overview</td>
<td>Lucy Freedman</td>
<td>Analysis and subsidies</td>
<td>Laredo Garage</td>
<td>Personal Development Issues</td>
</tr>
<tr>
<td></td>
<td>Lunch</td>
<td>Lunch</td>
<td>Customer services</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Luncheon</td>
<td>Avondale Rail Station</td>
<td>Lunch</td>
<td>Bus tour through construction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brady Avenue Garage</td>
<td>Avondale yard activities</td>
<td>Overview and federal requirements</td>
<td>areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bus transportation</td>
<td>Car maintenance</td>
<td></td>
<td>Lenox Square Mall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bus maintenance</td>
<td>Central control</td>
<td></td>
<td>(Free time)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio room</td>
<td>Zone center/security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dinner</td>
<td></td>
<td></td>
<td>Reception</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dinner and overview of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>tomorrow's morning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>session</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Informal discussions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Informal discussions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
GUEST OFFICIALS

Playing an integral role in the Institute were the guest officials who participated in three of the Institute's functions. Representation of all organizations instrumental in making the Institute a reality was sought for the welcome session. This included: The Georgia Department of Transportation, Georgia Tech, MARTA, City of Atlanta government, and UMTA Regional Office and Headquarters. Technical presentors, MARTA board members and Georgia Tech officials were invited to the reception on Wednesday. At the Friday awards banquet, guests included MARTA's general manager, Georgia Tech's Associate Dean of the College of Architecture and the Director of the City Planning Program.

INSTITUTE EVALUATION

The Institute was evaluated in a number of different contexts. Specific sessions were assessed as well as the Institute in its entirety by the participant. Evaluations were conducted for:

1. Bus Operations
2. Women In Transit/Non-Traditional Roles
3. Rail Operations
4. Scheduling, Evaluation, and Public Interaction
5. Accomplishment of Participant Objective
6. General Evaluation

For bus operations, women in transit/non-traditional roles, rail operations, and scheduling, evaluation and public interaction, a common evaluation format was used. Six structured questions were asked about each of these sessions with a fixed response set. Participants were encouraged to share any comments or suggestions they had by writing these on the back of the evaluation form. The questions asked are listed below:

1. The physical setting was...
   - excellent
   - good
   - fair
   - poor

2. The length of time spent on this topic was...
   - more than enough
   - about right
   - needed more time
   - absolutely too long

3. The presenters were...
   - well prepared & interesting
   - adequately prepared & interesting
   - adequately prepared, but boring
   - poorly prepared

4. The organization of the information was...
   - excellent
   - good
   - fair
   - poor
5. The usefulness of the information was...  
   immediately useful  
   may be useful later  
   is not useful

6. The appropriateness of the information was...  
   very appropriate  
   appropriate  
   inappropriate

**Bus Operations**

The majority of participants felt the physical setting for the bus operation sessions was either excellent or good with approximately 25 percent saying it was fair. This session, held in the Brady Avenue Garage, was the lead-off and helped shape participant expectations of subsequent on-site visits. One problem was the radio-room which was too small to accommodate the group comfortably. While this was somewhat unavoidable it may be beneficial to prepare participants by informing them of such situations prior to arriving. Participants generally felt the amount of time spent on the topic was adequate.

It is interesting to note that participants were evenly split between thinking presenters were well prepared and interesting, and adequately prepared and interesting, but still they offered a number of suggestions for improvement. Many felt the presenters were very knowledgeable, but inexperienced at conveying information. Additionally, some felt the session would have been more effective if they had received written copies of the presentations. This would have better oriented participants and assisted presenters in focusing their discussions. This is demonstrated by the fact that 70 percent felt the organization of the information was either good or fair, not excellent. All felt the information was useful and appropriate. There was general agreement that the enthusiasm of the garage employees contributed much to the overall effectiveness of the session.

**Women In Transit/Non-Traditional Roles**

All participants agreed that the physical setting, the Continuing Education building at Georgia Tech, was either excellent or good. They were evenly split between feeling the time allocated was about right or insufficient. This indicates interest in having more time allocated to the topic. Participants generally seemed to feel they needed more information, partly because such information tends to be somewhat inaccessible to them.

Eighty-eight percent agreed that the presenter, Ms. Freedman, was well-prepared and interesting. Perhaps their interest and apparent enthusiasm is related to the importance of the topic to career development. Many responded that they frequently did not take time to evaluate additional considerations, other than their qualifications, which have implication for future positions they may wish to occupy. All agreed the organization of the material was either excellent or good in addition to being useful.

It is interesting to observe that 76 percent of those evaluating the session thought the information was very appropriate, while the remainder thought it was appropriate. A number of suggestions were made. However, it is clear that the session and the material were valued by the participants. This session was one of the most highly rated. One suggestion was for greater use of audio-visual aids and also for case studies which detail how to put various
strategies to work.

Rail Operations

Seventy percent agreed that the physical setting, the Avondale Station and railyard, was very conducive to facilitating learning about rail operations, with the remainder feeling it was good. The majority felt the time was about right with 23 percent wishing the site visit had been lengthier. Approximately 70 percent of the participants felt the presenters were well prepared and interesting. All agreed that the information was well organized, useful and either appropriate or very appropriate (84 percent). One concern was that various participants seemed to utilize a great deal of group time asking questions which were so specific as not to be generalizable. Perhaps the opportunity for some individual discussion with presenters would have alleviated this.

Scheduling, Evaluation and Public Intervention

Participants generally thought the physical setting, MARTA administrative offices, was comfortable. The vast majority, agreed that the time allocated was about right. While all the participants thought the presenters were either well prepared and interesting or adequately prepared and interesting, they offered some interesting observations. A number agreed, as has been suggested previously, that the presentations should be more structured and presenters more coordinated. This is reflected by the fact that 60 percent thought the organization of the information was good with the remainder feeling it was either excellent or fair. All agreed that the information was useful and appropriate.

Again, concern was expressed for the manner in which questions were asked. Some participants felt the way in which they were handled was disruptive. They suggested holding questions until the end feeling that, in some instances, presenters would have covered the information. Two participants wished they had been given more nuts-and-bolts information on scheduling. There was general agreement, however, that MARTA personnel take a great deal of pride in the system and are eager to share their enthusiasm.

Accomplishment of Participant Objectives

General Evaluation (Objective Accomplishment)

This was one of two evaluations which focused on the Institute generally, however, they are substantially different in orientation. The purpose of this evaluation was to identify the importance of certain objectives to the participant and assess the extent to which the Institute assisted in achieving these. Ten objectives were identified and participants were asked to rate them as being of great importance, of some importance, of little importance or of no importance. After determining this, they identified the extent to which they felt these objectives were achieved. The response could be very much so, to some extent, or not at all (see Table 4).

Ninety percent of participants agreed that improving their general knowledge about the transit industry was of great importance and over 50 percent of them thought this objective was very definitely achieved with most of the remainder feeling it was accomplished to some extent. One way of accomplishing the above objective was to use MARTA as a generalizable example
<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>IMPORTANCE RATING</th>
<th>EXTENT ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very much so</td>
</tr>
<tr>
<td>To improve your general knowledge about the industry.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To provide knowledge of one major transit agency (MARTA) as a generalizable example for comparison with other agencies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To provide information regarding career possibilities in urban transportation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To learn where and how the necessary experience can be gained, as a basic qualification for more responsible, non-traditional positions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To improve your confidence level as you consider occupying a higher position.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To identify modes of behavior which produce more successful office relationships.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBJECTIVE</td>
<td>1 IMPORrTANCE RATING</td>
<td>2 EXTENT ACHIEVED</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>Very much so</td>
<td>To some extent</td>
</tr>
<tr>
<td>To improve networks for women.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To increase the understanding of the role played by mentors in improving a woman's professional growth and attainment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To make participants aware of the general absence of casual work-oriented information and support networks for women.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To improve access to participation in the day-to-day information networks.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
for comparison with other agencies. The majority of respondents agreed this was of great importance and approximately the same number agreed this was very much accomplished.

Participants felt the provision of information regarding career possibilities was of great importance, while only 10 percent said it was of little importance. Ninety percent agreed the Institute very much provided this information. A part of this involved learning where and how the necessary experience can be gained. Responses were evenly split between those who considered this to be of great importance and those who considered it to be of some importance. However, the majority of participants, felt this objective was accomplished to some extent. This suggests more attention should be focused on identifying where experience can be gained. Although this was addressed during the conduct of the Institute, it should probably be accomplished in a more explicit manner.

Not surprisingly, the majority agreed that the improvement of one's self confidence was important in considering occupying a higher position and 80 percent agreed this was either very much accomplished or was accomplished to some extent.

Participants were evenly split between thinking that the identification of behavior which produces successful office relations was of great importance or of some importance. The majority felt the Institute was marginally successful and only accomplished this to some extent. Networking has been cited as one method for improving relations and the majority of respondents felt this was of some importance. All agreed that the Institute was either very successful or was successful to some extent in accomplishing this objective. Networking may result in the identification of a mentor and 75 percent of participants agreed that understanding the role of a mentor is either of great importance or of some importance. Sixty percent thought this was done to some extent, while 30 percent felt it was very much accomplished.

Twenty percent of Institute participants felt that being made aware of the absence of support networks was of little importance while 60 percent thought this was very much accomplished. While 20 percent is a minority, it does indicate some lesser significance attached to this issue. Lastly, 85 percent of participants felt improving their access to the day-to-day information networks was either of great importance or of some importance. They generally felt this was achieved.

General Evaluation

This evaluation focused on assessing the Institute in its entirety (see Table 5).

Participants were generally in agreement that the Institute met their expectations (70 percent) based on the advance announcement. The remainder thought their expectations were met to some extent. About 76 percent felt there were other topics which they would have liked to have discussed. These included: vehicle insurance; office attire; clerical management; more experience sharing; and detailed overview of public transportation.

Twenty-one percent of participants thought the tours and field visits were the most helpful sessions, while 17 percent felt the two presentations of women
<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>TO SOME EXTENT</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did the Institute meet your expectations based on the advance announcement?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Were there other topics you would like to have discussed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Which sessions did you find most helpful?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Which sessions were least helpful?</td>
<td>EXCELLENT</td>
<td>GOOD</td>
<td>FAIR</td>
</tr>
<tr>
<td>5. Were the physical facilities...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Did you find the meals to be...</td>
<td>EXCELLENT</td>
<td>GOOD</td>
<td>FAIR</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Were the hotel accommodations...</td>
<td>EXCELLENT</td>
<td>GOOD</td>
<td>FAIR</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
in transit and management development were the most helpful. More than one-fourth thought all sessions were equally helpful. Scheduling, bus operations, and planning were also mentioned by some. Generally, participants were hesitant in identifying the least helpful session with 42 percent not selecting a least helpful session. The remaining 52 percent were split among a number of sessions these included: the welcome session; Avondale Station; bus operations; evaluation and planning; routing and scheduling; and the visit to board room.

Seventy-percent of those attending the Institute judged the physical facilities to be excellent, 24 percent thought they were good. Approximately 65 percent found the meals to be either excellent or good, while only 30 percent felt they were fair. One participant suggested there be more opportunity for those in attendance to make their own dinner arrangements. The hotel was judged to be either excellent or good by only 35 percent of those in attendance. Another 35 percent thought it was either poor or fair. Many suggested they would be willing to pay more for a better quality hotel and would have much preferred a downtown location.

Participants outlined a number of suggestions which apply across the various sessions or which they felt they did not have ample opportunity to comment on. These are listed below:

* Split into smaller groups according to the interests and needs of the participants. The group remained together through all of the Institute.

* A short orientation may be appropriate for those totally unfamiliar with transportation authorities.

* A special training Institute for MARTA personnel only. Some of those in attendance were employed by MARTA.

* Night sessions should be cancelled when there are early morning sessions following.

* Don't start earlier than 8:30 a.m.

* Give participants more time to prepare themselves before the seminar. Send information three months in advance (minimum).

* The organizers were enthusiastic and dedicated.

Staff Evaluation and Recommendations

Undoubtedly the Institute staff had the final responsibility in organizing activities during the week. Generally the staff thought the major objectives were accomplished. Perhaps the one thing they had not anticipated was the interest, enthusiasm, dedication, and appreciation expressed by those in attendance. The response to the Institute was overwhelmingly positive.

A primary, although unarticulated objective, was the creation of a situation in which both those working in the academic environment and those employed in day-to-day operations at MARTA could work together on a common undertaking. This opportunity explains the tremendous amount of enthusiasm displayed by both. The merging of both of these resulted in the conduct of an
Institute that emphasized real skills development.

As commonly occurs, a variety of recommendations may be made for the future conduct of this or a similar undertaking. Logistics is an area where a number of issues emerged. The question of lead time prior to the conduct of an activity like the Institute is probably the singularly most important consideration. Ideally, this should have been lengthened substantially. However, a number of occurrences influenced this. This has direct implication for all activities. For example, better support from the Georgia Tech Continuing Education Program may have been achieved if they had been brought into the planning process sooner. This was not true for all instances where there were difficulties. There was limited space remaining so that the Institute was convened in older quarters rather than in the new Space Science Building where sessions are typically held. The room where the Institute was held was too cold and an inexperienced staff member was assigned to assist during the week, because the originally assigned, experienced staff member became ill. This person had only recently been employed and was unfamiliar with procedures. There were a number of support functions which were left to the last minute and required additional effort on the part of Institute staff because of the short time remaining before the Institute. This included: signage, the distribution of medical emergency information; and printing of special certificates.

Another important issue is the development of a more functional brochure and application form. Instead of having the brochure contain the application form, it is probably better to have a marketing brochure which identifies how to call or write for further information. Then, interested persons could be sent a much more extensive application than was used in this effort. The lack of information was fairly significant simply because the application form was too abbreviated as a result of being a part of the advertising brochure.

As the week progressed participants became weary of carrying the large notebooks to each session. The availability of a canvas bag to carry material and notebooks would have been helpful. Additionally, while the hotel with closest proximity to the campus was used, it was not within walking distance. This was particularly true given the inclement weather conditions which prevailed during the week. While participants used taxis or public transportation, a better location would have made their trips a bit easier. Also, it is a good idea to provide transportation wherever possible. It also became obvious that a microphone or voice amplifier on the bus of some sort, was necessary for the entire week's activities. Frequently, en route to different places, some member of the group could not hear. Organizers should make sure they can be heard by all participants at all times.

A number of improvements may be suggested in the presentation of material. Presenters should practice presentations and more should be done in classroom or lecture sessions. Participants needed a broader conceptual exposure to material prior to the on-site visit. Written materials distributed and discussed with participants prior to the visit would assist in remedying this. This might include mailing some material for reading purposes, prior to participants' arrival at the Institute. Also, a presenter's list should have accompanied the list of each day's activity.

A number of those in attendance felt that the opening session should have been shorter and the staff agrees with this. It is important that the opening
session be effectively run because it shapes perceptions about what is to follow. As much attention as possible should be given to assuring the conduct of an effective, well paced, enthusiastic initial session to set the tone of what is expected of and by participants.

There was tremendous support for the Institute and the market for future offerings is extensive. Many letters of support have been received and the Institute has been endorsed by numerous transportation organizations and transportation professionals.
TRANSIT OPERATIONS INSTITUTE:
A MANAGEMENT DEVELOPMENT SEMINAR
FOR WOMEN IN THE TRANSIT INDUSTRY

Dr. Catherine L. Ross
Associate Professor
Georgia Institute of Technology
College of Architecture
Atlanta, Georgia 30332

AUGUST 1984
FINAL REPORT
VOLUME II

Document is available to the U.S. public through the
National Technical Information Service,
Springfield, Virginia 22161

Prepared for
U.S. DEPARTMENT OF TRANSPORTATION
URBAN MASS TRANSPORTATION ADMINISTRATION
Office of Technical Assistance
University Research and Training Program
Washington, D.C. 20590

Dr. Catherine L. Ross, Associate Professor

Georgia Institute of Technology
College of Architecture
Atlanta, Georgia 30332

U.S. Department of Transportation
Urban Mass Transportation Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

This report consists of selected materials from the notebook distributed to participants of the "Transit Operations Institute: A Management Development Seminar for Women in the Transit Industry", a one-week workshop designed to provide professional growth and enhancement for women currently employed in the transit industry. An in-depth report on the results of this Institute can be found in Volume I of this report. This volume consists primarily of handouts which served as the basis for discussion by technical personnel.
### METRIC CONVERSION FACTORS

#### Approximate Conversions to Metric Measures

<table>
<thead>
<tr>
<th>Symbol</th>
<th>When You Know</th>
<th>Multiply by</th>
<th>To Find</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LENGTH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in</td>
<td>inches</td>
<td>2.5</td>
<td>centimeters</td>
<td>cm</td>
</tr>
<tr>
<td>k</td>
<td>feet</td>
<td>30</td>
<td>centimeters</td>
<td>cm</td>
</tr>
<tr>
<td>yd</td>
<td>yards</td>
<td>0.9</td>
<td>meters</td>
<td>m</td>
</tr>
<tr>
<td>mi</td>
<td>miles</td>
<td>1.6</td>
<td>kilometers</td>
<td>km</td>
</tr>
</tbody>
</table>

| **AREA** |
| sq in | square inches | 0.625 | square centimeters | cm² |
| sq ft | square feet | 0.0929 | square meters | m² |
| sq yd | square yards | 0.8361 | square meters | m² |
| sq mi | square miles | 0.2471 | square kilometers | km² |

| **MASS (weight)** |
| oz | ounces | 28.35 | grams | g |
| lb | pounds | 0.45 | kilograms | kg |
| ton | short tons | 0.9072 | metric tons | t |

| **VOLUME** |
| tsp | teaspoons | 5 | milliliters | ml |
| Tbsp | tablespoons | 15 | milliliters | ml |
| fl oz | fluid ounces | 30 | milliliters | ml |
| c | cups | 0.24 | liters | l |
| pt | pints | 0.47 | liters | l |
| qt | quarts | 0.946 | liters | l |
| gal | gallons | 3.785 | liters | l |
| cu ft | cubic feet | 0.0283 | cubic meters | m³ |
| cu yd | cubic yards | 0.765 | cubic meters | m³ |

| **TEMPERATURE (scale)** |
| °F | Fahrenheit temperature | 5/9 (subtracting 32) | Celsius temperature | °C |

### Approximate Conversions from Metric Measures

<table>
<thead>
<tr>
<th>Symbol</th>
<th>When You Know</th>
<th>Multiply by</th>
<th>To Find</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LENGTH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mm</td>
<td>millimeters</td>
<td>0.04</td>
<td>inches</td>
<td>in</td>
</tr>
<tr>
<td>cm</td>
<td>centimeters</td>
<td>0.4</td>
<td>inches</td>
<td>in</td>
</tr>
<tr>
<td>m</td>
<td>meters</td>
<td>3.281</td>
<td>feet</td>
<td>ft</td>
</tr>
<tr>
<td>km</td>
<td>kilometers</td>
<td>0.6214</td>
<td>miles</td>
<td>mi</td>
</tr>
</tbody>
</table>

| **AREA** |
| cm² | square centimeters | 0.155 | square inches | in² |
| m² | square meters | 1.196 | square yards | yd² |
| km² | square kilometers | 0.3861 | acres | acres |

| **MASS (weight)** |
| g | grams | 0.035 | ounces | oz |
| kg | kilograms | 2.2046 | pounds | lb |
| t | metric tons | 1 | short tons | 1 |

| **VOLUME** |
| ml | milliliters | 0.035 | fluid ounces | fl oz |
| l | liters | 1 | pints | pt |
| qt | quarts | 0.264 | gallons | gal |
| gal | gallons | 3.785 | cubic feet | ft³ |
| cu ft | cubic feet | 0.0283 | cubic yards | yd³ |

### TEMPERATURE (scale)

<table>
<thead>
<tr>
<th>°C</th>
<th>Celsius temperature</th>
<th>5/9 (then add 32)</th>
<th>Fahrenheit temperature</th>
<th>°F</th>
</tr>
</thead>
</table>

*For further exact conversions and more detailed tables, see NBS Tech. Pub. 300, Handbook of Weights and Measures, 1953 Ed. (Fuller, 1953) and C13-1973.
ACKNOWLEDGEMENTS

The author would like to express her appreciation to all of those employed by the Metropolitan Atlanta Rapid Transit Authority (MARTA) who assisted in the conduct of the Institute. In particular, the tireless effort and enthusiasm put forth by Ann Johnson, Manager of Research and Analysis was pertinent to its success. Of course, all of this was made possible through the commitment and dedication of Mr. Ken Gregor, General Manager, for continued progress in the transit industry.

Funding for this effort was provided by the UMTA University Research and Training Program. The author appreciates the support and participation of the project monitor, Ms. Judy Meade. Her foresight and intelligence contributed immensely to the accomplishment of Institute objectives.
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1 Executive Summary</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>2.1 Introduction</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>2.2 Institute Structure</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>2.3 Institute Organization</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

**GENERAL INFORMATION**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.1 Welcome Letter to Participants</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>3.2 Schedule of Activities</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>3.3 Institute Staff</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

**MONDAY**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.1 Marta Key Dates</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>4.2 Glossary of Transit Terminology</strong></td>
<td>18</td>
</tr>
<tr>
<td><strong>4.3 MARTA Organizational Chart</strong></td>
<td>27</td>
</tr>
<tr>
<td><strong>4.4 Department of Transit Operations/ Organizational Chart</strong></td>
<td>28</td>
</tr>
<tr>
<td><strong>4.5 Office of the Assistant General Manager For Transit Operations/Organizational Chart</strong></td>
<td>29</td>
</tr>
<tr>
<td><strong>4.6 Office of Deputy General Manager for Operations Planning and Marketing/Organizational Chart</strong></td>
<td>30</td>
</tr>
<tr>
<td><strong>4.7 MARTA Staff Composition</strong></td>
<td>31</td>
</tr>
<tr>
<td><strong>4.8 Division of Transportation/Organizational Chart</strong></td>
<td>34</td>
</tr>
<tr>
<td><strong>4.9 Division of Bus Maintenance/Organizational Chart</strong></td>
<td>35</td>
</tr>
<tr>
<td><strong>4.10 Bus Assignments by Division</strong></td>
<td>36</td>
</tr>
<tr>
<td><strong>4.11 Recommended Preventative Maintenance/ 7,000 Mile Inspection Sheet</strong></td>
<td>40</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS - cont'd

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.12</td>
<td>45</td>
</tr>
<tr>
<td>4.13</td>
<td>48</td>
</tr>
<tr>
<td>4.14</td>
<td>49</td>
</tr>
<tr>
<td>4.15</td>
<td>50</td>
</tr>
<tr>
<td>4.16</td>
<td>51</td>
</tr>
<tr>
<td>4.17</td>
<td>52</td>
</tr>
</tbody>
</table>

---

## TUESDAY

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>53</td>
</tr>
<tr>
<td>5.2</td>
<td>56</td>
</tr>
<tr>
<td>5.3</td>
<td>58</td>
</tr>
<tr>
<td>5.4</td>
<td>59</td>
</tr>
<tr>
<td>5.5</td>
<td>60</td>
</tr>
<tr>
<td>5.6</td>
<td>61</td>
</tr>
<tr>
<td>5.7</td>
<td>71</td>
</tr>
<tr>
<td>5.8</td>
<td>72</td>
</tr>
<tr>
<td>5.9</td>
<td>76</td>
</tr>
<tr>
<td>5.10</td>
<td>77</td>
</tr>
<tr>
<td>5.11</td>
<td>78</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td><strong>WEDNESDAY</strong></td>
<td></td>
</tr>
<tr>
<td>6.1 Service Planning and Scheduling/ Organizational Chart</td>
<td>82</td>
</tr>
<tr>
<td>6.2 Schedule for Route 66</td>
<td>83</td>
</tr>
<tr>
<td>6.3 Routing Sheet for Route 66</td>
<td>84</td>
</tr>
<tr>
<td>6.4 Run Assignment for Route 66</td>
<td>85</td>
</tr>
<tr>
<td>6.5 Department of Transit Operations/ Statistics Summary</td>
<td>86</td>
</tr>
<tr>
<td>6.6 Fare Schedule</td>
<td>88</td>
</tr>
<tr>
<td>6.7 Division of Customer Services/ Organizational Chart</td>
<td>89</td>
</tr>
<tr>
<td>6.8 Board of Directors</td>
<td>90</td>
</tr>
<tr>
<td><strong>THURSDAY</strong></td>
<td></td>
</tr>
<tr>
<td>7.1 MARTA Rail System Safety and Emergency Features</td>
<td>91</td>
</tr>
<tr>
<td>7.2 Fire Emergency Operating Procedures</td>
<td>106</td>
</tr>
<tr>
<td>7.3 Fire Emergency Uncoupling Procedures</td>
<td>107</td>
</tr>
<tr>
<td>7.4 Fire Emergency Evacuation Procedures</td>
<td>108</td>
</tr>
<tr>
<td><strong>FRIDAY</strong></td>
<td></td>
</tr>
<tr>
<td>8.1 Transit Related Educational Programs</td>
<td>109</td>
</tr>
<tr>
<td>8.2 Selected Bibliography</td>
<td>114</td>
</tr>
<tr>
<td><strong>FIGURES</strong></td>
<td></td>
</tr>
<tr>
<td>Figure I Format for On-Site Sessions</td>
<td>3</td>
</tr>
</tbody>
</table>
TRANSIT OPERATIONS INSTITUTE: A MANAGEMENT DEVELOPMENT SEMINAR FOR WOMEN IN THE TRANSIT INDUSTRY

EXECUTIVE SUMMARY

A week-long Institute, to strengthen the operations/management-development background of women in the transit industry, was held February, 6-10, 1984, in Atlanta, Georgia. Its purpose was to increase the number of women prepared to assume positions of major responsibility within the industry.

Findings of task forces commissioned by the American Public Transit Association (APTA) and the Metropolitan Atlanta Rapid Transit Authority (MARTA) have outlined two major needs in the transit industry: 1) opportunities for women to acquire managerial and technical skills; and 2) a "new talent pool" to fill positions vacated by the collectively aging top level management. This Institute was designed to meet those needs by improving the present managerial skills of women in the industry; illuminating attitudinal barriers to upward mobility and offering solutions to help overcome them; and exposing women to the operational or "nuts and bolts" side of the transit industry. This was accomplished through a unique industry/university approach utilizing MARTA and Georgia Institute of Technology (Georgia Tech). The success of various components as well as the Institute in its entirety was assessed by extensive evaluations which took place during the week.
Introduction

The need for the Transit Operations Institute became obvious as a direct result of two things: the lack of managerial training opportunities for women and the general status of women in the transit industry. The increased number of female headed households and increases in the cost of living have contributed to women seeking employment outside the home. While more women than ever before are entering the work force, their particular under-representation in the transit industry has been the subject of much discussion and analysis.

The aim of the Institute was to provide professional growth and enhancement for women currently employed in the transit industry (primarily sub-middle-management level employees). Participants were selected from the southeast, i.e., Georgia, Florida, Tennessee, Alabama, Mississippi, North Carolina, South Carolina, Kentucky and Puerto Rico.

The Institute was designed: to provide an overview of the operations side of the workforce which has heretofore been hindered in achieving same; to indicate logical career paths; to provide assistance in increasing the number of women entering the industry and moving up the professional/management ladder; and to improve the climate within which men and women work with each other in the urban transportation field.

The main concern was not to transmit all existing knowledge about every aspect of transit operations activities in one super packed week. Rather, the intent was to provide a reasonable representation of the range of functions which are needed and the skills and backgrounds which women must acquire in order to provide those functions to the industry. The Institute performed a unique function in the industry. There are a few transit-related institutes or study sessions in operation, but they tend to reflect the historical male-orientation of the field; and the highly-advertised women's career symposia, etc., are very general in nature. Thus, women who currently desire to move ahead in the transit industry have virtually no source of assistance which is both attuned to the specific needs of women in this field, and also is technically proficient.

INSTITUTE STRUCTURE

The Institute combined the capabilities of practitioners, academicians and consultants to meet the extensive goals of providing accurate career development and professional enhancement assistance specifically oriented to the small, but growing group of women in the industry. It provided a close-up study of the operations end of the transit industry, the area which is generally recognized as the most lacking in women's professional backgrounds. In order to accomplish this, Georgia Institute of Technology and the Metropolitan Atlanta Rapid Transit Authority (MARTA) entered into a cooperative effort. MARTA provided in-kind services which included personnel to direct technical sessions, tours of its facilities, and the services of an in-house project director. Since the institute placed great emphasis on hands-on operations, a
number of site visits were scheduled to authority facilities. These on-site sessions generally followed a common format:

![Diagram of on-site sessions format]

Pre-site visit briefing by technical personnel with accompanying handouts

On-site tour and discussion by technical personnel

Post-site discussion and question and answer session

FIGURE I. Format for On-site Sessions

INSTITUTE ORGANIZATION

The week-long Institute got underway on Sunday, February 5, 1984, with a get-acquainted session at the hotel which included introduction of the participants and distribution of the classroom and technical session materials.

Materials for the technical and classroom sessions, packaged in a 10 x 11 1/2 x 1 1/2 inch 3-ring notebook, consisted of an official daily schedule, a list of participants and their addresses, forms and information to support technical presentation (e.g., management ladder of operational units toured, monthly crime report for MARTA police). Additionally, management-related articles from various publications were included (e.g., Wall Street Journal, Savvy, Management Review). Also, a bibliography of transportation education programs and pertinent books and articles and evaluation forms for individual sessions and the entire Institute were distributed to each participant. Materials were compiled according to the Institute schedule and indexed by the day of the week. Volume II contains selected materials from the notebook distributed to participants. It primarily consists of handouts which served as a basis for discussion by technical personnel.
Welcome, to this unique educational and career-enhancement opportunity.

The "Women's Transit Institute" has been developed as a joint educational/experiential effort between Georgia Tech and MARTA and sponsored by UMTA to provide you the participants with a unique blend of formal personal development training along with specific transit operations-oriented career development information. The overriding goal of this endeavor is to improve the ultimate breadth of experience for a major swath of transit industry personnel who have historically been "underutilized" in their working careers. The way that this program seeks to achieve this goal is to 1) show the interaction of the various functional positions which keeps a transit system in operation, and 2) describe the content, background and potential career growth for each of those component positions. Through this seminar then, the hope is that a growing proportion of the women already employed in the transit industry can become more knowledgeable about the central operational aspects of the industry, and thereby become both more valuable to their own employing agencies as well as more capable of moving into operational positions heretofore not available to them.

In recognition of the educational values of this program, the Georgia Tech Continuing Education Program awards 4.0 Continuing Education Units (CEU's) for successful completion of the Women's Transit Institute. Standard Nine of the Southern Association of Colleges and Schools defines a continuing education unit (CEU) as ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. According to this scale, participants who successfully complete the course will earn 4.0 CEUs. At the participant's request, the registrar will supply an official transcript of CEUs awarded by Georgia Tech. An informal certificate documenting the CEU content of the Women's Transit Institute will be provided to each participant at the concluding banquet.

In addition, any expenses borne by the participant and not reimbursed by her employer are tax deductible. Treasury regulation 1.162.5 permits an income tax deduction for educational expenses (registration fees and cost of travel, meals and lodging) undertaken to: (1) maintain or improve skills required in one's employment or other trade or business, or (2) meet express requirements of an employer or a law imposed as a condition to retention of employment, rate status, or rate of compensation. Consult your tax advisor for details.

Again, welcome! It will be a strenuous week, full of movement and variety. We hope you enjoy the seminar, and prosper in your career.
"WOMEN IN TRANSIT INSTITUTE"

SCHEDULE OF ACTIVITIES

February 5-10, 1984
INFORMAL ORIENTATION
7:00 p.m. - 8:00 p.m.
Place: Howard Johnson Hotel, Executive Suites I & II
Refreshments: Wine and Cheese
MONDAY, FEBRUARY 6, 1984

REGISTRATION (OWN TRANSPORTATION)
8:00 a.m. - 8:30 a.m.
Place: Swann Bldg., Ga. Tech, Classroom A (3rd Floor)
Purpose: Pay Registration Fee ($100.00)
Receive: Name Tags, MARTA TransCards, Meal Tickets

CLASSROOM SESSION #1

WELCOME AND ORIENTATION TO ATLANTA
8:30 a.m. - 9:15 a.m.

PROGRAM OVERVIEW
9:15 a.m. - 9:40 a.m.

BREAK
9:45 a.m. - 10:00 a.m.

TRANSIT OVERVIEW
10:00 a.m. - 11:30 a.m.
Purpose: Transit Slide Show, Definitions, MARTA System Development, U.S. Transit Community.

PREVIEW OF AFTERNOON
11:30 a.m. - 11:45 a.m.

LUNCHEON
12:00 p.m. - 1:00 p.m.
Place: Swann Bldg., Ga. Tech., Classroom D

BOARD BUS AND TRAVEL TO GARAGE
1:05 p.m. - 1:25 p.m.

BUS TRANSPORTATION
1:30 p.m. - 2:30 p.m.
Place: Brady Avenue Garage
Purpose: Dispatch, Blockouts, Sign-Ups, Extra Board, Supervision, Discipline, and Public Interaction.

BREAK
2:30 p.m. - 2:45 p.m.

(Monday continued next page)
MONDAY, FEBRUARY 6, 1984 (continued)

BUS MAINTENANCE
2:45 p.m. - 3:45 p.m.
Place: Brady Avenue Garage
Purpose: Servicing and Cleaning, Routine Inspections,
Minor and Intermediate Repairs, Block-Outs,
Tire Shop, Storeroom.

RADIO ROOM
3:45 p.m. - 4:30 p.m.
Place: Brady Avenue Garage
Purpose: Automatic Surveillance of Fluid Systems, Transportation
Supervision, Maintenance Supervision, Bus System Security,
MARTA Traffic Watch.

BOARD BUS AND RETURN TO HOTEL
4:45 p.m. - 5:00 p.m.

BOARD BUS AND TRAVEL TO RESTAURANT
5:30 p.m. - 6:00 p.m.

COCKTAILS AND DINNER WITH REVIEW SESSION AND SPEAKER
6:00 p.m. - 8:45 p.m.
Place: Sandpiper Restaurant
Speaker: Lucy Freedman

BOARD BUS AND TRAVEL TO HOTEL
8:45 p.m. - 9:00 p.m.
TUESDAY, FEBRUARY 7, 1984

CLASSROOM SESSION #2 (OWN TRANSPORTATION)
8:00 a.m. to 12:15 p.m. *
Place: Swann Bldg., Georgia Tech. - Classroom A
Purpose: Women in Transit, Women in Non-Traditional Roles; Operators, Planners, Consultants; Career Pathing, Discrimination.

*Break at approximately 10:00 a.m.

WALK TO VARSITY DRIVE-IN
12:15 p.m. - 12:30 p.m.

LUNCH AT VARSITY DRIVE-IN
12:30 p.m. - 1:30 p.m.

TRAVEL TO AVONDALE STATION ON MARTA RAPID RAIL
1:30 p.m. - 2:00 p.m.

TAKE TRAIN INTO YARD AREA
2:00 p.m. - 2:20 p.m.
Place: Avondale Station Platform, To Be Announced.
Purpose: Observe yard activities, to disembark from end door of car to ground level.

CAR MAINTENANCE BUILDING
2:30 p.m. - 3:30 p.m.
Purpose: Car Maintenance, Signal Maintenance, Maintenance of Right-of-Way.

BOARD BUS AND TRAVEL TO CENTRAL CONTROL
3:30 p.m. - 3:40 p.m.

CENTRAL CONTROL
3:40 p.m. - 5:00 p.m.
Purpose: System Structures and System Surveillance (Rail Transp.) Electronic System Maintenance (Fare Gates, CCTV, Radios).

ZONE CENTER/SECURITY
5:00 p.m. - 5:30 p.m.
Purpose: Rail System Security, CCTV Center.

(Tuesday continued next page)
TUESDAY, FEBRUARY 7, 1984 (continued)

BOARD BUS AND TRAVEL TO DINNER
5:30 p.m. - 5:50 p.m.

COCKTAILS AND DINNER
5:50 p.m. - 7:45 p.m.

BOARD BUS AND RETURN TO HOTEL
7:45 p.m. - 8:00 p.m.
COFFEE AND DANISH
8:00 a.m. - 8:15 a.m.
Place: Peachtree Summit Bldg. (Located at Civic Center Station), 23rd Floor, Conference Room 23-E.

INTRODUCTION
8:15 a.m. - 8:45 a.m.

SCHEDULING
8:45 a.m. - 9:30 a.m.
Purpose: Bus and Rail Scheduling Process, Run Cutting/Labor Contract, Special Services.

EVALUATION AND REGIONAL INTERACTION
9:30 a.m. - 10:15 a.m.
Purpose: Traffic Checking, Shelters, Planning.

BREAK
10:15 a.m. - 10:30 a.m.

ANALYSIS AND SUBSIDIES
10:30 a.m. - 11:15 a.m.
Purpose: Routine Analysis, Major Projects, Fares and Subsidies.

CUSTOMER SERVICES
11:15 a.m. - 12:00 p.m.
Purpose: Public Hearings, Service Requests, Public Information.

LUNCH (ON OWN)
12:00 p.m. - 2:00 p.m.
Suggestion: Rapid Rail to Peachtree Center.

OVERVIEW AND FEDERAL REQUIREMENTS
2:00 p.m. - 2:45 p.m.

QUESTIONS
2:45 p.m. - 3:30 p.m.

BOARD OF DIRECTORS
3:30 p.m. - 4:00 p.m.
Purpose: Individual Responsibilities and Board Responsibilities.

(Wednesday continued on next page)
WEDNESDAY, FEBRUARY 8, 1984 (continued)

INDIVIDUAL DISCUSSIONS
4:00 p.m. - 5:00 p.m.

RECEPTION
5:00 p.m. - 6:30 p.m.
Place: Summit Club, Peachtree Summit Building, 2nd Floor.
Purpose: Casual conversation with Institute Personnel and
Tour Presentors. Hors d'ourves and two punches served,
cash bar available.
THURSDAY, FEBRUARY 9, 1984

BOARD BUS
7:00 a.m. - 7:10 p.m.

TRAVEL TIME TO ARTS CENTER STATION
7:15 a.m. - 7:30 a.m.

ARTS CENTER STATION
7:30 a.m. - 8:30 a.m.
Place: Arts Center Station
Purpose: Observe Bus and Rail Operations, and Free-Intermodal counts by Traffic Checkers.

TRAVEL FROM ARTS CENTER STATION TO BREAK
8:30 a.m. - 9:00 a.m.

BREAK AT MCDONALD’S RESTAURANT
9:00 a.m. - 9:20 a.m.

BROWNS MILL ROAD GARAGE
9:30 a.m. - 10:00 a.m.
Place: Browns Mill Garage
Purpose: Materials and Supplies Purchasing Procedures.

10:00 a.m. - 11:30 a.m.
Purpose: Heavy Maintenance

BOARD BUS AND TRAVEL TO LUNCH
11:30 a.m. - 11:45 p.m.

LUNCH AT MORRISON’S CAFETERIA
11:45 a.m. - 12:40 p.m.

TRAVEL TIME TO LAREDO DRIVE GARAGE
12:45 p.m. - 1:15 p.m.

LAREDO DRIVE GARAGE
1:15 p.m. - 3:30 p.m.
Place: Laredo Drive Garage
Purpose: Transfer Room; Bus and Rail Operator Training and Safety Instruction.

BREAK
3:30 p.m. - 3:45 p.m.

(Thursday continued on next page)
THURSDAY, FEBRUARY 9, 1984 (continued)

BUS TOUR THROUGH CONSTRUCTION AREAS
3:45 p.m. - 5:15 p.m.
  Purpose: View Rail System Construction.

TRAVEL TIME TO LENOX SQUARE MALL
5:15 p.m. - 5:30 p.m.

SHOPPING, ETC.
5:30 p.m. - 6:30 p.m.

BOARD BUS AND RETURN TO HOTEL (OPTIONAL)
6:30 p.m. - 7:00 p.m.
FRIDAY, FEBRUARY 10, 1984

CLASSROOM SESSION #3

CHECK OUT OF HOTEL AND PLACE BAGGAGE IN SAFE ROOM

TRANSIT MANAGEMENT DEVELOPMENT
8:00 a.m. - 9:00 a.m.
Place: Swann Bldg., Ga. Tech, Classroom A

9:00 a.m. - 12:30 p.m. *
Speaker: Sarah Lopez

*Break at approximately 10:00 a.m.

EVALUATIONS
12:30 p.m. - 1:00 p.m.

BOARD BUS AND TRAVEL TO BANQUET
1:00 p.m. - 1:15 p.m.

AWARDS BANQUET
1:15 p.m. - 2:45 p.m.
Place: Sierra Room, Top of Merchandise Mart (Peachtree St./Harris St.)

BOARD BUS AND RETURN TO HOTEL
2:45 p.m. - 3:00 p.m.
INSTITUTE STAFF

Dr. Catherine L. Ross  
Program Director  
Assistant Professor  
Georgia Institute of Technology  
Graduate City Planning Program  
Atlanta, Georgia 30332  
404-894-2350

Ann F. Johnson  
Technical Coordinator  
Manager, Research and Analysis  
MARTA  
401 W. Peachtree Street  
Atlanta, Georgia 30365  
404-586-5341

GEORGIA TECH STAFF ASSISTING

Susan M. Goodrick, Administrative Assistant  
Cecilia Ho, Graduate Research Assistant  
Inga Kennedy, Program Coordinator/Continuing Education  
Robin Rierdan, Graduate Research Assistant  
Siddhartha Sen, Graduate Research Assistant

MARTA STAFF ASSISTING

June L. Burridge, Transportation Analyst I  
Julie Kell, Staff Analyst for the AGM/DTO  
Lauren Solomon, Affirmative Action Administrator
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 6, 1971</td>
<td>Referendum passed</td>
</tr>
<tr>
<td>February 17, 1972</td>
<td>Purchase A.T.S.</td>
</tr>
<tr>
<td>March 1, 1972</td>
<td>Fare Reduced to 15¢</td>
</tr>
<tr>
<td>April 1, 1972</td>
<td>Sales Tax Collection begins</td>
</tr>
<tr>
<td>February 19, 1975</td>
<td>Construction ground-breaking (Arizona Ave.)</td>
</tr>
<tr>
<td>March 1, 1979</td>
<td>Fare Increase to 25¢</td>
</tr>
<tr>
<td>June 30, 1979</td>
<td>East Line Rail Service Open*</td>
</tr>
<tr>
<td>October 13, 1979</td>
<td>East Line Bus Feeder Routes begin</td>
</tr>
<tr>
<td>December 22, 1979</td>
<td>West Line Rail Service Open (includes Five Points)</td>
</tr>
<tr>
<td>June 7, 1980</td>
<td>West Line Bus Feeder Routes begin</td>
</tr>
<tr>
<td>July 26, 1980</td>
<td>Fare Increase to 50¢</td>
</tr>
<tr>
<td>July 1, 1981</td>
<td>Fare Increase to 60¢</td>
</tr>
<tr>
<td>December 4, 1981</td>
<td>North-South Line Rail Service Open (Garnett St. to N. Ave.)</td>
</tr>
<tr>
<td>September 11, 1982</td>
<td>South Line extended to West End Station--Peachtree Center Station along North Line also opened</td>
</tr>
<tr>
<td>September 18, 1982</td>
<td>South Line Bus Feeder Routes begin</td>
</tr>
<tr>
<td>December 18, 1982</td>
<td>North Line extended to Arts Center Station</td>
</tr>
<tr>
<td>January 8, 1983</td>
<td>North Line Bus Feeder Routes begin</td>
</tr>
</tbody>
</table>

* 4 years, 5 months, 11 days after ground breaking. By comparison BART & WMATA took 6½ years, Miami 7 years, and Baltimore longer.
This purpose of this glossary is to provide a listing of terms you might encounter while participating in this course.
| **A-CAR** | A rail car having a control cab at one end and including an air compressor; the A-Car operates in conjunction with a B-Car to form a married pair. |
| **ACCESS TIME** | Time required to walk or drive to and from the transit stops, plus a waiting time based on frequency of transit service. |
| **ALLOWANCE** | Pay time required to satisfy minimum daily or piece pay hour requirements. |
| **A.M. PEAK** | Period in morning when demand for transportation service or facilities is heaviest. Usually 1 1/2 to 3 hours. |
| **AMERICAN PUBLIC TRANSIT ASSOCIATION (APTA)** | A voluntary organization of transit-related interests for the benefit of the industry. |
| **ARTICULATED BUS** | An extra long bus with rear portion flexibly, though permanently, connected to the forward portion. No interior barrier to movement between two halves. |
| **ATLANTA REGIONAL COMMISSION (ARC)** | The metropolitan planning organization (MPO) for the Atlanta Region. |
| **B-CAR** | Operates in conjunction with the A-Car to form a married pair; the control cab on the B-Car is located at the opposite end from where the cab is located on the A-Car, and is not equipped with an air compressor. |
| **BASE** | The non-rush hours of the weekday (at MARTA 9:00 a.m. - 3:30 p.m.). |
| **BLOCK** | The composite of trips assigned to a vehicle for a day of operation. |
| **BLOCK-CUT** | The assignment by maintenance personnel of each bus to a particular piece of work (run) for the next day's operation. |
BUS LANE
A street or highway lane intended primarily for buses, either all day or during peak hours, but which other traffic may use under certain circumstances, e.g. making a right turn. Also see busway. Definition by Parsons, Brinckerhoff, Quade, and Douglas.

BUSWAY
A special roadway designed for exclusive or predominant use by buses in order to improve bus movement and bus passenger travel times; it may be constructed at, above, or below grade and may be located in separate rights-of-way or within highway corridors.

C-CAR
A single car equipped with a cab at both ends, capable of operating singly.

CAPACITY
The number of passengers that can be transported over a given section of a transit line in one direction during a given time period (usually one hour) under prevailing traffic conditions. Definition by Kaiser Engineers.

CAPTIVE RIDERS
Riders who, due to circumstances, have no other means of transportation.

CENTER PLATFORM STATION
A transit station with one platform located between two tracks. Definition by Kaiser Engineers.

CENTRAL BUSINESS DISTRICT (CBD)
The downtown retail trade area of a city or an area of very high land valuation, traffic flow, and concentration of retail business offices, theaters, hotels, and services.

CONTROL CONTROL
The radio base communication center that monitors the action of a rail system.

CHICAGO TRANSIT AUTHORITY’S “TECHNICAL INSTITUTE” (CTATI)
A one-week study course on transit operations conducted by CTA personnel.

CHOICE RIDERS
Those who choose transit even though they have a driver’s license and an automobile available for their use.

CONSIST
(1) The makeup or composition of a train of vehicles; their number and specific identity.

COUNTS
Number of passengers on a vehicle at a time point.
CORRIDOR
A geographic area comprising a broad band following a general directional flow. A patronage drainage area contributing vehicles or passengers to highways or transit lines. Definition by Parson, Brinckerhoff, Quade, and Douglas.

COUPLER
The mechanical knuckle or other means by which vehicles are locked together.

COUPLING
The means of linking vehicles together to form a train.

DEADHEAD
To move a revenue vehicle without passengers or cargo on board, e.g. on a regular route, to and from a garage, or from the end of one revenue trip to the beginning of another.

DISPATCHING
The process of starting a vehicle into revenue service.

DWELL TIME
The time a vehicle or train requires to discharge and take on passengers at a station (including opening and closing doors) and time spent standing in station.

EXPRESS SERVICE
Service providing higher speed with fewer stops than generally exist on other portions of the system or on the same route. Function is to traverse fairly long distance as speedily as possible.

FEEDER SYSTEM
Part of the family of vehicles used to bring passengers to or from the rapid rail system. May include conventional buses and/or demand-responsive systems.

GUIDEWAY
Supporting physical structure in or upon which vehicles travel. It may include guidance of the vehicle.

HEADWAY
(1) Time interval measured front-to-front between two vehicles traveling in the same direction on the same route. (2) Distance between vehicles or trains expressed either in units of time or in distance, measured from nose-to-nose, not from tail-to-nose, at a stated speed.

HEADWAY SHEET
A listing of one-way trips in sort by time point - including train number.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>KISS 'N RIDE</td>
<td>Facilities close to the transfer point at transit stops or terminals allowing the transit user to be dropped-off-from and picked-up-by an automobile.</td>
</tr>
<tr>
<td>LAYOVER</td>
<td>Time allowed at a terminal between arrival and departure for turning vehicles, recovery of delays, and preparing for return trip. Definition by Chicago Transit Authority.</td>
</tr>
<tr>
<td>LAYOVER TIME (TURNAROUND TIME) (RECOVERY TIME)</td>
<td>Vehicle time at line terminal out of service.</td>
</tr>
<tr>
<td>LINE CAPACITY</td>
<td>The hourly volume that could be carried if every vehicle operated at the minimum headway which the control system permits. Definition by Robert F. Casey, Transportation System Center.</td>
</tr>
<tr>
<td>LINKED PASSENGER TRIP</td>
<td>A complete passenger movement on public transportation from the point of entry to the system, to the point of exit from the system, irrespective of how many transfers are necessary to reach that destination.</td>
</tr>
<tr>
<td>LOCAL</td>
<td>A passenger or freight train or bus which stops at every station.</td>
</tr>
<tr>
<td>MARRIED PAIR</td>
<td>Two rail cars which must be operated as a unit, i.e., A-Car and B-Car. Definition by Boeing Vertol Co.</td>
</tr>
<tr>
<td>MAXIMUM LOAD POINT (MLP)</td>
<td>The time point on a bus or rail line at which the passenger volume is the greatest (one in each direction).</td>
</tr>
<tr>
<td>METROPOLITAN PLANNING ORGANIZATIONS (MPO)</td>
<td>The organization designated by the Governor responsible, together with the State, for comprehensive, coordinated, and continuing transportation planning. This organization shall be the forum for cooperative decision-making by principal elected officials of general local government.</td>
</tr>
<tr>
<td>P.M. PEAK</td>
<td>Period in the afternoon when demand for transportation service or facilities is heaviest usually 2 to 3 hours.</td>
</tr>
<tr>
<td>PAY-TIME (PAY HOURS)</td>
<td>The equivalent straight time paid for any piece of work.</td>
</tr>
<tr>
<td>PEAK HOUR</td>
<td>The sixty minute period during an average weekday when the greatest number of people travel past a specific point on a specific route. Definition by Parsons, Brinckerhoff, Quade, and Douglas.</td>
</tr>
</tbody>
</table>
PEAK PERIOD

The period during the day when demand for transit service is the greatest. Definition by Kaiser Engineers.

PLATFORM

(1) Rail Station: space provided for passengers to collect, wait, board and deboard trains. (2) Bus and rail operators' work stations — bus operators' seat location, train operators' work location (in cab).

PLATFORM TIME

The time a driver is on her/his assigned vehicle.

PROPULSION

Any of several means of effecting motion to a vehicle or train.

FULL-IN

The time a vehicle arrives at the garage.

FULL-OUT

The time a vehicle departs the garage.

RAIL RAPID TRANSIT

Trains of passenger-carrying vehicles propelled by on-board electric motors drawing their power from an electrified third rail or other external power source. May use steel wheels on steel rails or pneumatic tires on wooden, steel, or concrete guideways. Has exclusive right-of-way.

RECOVERY TIME

Extra time scheduled at the outer terminals of a transit route to allow for rest stops and to help make up lost time.

RELIEF POINT

Designated time point on a line other than garage, at which one driver is replaced by another. Lunch, if any, included in layover.

REPORT (SHOW-UP) TIME

Time paid for "start-of-work" preparation (Ex: 10 minutes before pullout).

REVENUE PASSENGERS

Passengers paying a fare, boarding service to begin a transit trip; the same as "linked passengers".

REVENUE SERVICE

(1) Line service operations excluding deadheading or layovers. (2) Any service scheduled for passenger trips.

RIGHT-OF-WAY

That land area or other space upon which a guideway (including stations, terminals, etc.) is placed, including zones required for safe, efficient operation of the system or systems.
ROUTE  
(1) The course followed by a scheduled transit vehicle as a part of a transit system. Definition by Parsons, Brinckerhoff, Quade, and Douglas.

RUN  
The composite of trips or partial trips assigned to a driver for a day of operation.

RUNNING TIME  
Vehicle travel time between time points along a revenue service route.

RUSH HOUR  
Refers to A.M. or P.M. peak or to both periods combined.

SECTION 15 REPORT  
Standardized report of transit operating and financial data required by UMTA to be filed annually in order to qualify for receipt of federal operating assistance and certain other funds.

SERVICE FREQUENCY  
Number of vehicles moving in the same direction that pass a given point on a route within a specified interval of time. Definitions by Chicago Transit Authority.

SHUTTLE SERVICE  
A service operating between two major activity centers as demand for rides dictates.

SIDE PLATFORM STATION  
A transit station with the tracks or guideways located between two platforms.

SIDING  
A length of track adjacent or parallel to the main track connected by switches at each end used for meeting or passing trains. Definition by U.S. Army Transportation School.

SPREAD  
The total time between the pull-out and pull-in of a driver work schedule.

STANDARD METROPOLITAN STATISTICAL AREA (SMSA)  
A county or group of counties containing at least one city (or twin cities) of 50,000 or more population, plus any adjacent counties which are metropolitan in character and economically and socially integrated with the central county or counties.

STRAIGHT RUN  
A driver work schedule that is a single piece of work, not broken as in a "split run".

SUBWAY  
(1) Any Rail Rapid Transit having a good portion of its exclusive Right-Of-Way in a tunnel. (2) Also the tunnel itself.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWING</td>
<td>The time period or break between the two pieces of a two piece run.</td>
</tr>
<tr>
<td>SWING RUN, SPLIT RUN</td>
<td>A driver work schedule approximately 8 hours long with an extended swing and spread time.</td>
</tr>
<tr>
<td>TERMINAL</td>
<td>(1) Physical end-point of a bus route or rail line. (2) An area or building serving a transportation facility for the picking up, transfer, or discharge of passengers or goods. Definition by Canadian Good Roads Association.</td>
</tr>
<tr>
<td>THIRD RAIL</td>
<td>The metal rail through which electric current is conducted to a transit vehicle.</td>
</tr>
<tr>
<td>TIME POINT</td>
<td>Specific location on a line at which vehicle arrival times are scheduled.</td>
</tr>
<tr>
<td>TOTAL PASSENGERS</td>
<td>The sum of revenue passengers plus transfer passengers; the same as &quot;unlinked passengers&quot;.</td>
</tr>
<tr>
<td>TRANSFER</td>
<td>(1) The act of moving from one transit vehicle to another (sometimes requiring additional fare payment) in order to complete a one-way transit trip; (2) an annotated ticket or other indicator of the fact that a fare has been paid; to validate the boarding of a subsequent vehicle.</td>
</tr>
<tr>
<td>TRANSFER PASSENGERS</td>
<td>The persons who make a transfer in order to complete a one-way transit trip; each subsequent boarding is counted as an additional transfer passenger.</td>
</tr>
<tr>
<td>TRAVEL TIME</td>
<td>Time paid for an operator to travel between relief points and the garage.</td>
</tr>
<tr>
<td>TRIP</td>
<td>A one-way movement of a vehicle in service along a line between terminal points.</td>
</tr>
<tr>
<td>TRIPPER</td>
<td>A driver work schedule approximately one to three hours long.</td>
</tr>
<tr>
<td>TWO PIECE RUN</td>
<td>A driver work schedule approximately 8 hours long with unpaid break off the vehicle.</td>
</tr>
<tr>
<td>UNLINKED PASSENGER TRIP</td>
<td>This occurs each time a passenger boards a transit vehicle.</td>
</tr>
<tr>
<td>URBAN MASS TRANSPORTATION</td>
<td>The arm of the U.S. Department of Transportation which oversees transit operations nationwide.</td>
</tr>
<tr>
<td>ADMINISTRATION (UMTA)</td>
<td></td>
</tr>
</tbody>
</table>
WOMEN'S TRANSPORTATION SEMINAR (WTS)

A professional organization of women engaged in any element of the transportation industry; chapters exist in 13 cities currently, plus an at-large membership in other areas.

YARD

System of tracks within defined limits provided for making up trains, storing cars, and other purposes; over which movements not authorized by timetables or trains order may be made subject to prescribed signals and rules or special instructions. Definition by U.S. Army Transportation School.

Other Definitions:
OFFICE OF THE ASSISTANT GENERAL MANAGER FOR TRANSIT OPERATIONS

Assistant General Manager for Transit Operations

Project Manager
Construction, Grants and Specifications

Executive Secretary

Secretary

Staff Analyst

3 Non-Represented Positions
5 Total Positions
### MARTA STAFF COMPOSITION
#### June 1983

<table>
<thead>
<tr>
<th></th>
<th>FEMALE</th>
<th>MALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BOARD OF DIRECTORS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 (14%)</td>
<td>12 (86%)</td>
<td>14</td>
</tr>
<tr>
<td><strong>GENERAL MANAGER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0-</td>
<td>1 (100%)</td>
<td>1</td>
</tr>
<tr>
<td><strong>SENIOR STAFF MEMBERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Assistant</td>
<td>-0-</td>
<td>1 (100%)</td>
<td>1</td>
</tr>
<tr>
<td>Assistants to the General Manger</td>
<td>-0-</td>
<td>4 (100%)</td>
<td>4</td>
</tr>
<tr>
<td>Assistant General Managers</td>
<td>1 (25%)</td>
<td>3 (75%)</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL NUMBER</strong></td>
<td>1 (11%)</td>
<td>8 (89%)</td>
<td>9</td>
</tr>
<tr>
<td><strong>DIRECTORS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directors</td>
<td>4 (21%)</td>
<td>15 (79%)</td>
<td>19</td>
</tr>
<tr>
<td>Assistant Directors</td>
<td>1 (33%)</td>
<td>2 (67%)</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL NUMBER</strong></td>
<td>5 (23%)</td>
<td>17 (77%)</td>
<td>22</td>
</tr>
<tr>
<td><strong>GENERAL MANAGERS OFFICE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>2 (29%)</td>
<td>5 (71%)</td>
<td>7</td>
</tr>
<tr>
<td>Professionals/Supervisors</td>
<td>11 (32%)</td>
<td>23 (68%)</td>
<td>34</td>
</tr>
<tr>
<td>Clericals/Technicians</td>
<td>13 (100%)</td>
<td>-0-</td>
<td>13</td>
</tr>
<tr>
<td><strong>DEPARTMENT TOTALS</strong></td>
<td>26 (48%)</td>
<td>28 (52%)</td>
<td>54</td>
</tr>
<tr>
<td><strong>TRANSIT SYSTEM DEVELOPMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Managers</td>
<td>-0-</td>
<td>3 (100%)</td>
<td>3</td>
</tr>
<tr>
<td>Managers</td>
<td>1 (5%)</td>
<td>18 (95%)</td>
<td>19</td>
</tr>
<tr>
<td>Professionals</td>
<td>16 (26%)</td>
<td>45 (74%)</td>
<td>61</td>
</tr>
<tr>
<td>Technicians</td>
<td>-0-</td>
<td>4 (100%)</td>
<td>4</td>
</tr>
<tr>
<td>Clericals</td>
<td>17 (100%)</td>
<td>-0-</td>
<td>17</td>
</tr>
<tr>
<td>Servicepersons</td>
<td>1 (50%)</td>
<td>1 (50%)</td>
<td>2</td>
</tr>
<tr>
<td><strong>DEPARTMENT TOTALS</strong></td>
<td>35 (33%)</td>
<td>71 (67%)</td>
<td>106</td>
</tr>
</tbody>
</table>
MARTA STAFF COMPOSITION
JUNE 1983

<table>
<thead>
<tr>
<th>Department</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINANCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>1 (14%)</td>
<td>6 (86%)</td>
<td>7</td>
</tr>
<tr>
<td>S'visors/Professionals/Administrative</td>
<td>30 (48%)</td>
<td>33 (52%)</td>
<td>63</td>
</tr>
<tr>
<td>Clericals/Technicians</td>
<td>45 (71%)</td>
<td>18 (29%)</td>
<td>63</td>
</tr>
<tr>
<td><strong>DEPARTMENT TOTALS</strong></td>
<td>76 (57%)</td>
<td>57 (43%)</td>
<td>133</td>
</tr>
<tr>
<td><strong>HUMAN RESOURCES &amp; ADMINISTRATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>6 (50%)</td>
<td>6 (50%)</td>
<td>12</td>
</tr>
<tr>
<td>Professionals/Supervisors</td>
<td>20 (63%)</td>
<td>12 (37%)</td>
<td>32</td>
</tr>
<tr>
<td>Clericals/Technicians</td>
<td>33 (57%)</td>
<td>25 (43%)</td>
<td>58</td>
</tr>
<tr>
<td>Servicepersons</td>
<td>-0-</td>
<td>5 (100%)</td>
<td>5</td>
</tr>
<tr>
<td><strong>DEPARTMENT TOTALS</strong></td>
<td>59 (55%)</td>
<td>48 (45%)</td>
<td>107</td>
</tr>
<tr>
<td><strong>TRANSIT OPERATIONS (OPM)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>2 (40%)</td>
<td>3 (60%)</td>
<td>5</td>
</tr>
<tr>
<td>Supervisors/Chiefs</td>
<td>5 (63%)</td>
<td>3 (37%)</td>
<td>8</td>
</tr>
<tr>
<td>Professionals</td>
<td>11 (46%)</td>
<td>13 (54%)</td>
<td>24</td>
</tr>
<tr>
<td>Clericals/Technicians</td>
<td>32 (78%)</td>
<td>9 (22%)</td>
<td>41</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>50 (64%)</td>
<td>28 (36%)</td>
<td>78</td>
</tr>
<tr>
<td><strong>TRANSIT OPERATIONS (BUS)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers/General Foremen</td>
<td>1 (5%)</td>
<td>19 (95%)</td>
<td>20</td>
</tr>
<tr>
<td>Supervisors</td>
<td>1 (4%)</td>
<td>25 (96%)</td>
<td>26</td>
</tr>
<tr>
<td>Foremen</td>
<td>-0-</td>
<td>32 (100%)</td>
<td>32</td>
</tr>
<tr>
<td>Chiefs</td>
<td>-0-</td>
<td>3 (100%)</td>
<td>3</td>
</tr>
<tr>
<td>Professionals</td>
<td>1 (17%)</td>
<td>5 (83%)</td>
<td>6</td>
</tr>
<tr>
<td>Clericals/Technicals</td>
<td>15 (88%)</td>
<td>2 (12%)</td>
<td>17</td>
</tr>
<tr>
<td>Bus Operators</td>
<td>114 (10%)</td>
<td>1,046 (90%)</td>
<td>1,160</td>
</tr>
<tr>
<td>Dispatchers</td>
<td>2 (12%)</td>
<td>14 (88%)</td>
<td>16</td>
</tr>
<tr>
<td>Mechanics</td>
<td>1 (1%)</td>
<td>199 (99%)</td>
<td>200</td>
</tr>
<tr>
<td>Apprentices</td>
<td>1 (1%)</td>
<td>92 (99%)</td>
<td>93</td>
</tr>
<tr>
<td>Servicepersons</td>
<td>19 (29%)</td>
<td>47 (71%)</td>
<td>66</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>155 (9%)</td>
<td>1,484 (91%)</td>
<td>1,639</td>
</tr>
</tbody>
</table>
# MARTA STAFF COMPOSITION
## JUNE 1983

### TRANSIT OPERATIONS (RAIL)

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers/General Foremen</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Supervisors</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Foremen</td>
<td>23</td>
<td>96%</td>
</tr>
<tr>
<td>Chiefs</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Professionals</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>Clericals/Technical</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>Rail Operators</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>Dispatchers</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Mechanics</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Apprentices</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Servicepersons</td>
<td>33</td>
<td>43%</td>
</tr>
<tr>
<td>Protective Service Workers</td>
<td>16</td>
<td>24%</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>67</td>
<td>16%</td>
</tr>
<tr>
<td><strong>DEPARTMENT TOTAL</strong></td>
<td>272</td>
<td>13%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subdepartment</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>-</td>
<td>23</td>
<td>96%</td>
</tr>
<tr>
<td>-</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>-</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>-</td>
<td>9</td>
<td>82%</td>
</tr>
<tr>
<td>-</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>-</td>
<td>67</td>
<td>99%</td>
</tr>
<tr>
<td>-</td>
<td>1</td>
<td>99%</td>
</tr>
<tr>
<td>-</td>
<td>9</td>
<td>99%</td>
</tr>
<tr>
<td>-</td>
<td>3</td>
<td>96%</td>
</tr>
<tr>
<td>-</td>
<td>38</td>
<td>95%</td>
</tr>
<tr>
<td>-</td>
<td>44</td>
<td>57%</td>
</tr>
<tr>
<td>-</td>
<td>52</td>
<td>76%</td>
</tr>
</tbody>
</table>

**Total:** 423

**Department Total:** 2140

---

33
<table>
<thead>
<tr>
<th>Route Numbers and Names</th>
<th>Weekday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (2) Irwin St. - MLK Jr. Dr.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6 Emory</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7 McAfee</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>9 Toney Valley</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>10 Peachtree</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>12 Medlock</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14 West Peachtree</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>15 North Dekalb/South Dekalb</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>16 Noble</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>18 Decatur</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>21 Memorial</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>22 Second Ave.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>24 Belvedere</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>25 North Shallowford</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>27 Monroe Drive</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>28 East Lake Meadows</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>30 LaVista</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>33 (4) Howell Mill/Argonne*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>36 North Decatur</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>40 North Springs-Decatur</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>41 Piedmont</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>43 Peachtree Dunwoody*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>44 Skyland - Ashford</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>46 Boulevard - St. Charles</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>52 Glenridge Forest*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>53 Mt. Vernon Woods*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>59 Londonberry*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>65 Northwoods - Oakcliff</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>65P Doraville Park-Ride</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>66 Internal Revenue Service*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>68 Armour Industrial*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>70 Chambley Doraville</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>74 Flat Shoals</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>75 Tucker</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>84 River Chase - Glen Errol*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>86 Lithonia</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>95 Tilly Mill - Happy Hollow*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>96 Snapfinger - Wesley Chapel</td>
<td>X 86</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ROUTE NUMBERS AND NAMES</td>
<td>WEEKDAY</td>
<td>SATURDAY</td>
<td>SUNDAY</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>107 Glenwood</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>114 Columbia Woods</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>115 Covington Road</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>116 Redan Road</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>118 Rockbridge</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>120 Stone Mountain</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>121 Mountain Industrial</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>122 Dekalb College</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>125 Doraville - Avondale</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>CTH Stone Mountain - Brookhaven</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52</strong></td>
<td><strong>36</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

**A DIVISION (Continued)**

<table>
<thead>
<tr>
<th>ROUTE NUMBERS AND NAMES</th>
<th>WEEKDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (2) Marietta Street - Howell Mill - Coronet</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2 Ponce de Leon</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>M4 Ridgewood - West Wesley</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Sandy Springs</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>11 (2) English Ave. - McDaniel St.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>13 West Fair</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>23 Buckhead - Lenox - Oglethorpe</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>26 Perry Homes</td>
<td>X</td>
<td>X</td>
<td><strong>11</strong></td>
</tr>
<tr>
<td>28 (2) Northwest Limited*</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>29 Roxboro</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>31 (2) Grant Park - Piedmont - Morningside</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>32 Eastland</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>35 Ansley Park</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>37 Loring Heights</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>43 Garden Hills</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>45 Virginia - Mc Lynn</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>50 Bankhead</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>51 Lake Forest*</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>51 Simpson</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>52 Knight Park</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>53 Grove Park</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>56 Adamsville</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>57 Collier Heights</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>58 Bolton</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>59 Maynard Courts</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>60 Hightower - Moores Mill</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>61 Bowen Homes</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>63 Atlanta University - Kennedy Center</td>
<td>/</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>64 Beecher</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**B DIVISION**
### B DIVISION (Continued)

<table>
<thead>
<tr>
<th>ROUTE NUMBERS AND NAMES</th>
<th>WEEKDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>64 Sagamore Hills*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69 Dixie Hills</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>73 Fulton Industrial</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>77 Powers Ferry Estates*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77 Riverside - Brandon Mill*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81 Dalrymple - Glen Courtney*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85 Roswell - Alpharetta</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>85P Abernathy Park/Ride</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87 North Springs</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91 Briarcliff - Henderson Mill</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>92 Perimeter Mall</td>
<td>X</td>
<td>X</td>
<td>85</td>
</tr>
<tr>
<td>94 N. E. Expressway Industrial*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>98 West End - Arts Center</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99 MLK/North Avenue</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130 Winters Chapel</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>140 Holcombs Bridge</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>165 Kimberly - Country Squire</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>201 Six Flags Over Georgia</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th>ROUTE NUMBERS AND NAMES</th>
<th>WEEKDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51</td>
<td>37</td>
<td>34</td>
</tr>
</tbody>
</table>

### C DIVISION

<table>
<thead>
<tr>
<th>ROUTE NUMBERS AND NAMES</th>
<th>WEEKDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>M2 Fairburn - Palmetto</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4 Federal Prison</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>17 (2) Decatur - Lakewood</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>20 Hapeville - College Park</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>24 Northland Limited*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34 Gresham</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>38 Paces Ferry*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42 Cooper - Village - Highpoint</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>48 Thomasville - Lenox Square</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>49 McDonough</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 Farmers Market*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54 Blair Village - Forest Park</td>
<td>X</td>
<td>X</td>
<td>95</td>
</tr>
<tr>
<td>55 Orchard Knob</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>60 Ridgegmore*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62 Headland</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>66 Greenbriar</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>67 Westview</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>68 Donnelly</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>71 Cascade - Richland</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>72 Airport</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>79 Friendly</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81 Oakland City</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>82 Greenbriar - East Point</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>83 Ben Hill</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>83 Springfield - Meadowlak*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Route Numbers and Names

<table>
<thead>
<tr>
<th>Route Number</th>
<th>Name</th>
<th>Weekday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>Mount Olive</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>88</td>
<td>Camp Creek</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>89</td>
<td>Brittany Kimberly</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>90</td>
<td>Jonesboro - Hutchens Rd.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>93</td>
<td>Sylvan Hills</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>95</td>
<td>Stewart Hapeville</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>97</td>
<td>Atlanta Ave. - Georgia Ave.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>100</td>
<td>Grady Express</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>160</td>
<td>Boulder Park</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>170</td>
<td>Brownlee - Ben Hill</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>190</td>
<td>South Fulton Parking Lot</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>37</strong></td>
<td><strong>30</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

### System Totals

<table>
<thead>
<tr>
<th>Day</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekdays</td>
<td>140</td>
</tr>
<tr>
<td>Saturdays</td>
<td>103</td>
</tr>
<tr>
<td>Sundays</td>
<td>83</td>
</tr>
</tbody>
</table>

*Domestics*
## Recommended Preventive Maintenance

### 7,000 Mile Inspection Sheet

<table>
<thead>
<tr>
<th>BUS #</th>
<th>ODOMETER</th>
<th>DATE</th>
<th>INSPECTOR #</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>After Cleaning:</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clean Evaporator Filters ---</td>
<td>Use spray or warm soapy water, steam or both. Remove all dirt, grease and lint.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Clean Evaporator Coil ---</td>
<td>Straighten any bent coil fins. Dip or spray filters (not coils) with odorless oil. Replace with thoroughly drained filters.</td>
<td></td>
<td>Dirty filters and coils cause compressor damage due to (a) low suction pressure, (b) loss of circulation to compressor and also cause substantial loss of capacity.</td>
</tr>
<tr>
<td>3. Evaporator Compartment ---</td>
<td>Visually check for oil or dirt accumulation on any surface indicating a refrigerant and oil leak. Correct leak and clean area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Evaporator Compartment --- Doors, seals &amp; latches -</td>
<td>Visually check for air tight compartment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Clean Condenser filters and/or coil ---</td>
<td>Use spray of warm soapy water, steam or both. Remove all dirt, grease and lint. Straighten any bent coil fins.</td>
<td></td>
<td>Increase air flow and heat transfer to reduce condenser pressure and temperature. Prevents excessive temperature and pressure in compressor and hoses.</td>
</tr>
<tr>
<td>6. Grad-U-Stat ---</td>
<td>By using air wand - clean dust, dirt and foreign matter from bellows and/or bi-metal strip.</td>
<td></td>
<td>Properly adjusted Grad-U-Stat will result in specified heating/A/C cycle.</td>
</tr>
<tr>
<td>7. Engine Low Oil Pressure Switch -</td>
<td>Raising engine R.P.M. - check to see that A/C clutch will not engage above 25 P.S.I. - engine oil pressure.</td>
<td></td>
<td>Prevent clutch engagement at high engine R.P.M.</td>
</tr>
</tbody>
</table>

**Reasons:**
- Loss of oil, refrigerant, capacity and system damage.
- To assure proper air flow.
- Increase air flow and heat transfer to reduce condenser pressure and temperature. Prevents excessive temperature and pressure in compressor and hoses.
- Properly adjusted Grad-U-Stat will result in specified heating/A/C cycle.
8. Pressure Test
- Install test gauges on compressor suction (S) and discharge (D) fittings Purge lines of air at gauges before tightening.

**Gauge Reading:**
- Suction........... Discharge........... 

**REASON:** If positive pressure is not recorded, determine cause and correct. After correction, evacuate if air in system is suspected. Before further tests, start engine, engage air conditioning system and operate at engine idle speed of 500 engine R.P.M.

9. Evaporator
- Assure proper motor operation by checking for adequate air flow at both right and left hand air outlets.

**Motor Operation:**
- LH RH High Speed........... Low Speed........... Stopped...........

**REASON:** Prevent compressor damage due to (a) low suction pressure, (b) loss of oil circulation to compressor, also, causes substantial loss of capacity.

10. Condenser Fan
- Assure proper motor operation by standing near condenser compartment to verify that adequate air flow through coil does exist.

**Fan Operation:**
- Fan OK........... Fan Not Operating........... 

**Correction**

**REASON:** Prevent major damage by warning mechanic to shut air conditioning system off. Shut off engine if necessary. Determine cause of no air flow and correct.

**NOTE:** Before additional checks (1) observe gauges to verify discharge pressure below 425 psi, (2) allow engine, compressor and coach interior to reach operating temperatures.

11. Hose and Compressor Seal
- Visually check for oil or dirt accumulation on any surface indicating a refrigerant and oil leak. Visible leaks (bubbling or oil accumulation) indicate worn out hose or seal. Replace defective part.

**REASON:** Loss of refrigerant, oil, capacity and system damage.

12. Refrigerant Level Record
- Add to maintain one-half (1/2) sight-glass. Record original level (bottom) of glass, below glass, etc.) and date.

**Position on Sight Glass**
- R-22 Oil 
  - Above........... Below........... Center........... 
  - 7/8 Glass........... 

**REASON:** Assure proper operating level. Repeated loss of refrigerant should be corrected.

13. Oil Level
- Add to maintain 7/8 sight-glass. DO NOT add compressor oil only. Charge oil with hydraulic pump equipped with ball check at (1) oil charging valve or (2) oil pressure test fitting if no charging valve. Record amount added. Investigate cause of low oil.

**Added**
- lbs. R-22 Type Oil
  - Added........... Added........... 

**Leak Found**
- **Leak Corrected**

**NOTE:** If compressor crankcase is not hot, repeat oil level check after reaching operating temperatures to assure level reading does not include liquid refrigerant.

(5/82)
14. Compressor Mounting ---

Tighten loose mounts, replace cracked or broken mounts and brackets. Check and lubricate drive line components. Listen for pulsating rattles or noise. Replace worn parts. Do not overlook engine fan damper, etc.

**REASON:** Prevent excessive vibration, short hose life and repeated clutch failures. Compressor seal and bearing life are also affected.

15. Engine idle ---

Set to 500 R.P.M. with air conditioner operating and transmission in gear. Tachometer Reading Corrected to 500 R.P.M. by Mechanic #

**REASON:** To prevent low R.P.M. engine vibration from damaging drive component dampers, splines, "U" joints, clutch and compressor. To assure adequate oil pump capacity for compressor lubrication and unloader actuator operation.

16. Refrigerant Pressures Record -

At 500 engine R.P.M., record suction pressure and discharge pressure. Repeat at 1800 R.P.M. Compare readings to previous records on same coach and other coaches. Determine cause of significant differences based on ambient temperatures.

**REASON:** To diagnose a system malfunction. Any system defect can be observed through its effect on suction and discharge pressure.

17. Condenser Strainer ---

Determine that no temperature difference exists across filter-drier. Replace if temperature drop is noted.

**REASON:** Compressor damage due to (a) low suction pressure, (b) loss of oil circulation to compressor. Also, cause substantial loss of capacity.

13. Unloader Mechanism -

Remove discharge test gauge - attach to #1 cylinder unloader test fitting. OK................. Adjusted..............

Record data in chart. Repeat test for #4 cylinder unloader.

**REASON:** to unload (drop oil pressure reading) at 54 PSI using adjustment in bottom of crankcase.

**NOTE:** Coach interior must be 70-75°F minimum for accurate test. If incorrect, adjust #1 to unload (drop oil pressure reading) at 54 PSI using adjustment in bottom of crankcase.

**REASON:** Excessive compressor damage will result due to low oil pressures and high operating temperatures. Clutch and drive train life can be reduced by cylinders loading and unloading at too high RPM.

---

(3/82)
19. Oil Pump Safety Switch

Remove unloader test gauge and attach to oil pressure test fitting.

Switch Position | Oil Pump Pressure
-----------------|-------------------
Open...... | 85 PSI
Close...... | 85 PSI

With Pump-down feature—At engine idle, turn air conditioning switch off.
Without Pump-down—At engine idle, close receiver outlet or dehydrator service valve to drop suction pressure.
Record gauge pressure (oil and suction) at time oil pressure switch opens. If switch does not open at 65 PSI, stop engine and correct problem.

REASON: To shut off air conditioning compressor any time a loss of oil pressure or suction pressure occurs.

20. High-Low Safety Pressure Switch

Check discharge pressure cutout by restricting condenser air intake with cardboard to raise pressure. Remove restriction immediately if pressure exceeds 425 PSI. Correct switch & repeat if necessary.

Open Discharge Pressure...... | 375-425 (all coaches)
Close Discharge Pressure...... | 50 PSI below open

REASON: To prevent serious damage to the compressor and system components.

21. Belts (Condenser Fan Alternator or Pump)

Check belt tension and condition of belts. Adjust improperly tensioned belts and replace worn or frayed belts.

Belts missing.............
Belts frayed.............
Belts loose.............
Belts OK.............

Tension __________ lbs.
@ __________in. Defl.

REASON: Worn, loose or frayed belts can contribute to excessive pulley temperatures, resulting in overheated bearings and alternator failure. Tight belts cause early bearing failures.

22. Oil Pressure ---

With compressor warm or after idling a minimum of 5 minutes, operate at 1700-1800 engine RPM for 10 minutes. Reduce RPM to idle 500 RPM and operate 2 minutes before recording gauge readings.

REASON: To determine minimum oil pressure under most severe operating conditions. Failure to maintain minimum of 30 PSI net oil pressure indicates compressor should be rebuilt to avoid accelerating wear (unloader mechanism on 41 and 84 cylinders requires 38 PSI for operation. Failure to operate properly will cause severe system imbalance).
23. Clutch adjustment check using 65-120 PSI shop air supply with coach engine off.
   (1) Replace coach air supply to cylinder with shop air.
   (2) Remove clutch arm clevis pin (air pressure applied).
   (3) By hand, move clutch arm away from cylinder until all clearance is removed. Adjust cylinder rod clevis to obtain 7/64" clearance on center lines of clevis pin holes.
   (4) Replace pin-exhaust air and measure cylinder rod travel. Maintain 1 1/8" travel. Incorrect travel requires rebuild of clutch assembly.
   (5) Remove air supply-check flywheel to clutch disc clearance. Maintain minimum clearance of .010".


25. Condenser Fan R.P.M. Record
   Hydraulic @ Idle ________________
   Electric - 1450 - 1500
   2000 Engine R.P.M. ________________
   Voltage ________________ 1800 + 100
   Ampere Draw ________________
   REASON: If fan speed is not exactly as shown, determine cause and correct. Check alternator, pump, amperes, volts, regulator, brushes, bearings, etc. See applicable maintenance manual. Excessive motor speeds (electric) affects service life of alternator & motor.

26. Check compressor alignment and drive line components. Replace compressor and/or engine mounts if necessary prior to alignment.
   "O" Joints..............
   Splines-Clutch Disc.
   Yoke...
   Engine accessory drive noise level @ idle without prop-shaft...
   Quiet, Pulsating rattle, etc.
   REASON: Prevent excessive vibration, short hose life and repeating clutch failures. Compressor seal and bearing life are also affected.

27. Check Super Heat ---
   Clean remote bulb, use electric remote thermomter and suction gauge to check super heat.
   100 - 150
   REASON: To control amount of rise in temperature above saturation point and prevent liquid damage to compressor.

28. Compressor Oil Sample ---
   Remove sample of oil in clean, clear container and allow time for refrigerant to separate from oil. Oil and dehydrator filter should be changed if color is dark brown or black indicating chemical breakdown of oil. Compressor and dehydrator filter should be changed if oil sample is gray, indicating progressive bearing failure.
   Oil Color
   Amber..............
   DK. Brown...........
   Black................
   Gray................
   Foreign particles....
   Correction............
   Yes
   No
   Replaced dehydrator....
   Replaced oil....
   Evacuated system.....
   Replaced compressor....

55-0818 (rev. 5/82)
BODY - INTERIOR - EXTERIOR

1. Floor, steps, and covering
2. Wash engine
3. Wash battery. Check specific gravity Water added
   Battery numbers
5. Tighten axle studs - check wheel studs
6. Check all lights - replace burned out bulbs. Check headlight adjustment
7. Operator's seat, adjustment and oil pedestal.
8. Horn operation - button - brush.
9. Inside and outside mirrors.
10. Operator's dash and instruments, switches, gauges and tell tale lights.
12. Transfer cutter, money tray, punchers.
13. Windshield wipers, and control valves, fill washer.
14. Direct light switches and headlight foot switch.
15. Speakers and microphone - radio operation.
17. Heater pump - motors and controls.
18. Inside decals - replace if necessary.
19. Seats, stanchions.
20. Loose screws - inside trim - tighten or replace.
22. Signal bell cords and guides.
23. Check doors, rods, levers, gears, wires, operation.
24. Tighten starter terminal nuts - check wire mounting straps.
25. Check outside body damage - State inspection sticker - exact fare signs - rear compartment doors and locks - advertising sign frames.
26. Check fuel cap and gasket.
27. Check transmission and radiator grill doors and latches.
28. Check air leaks.
29. Paint wheels.

Mechanic's Signature  Date
ENGINE COMPARTMENT

1. Change oil filters
2. Change fuel and torque filters - Primary □ Secondary □ Torque □
3. Fill with oil
4. Fill with torque fluid
5. Change shift governor
6. Change air governor
7. Change alarmstat
8. Change shutterstat
9. Check for oil leaks
10. Clean engine air filters - Air intake restriction "Water (Manometer)"
11. Check generator field current Amps
12. Check muffler and exhaust system
13. Check air pressure, 50# to 90# seconds
14. Check air pressure drop
15. Check brake air pressure drop (Gauge, Brake cylinder)
16. Check low air buzzer
17. Check oil pressure idling and top speed, Idle-RPM Top-RPM
18. Check convertor main pressure idling and top speed, Idle Top
19. Check turbine outlet pressure idling speed
20. Check fuel pressure idling and top speed, Idle-RPM Top-RPM
21. Tighten water hose
22. Check radiator, fan and hub, shutters, and shutter motor. Add Kysor fluid.
23. Grease accelerator bell crank on governor housing. Check spring.
24. Check micro switch soft shift VS transmission
25. Check Jacobs Engine Brake operation
26. Oil accelerator cable in rear compartment
27. Check engine mountings
28. Oil hi-idle cylinder
29. Oil engine stop solenoid and cylinder
30. Check emergency stop solenoid operation
31. Oil bell crank bushing on top of governor
32. Set fast idle
33. Check anti-freeze, water, radiator, low coolant indicator circuit, protection of
34. Check wiring in rear compartment
35. Check for air leaks
36. Check decals in rear compartment
37. Air-Condition: 1. Operate A/C for ten (10) minutes at each inspection
   2. Check alternator output voltage, 37± 3 volts
   3. Check A/C alternator belts and tension

Mechanic's Signature Date
1. Adjust service and emergency brakes - check steering gear and Pitman arm

2. *Drain oil - take sample. Change oil filter

3. Change differential grease

4. Drain converter fluid

5. Drive shaft and universal joint

6. Muffler and exhaust system

7. Lubricate steering, king pins, tie rods, drag links, drive shaft

8. Check and lubricate emergency brake cam shaft and linkage, accelerator pedal pins, brake cam shafts, anchor pins - slack adjusters

9. Check tie rods, drag link ends, king pins

10. Check interlock rods and cylinders

11. Oil accelerator and emergency brake cables

12. Tighten water hose

13. Check frame - gussets and structural members

14. Check fuel tank for leaks

15. Change heat blower filters. Check blower compartment doors and seals

16. Check bellows for leaks & ride height _______ inches _______ inches
   Front          Rear

17. Drain air tanks

18. Check air dryer operation

19. Check for air leaks

20. Check brake - air reservoir differential, Tank _______ Brake pressure _______
   Differential

21. Check and set toe in

22. Air-Condition: 1. Check compressor mounting bolts and brackets
               2. Check and lubricate drive shaft "U" joints. (Over lubrication at front fitting will damage clutch).

*Check sample oil viscosity _______ % fuel dilution

Maximum allowable 5%

Mechanic's Signature    Date

Foreman's Signature     Date

55-0188 (rev. 5/82)
## DYNAMOMETER TEST AND TUNE-UP

**50,000 Miles**

<table>
<thead>
<tr>
<th>Date</th>
<th>Speedometer Reading</th>
<th>Mileage Due</th>
<th>Bus No.</th>
</tr>
</thead>
</table>

### MILES PER HR. LAST INSPECTION PRESENT INSPECTION

<table>
<thead>
<tr>
<th>Horse Power</th>
<th>Converter Upshift</th>
<th>Converter Downshift</th>
<th>Horse Power</th>
<th>Converter Upshift</th>
<th>Converter Downshift</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Present Mile Per Gal. Oil Pressure Engine Temperature

#### TRANSMISSION PRESSURE TEST

<table>
<thead>
<tr>
<th>R.P.M.</th>
<th>Main</th>
<th>Hydraulic</th>
<th>Direct</th>
<th>Converter In</th>
<th>Converter Out</th>
<th>Main When Shifting</th>
<th>Accumulator Valve Time Delay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**STALL (R.P.M.)**

## ENGINE TUNE UP

<table>
<thead>
<tr>
<th>CHANGE INJECTORS</th>
<th>ABLE</th>
<th>O.K.</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. **TUNE ENGINE**—Follow Tune-up Procedure in GMC Diesel Engine Manual
2. **CHECK ACCELERATOR LINKAGE & ADJUSTMENT**
3. **CHECK FUEL SYSTEM AND FUEL PUMP PRESSURE**
4. **CHECK EMERGENCY STOP SOLENOID**
5. **CHECK AND SET FAST IDLE**
6. **CHECK ENGINE MOUNTINGS**
7. **CHECK AIR COMPRESSOR GOVERNOR OPERATING RANGE**
8. **CHECK ENGINE AIR INTAKE SYSTEM**
9. **CHECK RADIATOR—WATER HOSE—FAN—SHUTTERS & SHUTTER MOTOR**
10. **CHECK BATTERY CONDITION & VOLTAGE REGULATOR SETTING**
11. **CHECK WIRING AND TELL TALE ALARM SYSTEM**
12. **CHECK LOW COOLANT PROBE & CIRCUIT REMOVE & CIRCUIT INJECT**
13. **CHECK SOFT SHIFT CONTROLS SHIFT GOVERNOR**
14. **IDLER GEAR**
15. **PISTON BUSHING**

Inspector | Date Inspected | Air Box Pressure
----------|---------------|-----------------|
0570 (6/76) |               |                 |

LIST ADDITIONAL REMARKS OR DEFECTS ON REVERSE SIDE
<table>
<thead>
<tr>
<th>DATE</th>
<th>OIL QUARTS</th>
<th>WATER QUARTS</th>
<th>FUEL GALLONS</th>
<th>MILEAGE AT END OF OCTOBER</th>
<th>MILEAGE INTERVAL/MILEAGE TO BE DONE</th>
<th>INSPECTION DUE (MILES)</th>
<th>INSPECTION COMPLETED (MILES)</th>
<th>DUE AGAIN DATE (MILES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>31.4</td>
<td>450,498.15</td>
<td>7,000</td>
<td>452,500.00</td>
<td>453,700.00</td>
<td>11/17/83 460,700.00</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>58.0</td>
<td>450,498.13</td>
<td>7,000 MILE BUS INSPECTION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>58.7</td>
<td>451,097.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>0</td>
<td>50.0</td>
<td>451,267.82</td>
<td>14,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
<td>79.3</td>
<td>451,537.52</td>
<td>SEC FILRS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>0</td>
<td>36.9</td>
<td>451,663.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>0</td>
<td>53.2</td>
<td>451,843.95</td>
<td>28,000</td>
<td>456,800.00</td>
<td>453,700.00</td>
<td>11/17/83 481,700.00</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>0</td>
<td>40.7</td>
<td>451,982.37</td>
<td>CONV FLTRRS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>0</td>
<td>48.8</td>
<td>452,146.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>0</td>
<td>69.9</td>
<td>452,386.07</td>
<td>28,000</td>
<td>456,800.00</td>
<td>453,700.00</td>
<td>11/17/83 481,700.00</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0</td>
<td>63.4</td>
<td>452,601.69</td>
<td>ALARMSTATS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>0</td>
<td>61.8</td>
<td>452,811.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>0</td>
<td>61.7</td>
<td>453,021.71</td>
<td>28,000</td>
<td>456,800.00</td>
<td>453,700.00</td>
<td>11/17/83 481,700.00</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>0</td>
<td>83.7</td>
<td>453,306.37</td>
<td>DIFF GREAS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>0</td>
<td>31.0</td>
<td>453,411.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>0</td>
<td>31.2</td>
<td>453,517.91</td>
<td>7,000</td>
<td>454,700.00</td>
<td>453,800.00</td>
<td>11/18/83 460,800.00</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>0</td>
<td>75.5</td>
<td>453,774.68</td>
<td>7,000 MILE AIR COND. INSPECTION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>0</td>
<td>12.1</td>
<td>453,815.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>0</td>
<td>58.1</td>
<td>454,013.43</td>
<td>1,000</td>
<td>456,400.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>0</td>
<td>66.0</td>
<td>454,237.89</td>
<td>EXT WASH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>3</td>
<td>0</td>
<td>51.2</td>
<td>454,412.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>3</td>
<td>0</td>
<td>79.3</td>
<td>454,533.16</td>
<td>2,000</td>
<td>457,400.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>2</td>
<td>0</td>
<td>54.5</td>
<td>454,738.51</td>
<td>INT WASH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>3</td>
<td>0</td>
<td>62.3</td>
<td>454,950.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>3</td>
<td>0</td>
<td>60.5</td>
<td>455,156.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTALS:**

- 11 QUARTS
- 6,134.2 GALLONS
- 4,564.79 MILES

**FISCAL YEAR-TO-DATE MILEAGE:** 21,775.46
**FISCAL YEAR-TO-DATE FUEL:** 6,678.5

**BUS NUMBER:** 04007
BUS INTERIOR GLASS CLEANER

- Wash all interior glass, including windshield, mirrors, gauges and doors.
- Dust dash, farebox, destination signs, doors and back of rear seat.
- Clean front and center door glass.
- Clean dash from floor upward.

Check Each Number As Completed.

<table>
<thead>
<tr>
<th>BUS NUMBER</th>
<th>BUS NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date Completed ______________ 19 __
Signed ________________________

Checked and Approved By ________ Foreman

55-0562 (5/81)
SPECIAL INTERIOR CLEANING

1. Empty trash box, remove all old transfers paper.
2. Using scraper, loosen all mud from floor and step wells.
3. Wash ceiling, remove all stain or dirt from around lights, stanchions, brackets, moulding, etc.
4. Sweep floor and stepwells.
5. Wash all side panels and instrument panels, remove all stain or dirt.
6. Clean all interior glass; remove all smudges or streaks.
7. Wash all seat backs being careful not to streak.
8. Clean all seat upholstery using a damp cloth. (Take necessary steps to remove chewing gum and other hard-to-remove matter).
9. Scrub floor and Stepwell thoroughly. (Do not use running water in bus above seats, on radio equipment, dash or control switches).
10. Mop floor and stepwells, removing all excess water.
11. Wash Exterior of windshield; remove all smudges and streaks.
12. Wash bus Exterior.
13. Clean underneath rear setee.

Date Completed 19

Signed

Checked and Approved By Foreman

-0195 (rev. 2/83)
RADIO SIGNAL CODE

10 - 1 SIGNAL WEAK
10 - 2 SIGNAL GOOD

10 - 3 ASSAULT ON OPERATOR
10 - 4 AFFIRMATIVE (OK)
10 - 5 WAIT FOR SUPERVISOR OR SHOP TRUCK
10 - 6 CLEAN UP OR SWAP OFF

10 - 7 OUT OF SERVICE
10 - 8 IN SERVICE
10 - 9 SAY AGAIN (REPEAT MESSAGE)
10 - 10 NEGATIVE

10 - 11 ACCIDENT BUS INVOLVED
10 - 12 AMBULANCE NEEDED
10 - 13 HOLD UP

10 - 14 PASSENGER INJURED
10 - 15 PASSENGER SICK
10 - 16 PASSENGER SMOKING: HAS BEEN ASKED TO
STOP, BUT REFUSED.
10 - 17 PASSENGER ARMED
10 - 18 PASSENGER DISORDERLY (DAMAGE TO BUS)

10 - 19 DISTRUBANCE ON BUS
10 - 20 LOCATION
10 - 21 STREET BLOCKED BY ACCIDENT, CONSTRUCTION, TRAIN
10 - 22 TRAFFIC LIGHT MALFUNCTION (LOCATION)
10 - 23 BUS WITH MECHANICAL TROUBLE (STATE TROUBLE AND TIME IN CITY)
10 - 24 BREAKS, SLACK OR PULLING
10 - 25 DISABLED BUS (CAUSE)
TUESDAY
A new study reveals some surprising findings about the fatal flaws of top managers.

BY HENRY WEIL

Two high-level managers are being considered for promotion to a top position at a large corporation. Each has performed well over a twenty-five-year career in a variety of capacities—although each has made notable mistakes. Candidate A is a hard-nosed, demanding taskmaster who doesn’t care whose feathers are ruffled as long as the job gets done and who can always find the guilty culprit when the work falls behind schedule. Candidate B puts in long hours and expects others to consider his wishes paramount. Anyone else’s advice is usually ignored.

When subordinates have personal problems, Candidate A will explain that it’s too bad, but personal difficulties should never interfere with work. Candidate B will be instantly sympathetic and will make allowances.

Moreover, Candidate B will listen to experts who know more about a specialized area of business and will usually accept their counsel. Candidate A is so confident and has been so successful that anyone else’s advice is usually ignored.

Candidate A gets the job. True or false?

The answer, according to a recent study of corporate life, is true. Behavioral scientists at the Center for Creative Leadership in Greensboro, North Carolina, discovered that, contrary to popular wisdom, nice guys do not necessarily finish last.

A nonprofit organization founded in 1969, the Center for Creative Leadership seeks to identify and teach the elements of effective leadership in government, industry, and universities. Among its many projects is a sweeping study of executive learning, growth, and development, sponsored by ARMCO Steel, Merrill Lynch, Sun Company, Union Carbide, and Westinghouse Electric. One part of this study sought to answer the question “Why do the careers of successful executives suddenly come to a halt?” The center’s answers were provided by a research team headed by Morgan W. McCall Jr. (PhD in organizational behavior from Cornell), Michael M. Lombardo (EdD from the University of North Carolina at Greensboro), and Ann M. Morrison (MA in psychology from Bucknell and MBA from Wake Forest).

The center’s team had hoped to identify the pivotal factors leading to success but found instead that the factors interfering with it were more clear-cut. The researchers were allowed to comb the top executive offices at several Fortune 100 companies looking for both on-track careers and those that had derailed. They interviewed executives, the executives’ associates, and senior human resource personnel. Some interviewees were asked to detail the careers of both successful and failed executives they had known. Others—successes—were asked to describe their own careers. Says Lombardo, “Every question we asked got a story. We were frankly amazed. One guy said, ‘At last, somebody finally asked me about what’s important to me.’”

Adds Ann Morrison: “I was surprised at the candor with which they admitted their mistakes.” The executives, in short, unburdened themselves to the researchers as if to their therapists.

The executives’ average age was forty-seven, and because of the promotion patterns at the cooperating companies, most of the 105 subjects of the study were men. (The researchers insist that their findings are equally valid for women—with one important difference, as will be discussed later.) The executives—successes and failures—all shared certain traits. The researchers identified seven and noted that while no executive had them all, each had at least two: 1) they had built impressive track records that usually began while they were still young; 2) they were well-liked; 3) they had brilliant technical minds; 4) they were loyal to their colleagues and their companies, and they were self-sacrificing; 5) they were ambitious and adroit manipulators of their own careers; 6) they received an important promotion during a major reorganization or merger; 7) their subordinates performed enthusiastically and skillfully under their supervision.

But all of the rising executives—every one—had also suffered from serious setbacks in their careers and major flaws in their performances.

Two-thirds had tumbled assignments at one time or another, or had missed promotions, had been assigned to dead-end jobs, had fought with a boss and lost, had been demoted or fired, or had found themselves over their heads in a new job assignment. One executive said to the researchers, “Here are the three most common mistakes managers make, and I ought to know. I’ve made them all.”

Another executive, who early on found himself in a dead-end job, quit and walked down to the personnel office. He reapplied for a job with the same corporation, requesting a different division, and went on to be a success. Another rising star saw his career plateau unexpectedly. He had been considered a genius who could do anything. But when he was promoted into a job that bombarded him with more details than he could keep track of, no one stepped forward to help. His subordinates, his peers, and his bosses all thought he was so brilliant that he would eventually master the job on his own. But, in fact, he couldn’t, and when he didn’t get help, the genius was soon dismissed as a failure.

Every executive—on-track or derailed—found his weaknesses exposed when faced with one of five events. First, those whose careers had depended on a mentor—someone who...
taught them how to perform properly and who covered for their mistakes—were exposed when the mentor retired or changed jobs, or when the fair-haired subordinates were promoted away from the mentor's protection. To the researchers' surprise, mentors sometimes turned out to do as much harm as good in an executive's career. If the mentor tried to cover up a subordinate's flaws, sooner or later his shortcomings surfaced anyway. Conversely, even when the subordinate was truly talented, he was often perceived as overly dependent on his mentor and denied promotion as a result. Few successful executives interviewed by the center's team reported being helped much by a mentor. Many more interviewees claimed instead that they learned far more from bad examples, from others whose mistakes the successes observed and vowed never to repeat. Says Mike Lombardo, "People don't learn much from smooth sailing."

Second, a rising executive's limitations sometimes appeared when he was handed a job assignment for which he was not prepared—often under a boss whose style was different from that of managers he had worked for previously. Third, a departmental reorganization kicked many employees upstairs into jobs for which they weren't ready or even—fourth—into executive suites where their styles and talents clashed with the new top-level colleagues. And finally, the executive could have been such a snarling, bullying, back-stabbing SOB that the enemies he made during his rise to the top finally complained enough to get him fired. According to the center's study, the flaws that rising executives reveal during their rise to the top finally come home to roost.

Weaknesses that can be fatal when combined can be categorized as managerial, personal, and in-between. For instance, managers can fail to meet profit goals; they can get lazy; or they can simply be out of their depth when transferred from, say, marketing to manufacturing, or from day-to-day routine to long-range planning. If they don't learn ways to improve their performances, their careers will falter.

Fatal flaws, however, are more often liabilities of personality. Executives sometimes overmanage because they can't let go and give subordinates the responsibility they need, or because they don't trust the judgment of those who are out in the field and know better. When a problem arises, some managers are quick to be defensive, refusing to admit their part in the problem, and they try to lay the blame on others. They are so blatantly worried about their own careers that they thrash and flail trying to stay on track.

Sometimes managers simply don't relate well to other people. They manage by being abusive and sarcastic. They seem aloof or arrogant. Or they are simply unpredictable, exploding unexpectedly or taking action without warning colleagues of the consequences. But of all possible flaws, the report concluded, "the most frequent cause of derailment is insensitivity to others"—whether through callousness, self-absorption, or sheer ineptitude.

The report also points out that a manager's flaws can sometimes be an asset. Executives who overmanage, who cannot delegate, sometimes prove effective at turning around lackluster divisions that desperately need someone meddling everywhere. Managers who are natural bullies can occasionally get lazy workers to shape up. But these tendencies succeed only in certain circumstances. As high-level managers overseeing many divisions, the meddlers and the bullies will usually break too much china.

No managerial or personal flaw will stop a career if the executive recognizes it and sets about correcting it. Says Mike Lombardo, "We interviewed one successful executive, a brilliant engineer who, when he was young, had been told he was being transferred off a project. He said, 'Wait a minute. I need three more months to finish it.' His boss said, 'You don't understand. Everybody finds you a pain in the butt. No one wants to work with you.' The guy couldn't deal with people, who seemed to him, as an engineer, to be improperly working machines. Well, it was a deeply traumatic experience for him—most successful executives face at least one similar adversity in their careers—and he decided he'd better change. It took him a couple of years. No one knows how he did it, but he finally learned to appreciate people because of their shortcomings. Ultimately, he went on to become very successful."

In general, the report says, executives who didn't derail had performed well in two or more different kinds of challenges during their careers: "They had turned a business around and successfully moved from line to staff and back, or they had started a new business from scratch and completed a special assignment with distinction. They built plants in the wilderness and the Amazon jungle, salvaged disastrous operations, resolved all-out wars between factions without bloodshed—one even built a town."

Ann Morrison notes that many successes went out of their way to broaden their range of experiences. Some proposed assignments for themselves to enlarge the scope of their jobs. Others did volunteer work in the community. And still others sought and received appointments to problem-solving task forces within their companies.

In addition to demonstrating versatility, the successful executives exhibited strong interpersonal skills. They were calm and confident when the going got rough, willing to accept responsibility at all times, and seldom moody or volatile. This proved especially difficult whenever they were transferred from a division where they had demonstrated their competence to another division where they had to prove themselves all over again.

Then, whenever they loused up, the successful executives admitted it and accepted the consequences. They warned colleagues to be prepared for the problems they had created in order to minimize the damage. They never tried to blame others, nor did they brood about their mistakes. One successful executive told the researchers, "You can't get too concerned about losing millions. After all, money is lost every day."

The successful executives also owned up when they were out of their depth. Says Lombardo, "One guy was put in charge of computers even though he knew nothing about them. So he called the staff together and said, 'First, I know nothing about computers. Second, I know market-
The most frequent cause of derailment is insensitivity to others.

They were simply carried along by you make your systems relevant to variety of people, even those with White, "and some answered, 'I don't know that there are no quick fixes to ensure success, that there are many entrepreneurs and su- perachievers who made their business successes successful in the face of an indifferent or resistant marketplace. These hustlers have learned to be persistent, obsessive, even obnoxious—and in the end those qualities paid off. Having been handsomely rewarded for unpleasant behavior, they're not about to change. They may even argue that theirs is the only way to succeed. Says Helen Galland, president of Helen Galland Associates, a marketing consulting firm, and former president of Bonwit Teller, "There are people who aren't so adorable but who know their business so well that they can compensate for their liabilities."

In general, Galland finds the center's conclusions to be accurate, and she agrees that the ability to get along with people is usually a prime virtue for an executive. "No business," she explains, "can survive on the expertise of only one individual. It always needs a support team. And a top executive will need to get along with the members of that team." Says Suzanne de Passe, president of Motown Productions, "I don't know of a successful manager who doesn't have successful people with him. And when you have good relationships with subordinates, it creates a power that pushes you up."

One top executive agrees with the findings, but interprets them from a jaundiced point of view. It's not that affable types are necessarily more effective managers, says Lois Wyse, president of Wyse Advertising and author of The Six-Figure Woman, it's simply that "people who inspire strong emotions have a harder time getting promoted. The top jobs go to blander personalities. We tend to promote Cheez Whiz and not pizza."

There is, of course, that nagging question that the center's report never answered: Are the findings equally true for women? Says Ann Morrison, "I suspect that women's careers are more complicated, but my feeling is that 90 percent of what we've learned will also apply to women." Mike Lombardo adds that he and his colleagues spoke to many women who weren't included in the study, and the findings seem to hold true for women executives—with one significant addition. "At each new level," he says, "a woman must gain credibility all over again, something a man seldom has to do. We spoke to one woman, a petroleum engineer who had been assigned to Wyoming in the dead of winter. She told us that after one day working alongside men at 20 degrees below zero, she didn't have to prove herself any further. But she did have to get through that first day just the same."

Jackie DaCosta recognizes the same problem. "It's a continuous process of gaining approval," she says. "Even though you've developed a positive reputation, you have to keep proving yourself." Adds Lois Wyse, "It's tougher for women, because as women we get emotional responses at so many levels, whether it's a man doing the promoting or a woman. Women won't have equality until they have the freedom to fail."

On the whole, however, women executives agree that the qualities a woman needs to get to the top are identical to those a man needs. Says Linda Wachner, president of Max Factor, "The people who rise to the top are consistent and intellectually honest and have good people skills."

Adds Helen Galland, "When people get to the upper rungs of the executive ladder, it doesn't matter at all whether they're men or women. The skills and talents they need to succeed are the same."

55

January 1984/Sassy 39
Female Bosses Say Biggest Barriers Are Insecurity and 'Being a Woman'

By JENNIFER BINGHAM HULL
Staff Reporter of THE WALL STREET JOURNAL

They are senior executives at large U.S. companies with average salaries of about $92,000. Their titles range from corporate secretary to president and chief executive officer, and while most are single, those who are married say they are both the main breadwinner and the main homemaker.

They attribute their successes to ambition, drive and a willingness to take risks, and they blame their failures on a male world and their lack of confidence in it. They were more often the first-born or only child in their families and favored their fathers.

This is part of a picture that emerges from a study of executive women recently completed by Korn/Ferry International, an executive search firm, and the University of California, Los Angeles, Graduate School of Management. The study is based on 300 responses to 600 questionnaires mailed to women at the level of vice president and above at Fortune magazine's list of the top 1,000 industrial concerns and 300 of the largest companies in specialized areas.

Executive women who are married are far more likely to bring home more of the money. On the average these women provide 56% of their household income. Sixty-eight percent of the women say their careers have been more financially rewarding than their husbands and 78% say their careers have progressed faster. About half of the women say they're responsible for the household income.

A few women have fallen at the senior management level. "I know I'm not what they mean. They mean I support it as long as it doesn't interfere with someplace I want you to be," she says, describing how they divide the work at home.

Another difference between executive women and men is mobility. While 53% of the female respondents have been transferred, only 21% of the men have. Half of the women say they're responsible for the household income.

Female bosses say biggest barriers are in insecurity and "being a woman." Many of them were either single or divorced, she recalls. "It's hard to find men in this age group willing to be supportive and understanding of the demands on a successful woman. I know men who say, 'I support your career. It's wonderful.' But that's not what they mean. They mean I support it as long as it doesn't interfere with somewhere I want you to be."
Female Executives Say That 'Being a Woman,' Insecurity Are Barriers

Continued From Page 31

34% of the younger women surveyed have advanced degrees, compared with only 14% of the older women.

Comparison of the two studies shows that female executives are also less conservative and less religious than male executives. Some 60% of the women say religion plays little or no role in their lives, while about the same percentage of men said religion was a significant or moderate influence on them.

On economic issues, 49% of the respondents say they are conservative, compared with 74% of the men. On social issues, 21% of the women say they are conservative, compared with 42% of the men. Some 80% of the women favor passage of the Equal Rights Amendment and 90% favor a woman's right to abortion.

The studies also show a difference in family background between men and women in senior management. Sixty percent of the women surveyed say they were either the oldest or only child, compared with 41% of the men. In addition, 48% of the women say they were closer to their fathers while growing up, compared with 40% who were closer to their mothers. Fifty-four percent of these female executives say their mothers didn't work outside the home.
Women in Transit Review
Findings on Utilization

The issue of the underutilization of women in the transit industry surfaced during the 1979 APTA Annual Meeting in New York at a session called Women in Transit. The WIT session attracted unusual attention, and because of the overwhelming reception of the session, a WIT Task Force was appointed to review and analyze the issues which had been raised. The task force was asked to report its findings to the APTA Executive Committee at the 1980 Annual Meeting.

In brief, the task force found that the utilization of women in the transit industry is minimal at best. Acting on a recommendation of the task force, APTA created a permanent Women In Transit Committee within the framework of the Human Resources Committee. The WIT Committee was charged with developing "an ongoing program to assist women in achieving equity and parity in transit."

Since its creation, the WIT Committee has reviewed three in-depth studies to determine the current status of women in the transit industry. The first study reported on the various developmental trends affecting the overall employment of women in the U.S. from 1976 through 1985, the second was an equal opportunity study of senior managerial positions in one large transit authority, and a third reported on the current status and future potential development of women and minorities in senior managerial positions in eight selected public transit properties.

The findings were:

* women had proportionately greater representation in senior managerial jobs than men. However, far fewer women had earnings above $35,000 than did the men; 9% of the women who had earnings above $35,000, whereas 33% of the men earned more than this amount;
* a small proportion of the transit managers were women. Only 41 of the 337 managers surveyed were females, representing 12% of the respondents, minority women accounted for only 4%.
* smaller properties have made more progress than larger properties in employing women managers and in placing them in senior management jobs. Nearly 40% of the senior managers at small properties are women. Their representation, however, decreases sharply at the middle and first levels; and
* the employment of women managers seems to be a recent phenomenon. The majority of the women have been employed at the properties for five years or less, and most have been managers for about the same length of time.

The committee also developed and distributed two survey questionnaires to women already employed in the transit industry and to transit industry personnel managers. The purpose of the survey was to assess the women's need for a job bank. Of the women surveyed 79% indicated that they would use a job bank if it were available. Of the personnel managers surveyed 53% indicated that currently available sources are inadequate in identifying female applicants and 60% indicated they would use a central clearing house if it were available.
Elizabeth Dole a good choice

President Reagan's appointment of Elizabeth Dole as Transportation Secretary is a sound one. She is no transportation expert, but she is a proven administrator with a level political head. And her appointment, as well, is a welcome hint that Reagan may realize that not all the top talent available to the nation is male.

Reagan's female appointees have for the most part been relegated to cosmetic, low-profile posts — such as the "assistant for public liaison" White House slot in which the 46-year-old Mrs. Dole has languished for two years — leading his critics to wonder openly if his naming of the able Sandra Day O'Connor to the Supreme Court was a sop and an aberration.

But the women in his administration are a talented and highly charged group. Mrs. Dole, for example, though perhaps best known as the wife of the Republican senator from Kansas, was a Phi Beta Kappa at Duke, a Harvard Law School graduate, a respected attorney and a member of the Federal Trade Commission before coming to Reagan's attention. And she was smart enough to have described herself publicly, after joining the White House staff, as a feminist who was "not wedded" to the Equal Rights Amendment (which Reagan opposed) while lobbying privately for the hiring of more women.

"There's more than one way to reach equal rights for women," she has said, and she may be right. There's encouragement in knowing that a woman of her savvy and caliber can reach Reagan.
FOUR-YEAR SUMMARY
OF MARTA
RAIL TRANSIT SYSTEM PERFORMANCE
AUGUST 1983
SUMMARY MARTA FACT SHEET
OF SYSTEM PERFORMANCE

On-Time Performance

98.7% for month of June 1983
97.7% first year average (6/30/79 to 6/30/80)
99.0% second year average (6/30/80 to 6/30/81)
99.0% third year average (6/30/81 to 6/30/82)
98.9% fourth year average (6/30/82 to 6/30/83)
98.8% four-year average (6/30/79 to 6/30/83)

Daily Car Availability

90.8% for month of June 1983
105.6 cars average daily car availability for June
84.1% first year average (6/30/79 to 6/30/80)
86.0% second year average (6/30/80 to 6/30/81)
91.4% third year average (6/30/81 to 6/30/82)
90.5% fourth year average (6/30/82 to 6/30/83)
89.0% four-year average (6/30/79 to 6/30/83)

Transit Vehicle Fleet Size

120 accepted cars on 6/30/83
20 accepted cars at start of revenue service 6/30/79

Patronage

3,228,000 rail passengers in June 1983
12,021,000 rail passengers in first year (6/30/79 to 6/30/80)
21,112,000 rail passengers in second year (6/30/80 to 6/30/81)
18,941,000 rail passengers in third year (6/30/81 to 6/30/82)
32,064,000 rail passengers in fourth year (6/30/82 to 6/30/83)
85,829,000 total rail passengers in 4 years (6/30/79 to 6/30/83)

Systems Operations

Currently, MARTA operates seven days a week from 4:43 am to 1:30 am. E/W line trains operate at 10-minute headways during rush hour and at 15-minute headways at other times. N/S line trains operate at 6-minute headways from 6:00 am to 7:30 pm and at 10-minute headways at other times.

MARTA began East Line revenue service on 6/30/79 operating five days per week from 5:00 am to 8:00 pm with trains operating at 15-minute headways.

The West Line opened for revenue service on 12/22/79.

The North/South Line opened for limited revenue service on 12/4/81, expanded its service on 9/11/82, and again on 12/18/82.
Inauguration of Rail Service

On June 30, 1979, MARTA opened rapid rail service on the 6.7 mile East Line with 7 stations. This segment of the system operated from Avondale Station east of Decatur to Georgia State Station, where patrons caught a downtown distribution bus called the "loop ride" to their offices or to transfer points for other buses. Two and four-car trains operated on weekdays from 5:30 in the morning until 8:00 in the evening at 15-minute headways (intervals).

Service Improvement & System Extension

On September 8, 1979, regular weekend service was initiated and the system began operating seven days a week. On October 13, feeder bus service was inaugurated and transit system operating hours were increased to approximately 19 hours a day, beginning at 5:30 a.m. and continuing until 12:30 a.m. Headways were reduced to 10 minutes during rush hours with six-car trains operating at that time to accommodate the increase in passenger traffic, resulting from the routing of feeder buses into stations. MARTA opened the West Line for revenue service on December 22. It consisted of an additional 5 miles and 6 stations beginning at Five Points in downtown Atlanta and continuing west to Hightower Station. Hours of operation and train frequency remained the same. West Line feeder bus service was inaugurated June 7, 1980, and the revenue operating day was extended until 1:30 a.m.

On December 4, 1981, the North-South Line, from Garnett Station to North Avenue Station, was opened for limited revenue service. Operations consisted of single tracking through Five Points, Peachtree Center and Civic Center Stations with no stop at Peachtree Center Station. Hours of operation on the North/South Line were from 6:00 a.m. to 8:00 p.m., five days per week, Monday through Friday.

On September 11, 1982, Peachtree Center and West End Stations were opened to the public and two-track operation was inaugurated on the North/South Line. Dual track North/South revenue service was provided from North Avenue Station on the north to West End Station on the south from 5:15 a.m. to 12:44 a.m. Feeder bus service to the south end of the North/South Line was established at West End Station on September 20, 1982. The North/South Line consisted of 3 miles of dual track operation and six stations, including Five Points Station. On November 22, 1982, six minute schedules were established on the North/South Line.

On December 18, 1982, Midtown and Arts Center Stations were opened to the public. Arts Center Station became the north terminal station for the North/South Line. On January 8, 1983, feeder bus service was established at the North Line stations; North Avenue, Midtown, and Arts Center. Thus at the present time, seven days a week, MARTA circulates trains throughout the East/West Line which consists of 11.7 miles of dual track and thirteen stations, and the North/South Line which consists of 4.2 miles of dual track operation and eight stations.
Transit Vehicle Fleet

At the inauguration of revenue service on June 30, 1979, the fleet consisted of 20 cars. During the third quarter of FY'82, MARTA accepted the last of the contract order for 120 cars. The fleet has remained stable at 120 cars since that time.

Daily Car Availability

Daily car availability has been consistently above the minimum to maintain the programmed level of service. Initially, the minimum daily car requirement was 12 cars. This enabled three 4-car trains to circulate on the East Line at 15-minute intervals. On October 13, 1979, the minimum daily car requirement was increased to 24 cars to provide for operation of six-car trains at 10-minute headways. On December 22, the car requirement was increased to 36 cars. This permitted operation of 6-car trains at 10-minute intervals on the full East/West Line during rush hours. On June 7, 1980, the daily car requirement was increased to 48 cars. This permitted operation of 8-car trains during rush hours. On December 4, 1981, the car requirement was increased to 54 cars, 12 cars for the North/South Line, and 42 cars for the East/West Line. On September 11, 1982, the car requirement was increased to 60 cars, 18 cars for the North/South Line and 42 cars for the East/West Line. On November 22, 1982, the car requirement was increased to 70 cars, with 28 cars for the North/South Line. The daily car requirement is depicted on the cars available chart, Figure 2.

Beginning March 13, 1981, DTO-Maintenance initiated a program of withholding fully operational cars from revenue service. By storing high mileage cars, their warranty will be extended over a longer period and their periodic preventive maintenance intervals will be extended. Should the need arise, these cars could be placed in revenue service.

The average number of cars available for service are listed by quarter in Figure 2. This chart clearly shows that the average number of cars available always exceeds the daily requirement. It is notable that not once during four years of revenue service has the Maintenance Division failed to provide the minimum number of cars required for scheduled service, a perfect record.

Figure 3 depicts car availability as a percent of the car fleet which is operational. The current FY'83 is shown as average daily car availability per month. The three previous fiscal years are shown as yearly averages, each a little higher/better than the previous year.

On-Time Performance

During its four years of operation, the MARTA rail system has produced results clearly exceeding goals previously set. The actual average on-time performance for the first twelve months is illustrated in the lower portion of Figure 4. The twelve months of fiscal year 1983 are depicted on the same Figure 4. The figure clearly shows the achievement of a stable high level of on-time performance. This stable high level of performance started in the ninth month of FY'80 and continued through FY'81 and FY'82. The average of 99.0% OTP for fiscal years '81 and '82 compares favorably to the first year.
operational goal of 93% of trips operating within four minutes of schedule. This four-minute criterion is the same standard used by other transit properties to evaluate their performance.

In June, the most recent month of full East/West and North/South service, on-time performance averaged 98.7%, and daily performance during each of the 30 days in the month exceeded the 93% criterion. The system is providing reliable, on-time service.

**Patronage Data**

The rail system has been well accepted by the citizens of this community. Patronage grew during the first year of operation from an initial level of 738,000 for three months. Patronage reached a high of 5,513,000 for the three months following the initiation of feeder bus service on the West Line, and has been above 5,000,000 per quarter since that time. The ridership in the first year of operation (FY'80) was 12.02 million; the second year (FY'81) 21.11 million and during the third year (FY'82) 18.94 million people rode the trains. The September 11, 1982 opening of Peachtree Center and West End Stations with dual track operations and feeder bus service to Garnett caused a significant increase in ridership. The average weekday ridership went from a level of around 70,000 for the four quarters ending August 31, 1982, to a level of 94,000 for the quarter ending December 31, 1982, and then to a level of 127,000 for the most recent quarter ending June 30, 1983. The total ridership for MARTA's four years of rail revenue service was 85.8 million people. Figure 5 illustrates the average number of weekday riders on a quarterly basis for FY'81, FY'82, and FY'83.

**Upcoming Major Milestones**

MARTA is proceeding to expand the North/South Line to Brookhaven on the north and to Lakewood on the south by December 1984.

**Summary**

In summary, MARTA's four years of rail operation have produced results clearly exceeding the goals previously set. The system is providing reliable, on-time service. Patronage over the first six months of operation consisted almost entirely of the East Line with the full East-West operating during the latter thirty-three months. The patronage on the North-South Line consisting primarily of patrons making connections with the East-West Line, was minimal during the ten months of limited service, increased dramatically when full service was established for the Phase 3A/4A and B1 South Line, and again when full service was established for the B1 North Line.
ACCEPTED TRANSIT VEHICLES BY QUARTER

<table>
<thead>
<tr>
<th>Quarters</th>
<th>FY 80</th>
<th>FY 81</th>
<th>FY 82</th>
<th>FY 83</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>34</td>
<td>48</td>
<td>56</td>
<td>118</td>
</tr>
<tr>
<td>2nd</td>
<td>48</td>
<td>56</td>
<td>72</td>
<td>120</td>
</tr>
<tr>
<td>3rd</td>
<td>56</td>
<td>72</td>
<td>78</td>
<td>120</td>
</tr>
<tr>
<td>4th</td>
<td>72</td>
<td>78</td>
<td>84</td>
<td>120</td>
</tr>
<tr>
<td>1st</td>
<td>72</td>
<td>84</td>
<td>92</td>
<td>120</td>
</tr>
<tr>
<td>2nd</td>
<td>84</td>
<td>92</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>3rd</td>
<td>92</td>
<td>100</td>
<td>107</td>
<td>120</td>
</tr>
<tr>
<td>4th</td>
<td>100</td>
<td>107</td>
<td>118</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>
AVERAGE NUMBER OF CARS AVAILABLE PER QUARTER

Daily Car Requirement

Avg. number of cars available for revenue service

Quarters

FY80 FY81 FY82 FY83

1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th

20.5 24 32.8 43.8 36 52.9 48 63.6 68.6 71.0 82.4 91.1 102.0 107.1 110.7 112.1 113.5 105.2 103.6
AVERAGE DAILY CAR AVAILABILITY PER MONTH

FA 83

PERCENT OF FLEET AVAILABLE

<table>
<thead>
<tr>
<th>Month</th>
<th>FY80 AV</th>
<th>FY81 AV</th>
<th>FY82 AV</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>84.1%</td>
<td>86.0%</td>
<td>91.4%</td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td></td>
<td>91.4%</td>
</tr>
<tr>
<td>Sept</td>
<td>89.4%</td>
<td>90.3%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Oct</td>
<td>90.5%</td>
<td>90.4%</td>
<td>94.8%</td>
</tr>
<tr>
<td>Nov</td>
<td>90.8%</td>
<td>90.2%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Dec</td>
<td>90.0%</td>
<td>90.2%</td>
<td>94.6%</td>
</tr>
<tr>
<td>Jan</td>
<td>90.5%</td>
<td>90.4%</td>
<td>94.0%</td>
</tr>
<tr>
<td>Feb</td>
<td>93.9%</td>
<td>94.8%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Mar</td>
<td>94.8%</td>
<td>94.0%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Apr</td>
<td>91.4%</td>
<td>94.6%</td>
<td>93.1%</td>
</tr>
<tr>
<td>May</td>
<td>94.0%</td>
<td>93.9%</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>93.1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AVERAGE DAILY CAR AVAILABILITY PER MONTH

80  85  90  95  100

FY 83
AVERAGE DAILY ON-TIME PERFORMANCE

- **N/S**
  - FY82 99.1%
  - FY82 99.1%
  - FY81 99.0%

- **E/W**
  - FY82 99.0%
  - FY81 99.0%
  - FY80 97.7%

- **TOTAL SYSTEM**
  - FY82 99.0%
  - FY81 99.0%
  - FY80 97.7%

Performance Metrics:
- July 1982: 99.1%
- Aug. 1982: 98.9%
- Sept. 1982: 98.8%
- Oct. 1982: 98.9%
- Nov. 1982: 99.1%
- Dec. 1982: 99.3%
- Jan. 1983: 99.4%
- Feb. 1983: 99.3%
- Mar. 1983: 99.4%
- Apr. 1983: 99.3%
- May 1983: 99.4%
- June 1983: 99.1%
FUNCTIONS
OF
THE MARTA TRANSIT POLICE/SECURITY DIVISION

The MARTA Transit Police Division was created by an act of the Georgia General Assembly and presently consists of the following personnel:

(A) Chief of Security (1)
(B) Secretary (1)
(C) Assistant Chief of Security (1)
(D) Transit Police Captain (1)
(E) Records Clerk (1)
(F) Transit Police Sergeants (7)
(G) Investigator (1)
(H) Sworn Transit Police Officers (38)
(I) Security Guards (13)
(J) Zone Center Monitors (22)
(K) Facility Attendants (Part-Time) (18)
(L) Radio Operators (3)

MARTA Police Officers are responsible for patrolling 15.2 miles of rail, twenty (20) rail stations, parking lots which consist of approximately 5,000 parking spaces. Daily ridership of the rail line is approximately 150,000 patrons.

To provide patrons and employees with a system that is both SAFE and SECURE, Transit Police Officers ride trains, patrol stations, and parking lots to maintain high visibility to detect and deter criminal activity. Police Officers are responsible for the enforcement of all laws, regulations, and departmental orders.

In addition to physical security, twenty-two (22) Zone Center Monitors observe activity within the twenty (20) rail stations through a complex closed circuit television system. These cameras are located in facilities known as Zone Centers and are equipped with pan, tilt, and zoom capabilities, as well as video taping and instant replay. Zone Center Monitors provide assistance to the public by providing information to patrons and other assistance. Patrons have access to the Zone Center Monitors by the patron assistance and police emergency telephones located throughout each rail station.

In areas not covered by the scrutiny of the CCTV camera lens additional measures are taken to ensure that patrons and employees are safe and secure.

Security Guards are stationed at bus operating facilities to provide physical security to garages and parking lots. Facilities are patrolled on foot by the Security Guards with written and radio reports of any unusual findings being made.
Facility Attendants staff restrooms at the Avondale, Hightower, and Five Points rail stations, as an extra measure of security to patrons and employees.

The communication system for the MARTA Transit Police is staffed by three (3) Radio Operators. These Operators maintain lines of communication within MARTA and outside police agencies as well as dispatching officers to locations by use of the two-way radio. Officers are directed to calls for service by the Radio Operator on a priority basis.

Calls for service to the Bus Operators are answered as they arise by mobile units responding in marked police vehicles. Calls are dispatched by the two-way radio with the mobile unit intercepting the bus on its route to avoid schedule delays.

MARTA Police Officers are responsible for the filing of all appropriate police reports and the follow-up criminal cases to their final determination. Cases of criminal activity requiring extensive follow-up investigation are assigned to the investigator's office after the initial field report is made.

January 27, 1984
# MONTHLY CRIME REPORT

## PARKING LOTS ACTIVITY SECTION

<table>
<thead>
<tr>
<th>Location</th>
<th>Theft from Auto</th>
<th>Theft of Auto</th>
<th>Arrest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>North Lot</td>
<td>South Lot</td>
<td>North Lot</td>
</tr>
<tr>
<td><strong>RAIL PARKING LOTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avondale</td>
<td>0</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Eastlake</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Candler Park</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Inman Park</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>King Memorial</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vine City</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ashby</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>West Lake</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hightower</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Arts Center</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>West End</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td><strong>PARK AND RIDE LOTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stone Mountain</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Abernathy</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Doraville</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Memorial Drive</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>FACILITY LOTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration Building</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M.D.W. Building</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Peachtree Summit</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Brady Avenue</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Brownsmill</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Laredo</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Total Thefts from auto 42  Arrest 0
Total Thefts of auto 8  Arrest 0
Total auto recovered 1  Arrest 0
<table>
<thead>
<tr>
<th>CRIME CATEGORY</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>80'</th>
<th>81'</th>
<th>82'</th>
<th>83'</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGGRAVATED ASSAULT</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>ASSAULT/BATTERY</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>4</td>
<td>17</td>
<td>26</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>HOMICIDE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>KIDNAPPING</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RAPE</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ARMED ROBBERY</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>PICK-POCKET SNATCH THEFT</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>48</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>DISORDERLY CONDUCT</td>
<td>5</td>
<td>16</td>
<td>2</td>
<td>18</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>13</td>
<td>10</td>
<td>15</td>
<td>7</td>
<td>12</td>
<td>433</td>
<td>170</td>
<td>91</td>
<td>112</td>
</tr>
<tr>
<td>DISORDERLY WHILE INTOXICATED</td>
<td>6</td>
<td>9</td>
<td>13</td>
<td>17</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>9</td>
<td>11</td>
<td>44</td>
<td>55</td>
<td>92</td>
<td>97</td>
</tr>
<tr>
<td>SMOKING/EATING DRINKING</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>15</td>
<td>13</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>FAKE EVASION</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>41</td>
<td>18</td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td>GRAFFITI/VANDALISM</td>
<td>7</td>
<td>12</td>
<td>22</td>
<td>13</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>25</td>
<td>126</td>
<td>96</td>
</tr>
<tr>
<td>LITTERING/PLAYING RADIO</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>SEXUAL OFFENSES (excluding Rape)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>DELAYING TRAIN OR BUS</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>-</td>
<td>15</td>
<td>34</td>
<td>14</td>
</tr>
<tr>
<td>THROWING MISSILES</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>9</td>
<td>11</td>
<td>6</td>
<td>9</td>
<td>-</td>
<td>73</td>
<td>5</td>
<td>71</td>
</tr>
<tr>
<td>MOTOR VEHICLE THEFTS</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>THEFTS FROM MOTOR VEHICLES</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>3</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL ARRESTS</td>
<td>20</td>
<td>34</td>
<td>38</td>
<td>34</td>
<td>17</td>
<td>7</td>
<td>12</td>
<td>30</td>
<td>24</td>
<td>25</td>
<td>16</td>
<td>25</td>
<td>353</td>
<td>230</td>
<td>210</td>
<td>522</td>
</tr>
</tbody>
</table>
## Monthly Crime Report for MARTA Bus Police

### Section: 1. Incidents by Route and Block

<table>
<thead>
<tr>
<th>Route # and Block #</th>
<th>Operator</th>
<th>Location</th>
<th>Incident</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>487 Alabama &amp; Broad Street</td>
<td>Disorderly conduct</td>
<td>Report</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>933 Auburn Avenue to Euclid</td>
<td>Vandalism</td>
<td>Report</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1253 Armstrong &amp; Piedmont Avenue</td>
<td>Simple battery</td>
<td>Report</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>965 Peachtree &amp; Martin Luther King Drive</td>
<td>Theft of services</td>
<td>Arrest</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1320 West Peachtree</td>
<td>Disorderly while intoxicated</td>
<td>Arrest</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>? Pryor &amp; Wall Street</td>
<td>Disorderly while intoxicated</td>
<td>Arrest</td>
</tr>
<tr>
<td>13</td>
<td>?</td>
<td>? West Peachtree</td>
<td>Disorderly while intoxicated</td>
<td>Arrest</td>
</tr>
<tr>
<td>22</td>
<td>1</td>
<td>1002 Rockyford &amp; College Avenue</td>
<td>Criminal damage to property</td>
<td>Report</td>
</tr>
<tr>
<td>23</td>
<td>?</td>
<td>? Arts Center Station</td>
<td>Attempted pick pocket</td>
<td>Report</td>
</tr>
<tr>
<td>24</td>
<td>1</td>
<td>1294 Eastlake Station</td>
<td>Consuming alcohol in public</td>
<td>Arrest</td>
</tr>
<tr>
<td>28</td>
<td>2</td>
<td>877 Wyman &amp; Memorial Drive</td>
<td>Damage to bus</td>
<td>Report</td>
</tr>
<tr>
<td>37</td>
<td>1</td>
<td>1269 Garden Hills</td>
<td>Disorderly conduct</td>
<td>Report</td>
</tr>
<tr>
<td>48</td>
<td>?</td>
<td>856 Inman Park Station</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
</tbody>
</table>
# Monthly Crime Report for MARTA Bus Police

## Section: 1, Incidents by Route and Block

<table>
<thead>
<tr>
<th>Route # and Block #</th>
<th>Operator</th>
<th>Location</th>
<th>Incident</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>66 12/23</td>
<td>1 390</td>
<td>Hightower Station</td>
<td>Disorderly while intoxicated &amp; smoking on bus</td>
<td>Arrest</td>
</tr>
<tr>
<td>66 12/08</td>
<td>2 1275</td>
<td>Lynhurst @ Lynway</td>
<td>Disorderly conduct &amp; delaying operations</td>
<td>Arrest</td>
</tr>
<tr>
<td>71 12/13</td>
<td>7 707</td>
<td>West End Station</td>
<td>Theft of services</td>
<td>Arrest</td>
</tr>
<tr>
<td>74 12/28</td>
<td>4 1137</td>
<td>Whitesmill Road</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
<tr>
<td>83 12/20</td>
<td>3 ?</td>
<td>Campbellton Road</td>
<td>Disorderly while intoxicated</td>
<td>Arrest</td>
</tr>
<tr>
<td>83 12/23</td>
<td>4 271</td>
<td>West End Station</td>
<td>Attempted Robbery</td>
<td>Report</td>
</tr>
<tr>
<td>89 12/01</td>
<td>? ?</td>
<td>Peachtree &amp; Marietta Street</td>
<td>Pick pocket</td>
<td>Report</td>
</tr>
<tr>
<td>97 12/01</td>
<td>1 1406</td>
<td>Broad @ Alabama Street</td>
<td>Disorderly conduct</td>
<td>Report</td>
</tr>
<tr>
<td>100 12/27</td>
<td>1 187</td>
<td>Pryor @ ridge</td>
<td>Damage to bus</td>
<td>Report</td>
</tr>
<tr>
<td>107 12/14</td>
<td>1 681</td>
<td>Pryor &amp; Wall Street</td>
<td>Disorderly while intoxicated</td>
<td>Arrest</td>
</tr>
<tr>
<td>107 12/29</td>
<td>1 ?</td>
<td>Wall @ Pryor Street</td>
<td>Disorderly while intoxicated, simple battery &amp; terrorist threats</td>
<td>Arrest</td>
</tr>
<tr>
<td>114 12/08</td>
<td>1 721</td>
<td>Columbia @ Glenwood</td>
<td>Disorderly conduct</td>
<td>Report</td>
</tr>
<tr>
<td>120 12/12</td>
<td>? ?</td>
<td>City of Stone Mountain</td>
<td>Disorderly conduct</td>
<td>Report</td>
</tr>
<tr>
<td>120 12/02</td>
<td>3 ?</td>
<td>East Ponce de Leon Avenue</td>
<td>Possession of marijuana</td>
<td>Arrest</td>
</tr>
</tbody>
</table>
### Monthly Crime Report for MARTA Bus Police

#### Section 1, Incidents by Route and Block

<table>
<thead>
<tr>
<th>Route # and Block #</th>
<th>Operator</th>
<th>Location</th>
<th>Incident</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>48 12/20</td>
<td>856</td>
<td>Constitution &amp; Forest Park</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
<tr>
<td>49 12/14</td>
<td>1099</td>
<td>Pryor @ Alabama Street</td>
<td>Disorderly while intoxicated</td>
<td>Arrest</td>
</tr>
<tr>
<td>50 12/17</td>
<td>?</td>
<td>Walton &amp; Fairlie Street</td>
<td>Disorderly while intoxicated &amp; Terroristic threats</td>
<td>Arrest</td>
</tr>
<tr>
<td>50 12/15</td>
<td>1036</td>
<td>Peachtree Street</td>
<td>Theft by taking (Operator)</td>
<td>Report</td>
</tr>
<tr>
<td>50 12/06</td>
<td>219</td>
<td>Maynard Court Apartments</td>
<td>Disorderly conduct</td>
<td>Report</td>
</tr>
<tr>
<td>50 12/23</td>
<td>1417</td>
<td>Yates @ Wilkes Circle</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
<tr>
<td>50 12/23</td>
<td>764</td>
<td>Bankhead Highway</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
<tr>
<td>50 12/27</td>
<td>806</td>
<td>Bowen Homes</td>
<td>Theft from bus</td>
<td>Report</td>
</tr>
<tr>
<td>51 12/06</td>
<td>912</td>
<td>West Lake Station</td>
<td>Disorderly while intoxicated</td>
<td>Arrest</td>
</tr>
<tr>
<td>54 12/27</td>
<td>142</td>
<td>Macon Drive &amp; Old Hapeville Road</td>
<td>Delaying bus, smoking on bus, disorderly conduct, simple battery, &amp; obstructing an officer</td>
<td>Arrest</td>
</tr>
<tr>
<td>54 12/30</td>
<td>?</td>
<td>Hapeville Road</td>
<td>Simple battery &amp; abusive &amp; profane language</td>
<td>Arrest</td>
</tr>
<tr>
<td>62 12/24</td>
<td>1277</td>
<td>Campbellton Road</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
<tr>
<td>65 12/06</td>
<td>1188</td>
<td>Courtland @ Currie</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
</tbody>
</table>
## Monthly Crime Report for MARTA Bus Police

### Section 1, Incidents by Route and Block

<table>
<thead>
<tr>
<th>Route # and Block #</th>
<th>Operator</th>
<th>Location</th>
<th>Incident</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>122</td>
<td>?</td>
<td>Reed Street &amp; Cedar Street</td>
<td>Disorderly conduct</td>
<td>Report</td>
</tr>
<tr>
<td>165</td>
<td>5</td>
<td>Kimberly Way</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
<tr>
<td>170</td>
<td>2</td>
<td>Campground &amp; Campbellton Road</td>
<td>Missile thrown</td>
<td>Report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Block #</th>
<th>Location</th>
<th>Incident</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/02</td>
<td>563</td>
<td>Mt. Vernon Road &amp; N. Peachtree Road</td>
<td>Aggravated assault</td>
<td>Report</td>
</tr>
<tr>
<td>12/08</td>
<td>1134</td>
<td>Candler Park Station</td>
<td>Theft of services</td>
<td>Arrest</td>
</tr>
<tr>
<td>12/10</td>
<td>992</td>
<td>Marietta &amp; Cone Street</td>
<td>Theft of services &amp; violation of knife ordinance</td>
<td>Arrest</td>
</tr>
<tr>
<td>12/18</td>
<td>?</td>
<td>Capitol Avenue</td>
<td>Disorderly while intoxicated</td>
<td>Arrest</td>
</tr>
<tr>
<td>12/22</td>
<td>?</td>
<td>Alabama &amp; Broad Street</td>
<td>Disorderly conduct</td>
<td>Arrest 2</td>
</tr>
<tr>
<td>12/19</td>
<td>819</td>
<td>Northside Parkway</td>
<td>Simple battery</td>
<td>Arrest</td>
</tr>
</tbody>
</table>
WEDNESDAY
Director of Service Planning and Scheduling

Manager of Scheduling
- Clerk Typist
  - Chief of Scheduling
    - Sched Analyst III
    - Sched Analyst II
    - Sched Analyst I
    - Schedule Clerk
  - transit Sched Analyst
    - Sched Analyst I
    - Word Processor
  - E&H Service Spec.
  - Clerk Typist

Manager of Planning
- Clerk Typist
  - Chief of Planning
    - Chief of Service Planning
      - Sched Analyst III
      - Sched Analyst II
      - Sched Analyst I
      - Schedule Clerk
      - transit Sched Analyst
        - Sched Analyst I
        - Word Processor
      - E&H Service Spec.
      - Clerk Typist
    - Chief of Service Monitoring
      - Senior Traffic Checker
      - 16 Traffic Checkers
    - transit Systems Analyst

Manager of Research & Analysis
- Clerk Typist
  - Operations Analyst
    - Chief of Research & Analysis
    - Marketing Planner
    - Sched Analyst III
    - Sched Analyst II
    - Sched Analyst I
    - Schedule Clerk
    - transit Sched Analyst
      - Sched Analyst I
      - Word Processor
    - E&H Service Spec.
    - Clerk Typist

8 Represented Positions
49 Total Positions

**Pending Classification**
**ROUTE 66: LYNHURST - GREENBRIAR**

**Schedule No. 2**

<table>
<thead>
<tr>
<th>Time Card for Block No.</th>
<th>Time Card for Block No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEEKDAY</strong></td>
<td><strong>WEEKDAY</strong></td>
</tr>
<tr>
<td><strong>Browns Mill Garage Lv.</strong></td>
<td>08:00</td>
</tr>
<tr>
<td><strong>Greenbriar</strong></td>
<td>08:30</td>
</tr>
<tr>
<td><strong>Children Dr. &amp; Landrum Dr.</strong></td>
<td>09:00</td>
</tr>
<tr>
<td><strong>Harrin Rd. &amp; Cascade Rd.</strong></td>
<td>09:30</td>
</tr>
<tr>
<td><strong>Lynhurst Dr. &amp; B. Mays Dr.</strong></td>
<td>10:00</td>
</tr>
<tr>
<td><strong>Highower Station Arr.</strong></td>
<td>10:30</td>
</tr>
<tr>
<td><strong>Highower Station Lv.</strong></td>
<td>11:00</td>
</tr>
<tr>
<td><strong>Greenbriar</strong></td>
<td>11:30</td>
</tr>
<tr>
<td><strong>Children Dr. &amp; Landrum Dr.</strong></td>
<td>12:00</td>
</tr>
<tr>
<td><strong>Harrin Rd. &amp; Cascade Rd.</strong></td>
<td>12:30</td>
</tr>
<tr>
<td><strong>Lynhurst Dr. &amp; B. Mays Dr.</strong></td>
<td>13:00</td>
</tr>
<tr>
<td><strong>Highower Station Arr.</strong></td>
<td>13:30</td>
</tr>
<tr>
<td><strong>Highower Station Lv.</strong></td>
<td>14:00</td>
</tr>
<tr>
<td><strong>Browns Mill Garage Lv.</strong></td>
<td>14:30</td>
</tr>
<tr>
<td><strong>Greenbriar</strong></td>
<td>15:00</td>
</tr>
<tr>
<td><strong>Children Dr. &amp; Landrum Dr.</strong></td>
<td>15:30</td>
</tr>
<tr>
<td><strong>Harrin Rd. &amp; Cascade Rd.</strong></td>
<td>16:00</td>
</tr>
<tr>
<td><strong>Lynhurst Dr. &amp; B. Mays Dr.</strong></td>
<td>16:30</td>
</tr>
<tr>
<td><strong>Highower Station Arr.</strong></td>
<td>17:00</td>
</tr>
<tr>
<td><strong>Highower Station Lv.</strong></td>
<td>17:30</td>
</tr>
<tr>
<td><strong>Browns Mill Garage Lv.</strong></td>
<td>18:00</td>
</tr>
<tr>
<td><strong>Greenbriar</strong></td>
<td>18:30</td>
</tr>
<tr>
<td><strong>Children Dr. &amp; Landrum Dr.</strong></td>
<td>19:00</td>
</tr>
<tr>
<td><strong>Harrin Rd. &amp; Cascade Rd.</strong></td>
<td>19:30</td>
</tr>
<tr>
<td><strong>Lynhurst Dr. &amp; B. Mays Dr.</strong></td>
<td>20:00</td>
</tr>
<tr>
<td><strong>Highower Station Arr.</strong></td>
<td>20:30</td>
</tr>
<tr>
<td><strong>Highower Station Lv.</strong></td>
<td>21:00</td>
</tr>
</tbody>
</table>

**NOTE:** (B) From Garage via

**NOTE:** (C) To Garage via

SEE ATTACHED SHEET FOR ROUTING.

- R-Hamilton Blvd.  
- R-Browns Mill Rd.  
- R-Crown Rd.  
- R-Ramp to 1-75 Northbound cont. 1-75 Expwy.  
- R-Ramp to 1-75 Northbound cont. 1-75 Southbound  
- R-Ramp to Cleveland Ave.  
- L-Cleveland Ave.  
- R-Norman Berry Dr. cont. Crown Rd. to Headland Dr. cont. Headland Dr.  
- R-Greenbriar Pkwy. to End of Line.

---

53-0185
ROUTE 66 LYNHURST & GREENBRIAR

In Effect: JUN. 28, 1982

Schedule No.

ATTACH ROUTING SHEET

Revised:

Revised:

OUTBOUND ROUTING:
FROM HIGHTOWER STATION
VIA: DRIVEWAY TO
R-MLK JR. DR.
L-LYNHURST DR.
L-CASCADE RD.
R-HARBIN RD.
R-LANDRUM DR.
L-CHILDERS DR.
R-HEADLAND DR.
R-GREENBRIAR PARKWAY
TO BUS STOP SHELTER AT
GREENBRIAR SHOPPING CTR.
LAYOVER AT BUS STOP
SHELTER AM & PM

INBOUND ROUTING:
FROM GREENBRIAR PARKWAY
AT BUS STOP SHELTER VIA:
GREENBRIAR PARKWAY
R-CAMPBELLTON RD.
L-CHILDERS DR.
R-LANDRUM DR.
L-HARBIN RD.
L-CASCADE RD.
R-LYNHURST DR.
R-MLK JR. DR.
L-DRIVEWAY TO
HIGHTOWER STATION
## Route 66
### LYNCHURST-GREENBRIAR

<table>
<thead>
<tr>
<th>Run</th>
<th>From</th>
<th>To</th>
<th>Time On</th>
<th>Time Off</th>
<th>Period</th>
<th>Start Time</th>
<th>Finish Time</th>
<th>O.T. Time</th>
<th>Pay Time</th>
<th>TOTAL TIME</th>
<th>OPERATOR</th>
<th>BADGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>66C</td>
<td>C</td>
<td>5:07a</td>
<td>1:02p</td>
<td>66C</td>
<td>7:55</td>
<td>8:52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>66C</td>
<td>C</td>
<td>5:37a</td>
<td>10:32a</td>
<td>66C</td>
<td>10:32a</td>
<td>10:32a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>66C</td>
<td>HS</td>
<td>1:02p</td>
<td>4:02p</td>
<td>HS</td>
<td>7:55</td>
<td>8:52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>66C</td>
<td>HS</td>
<td>5:32p</td>
<td>11:24a</td>
<td>HS</td>
<td>11:53a</td>
<td>12:53a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>66C</td>
<td>C</td>
<td>4:20p</td>
<td>11:53a</td>
<td>C</td>
<td>7:51</td>
<td>8:48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** The notations in the columns headed "Relief Point" are explained as follows:

- C: Run in or out of Browns Hill Garage.
- H.S.: Relief at Highrowe Station.
- W.E.S.: Relief at West End Station.

**These From Total Assignments RT 83 RT 66**

- **Total Bus Hours:** 38:08 11:35 36:33
- **Total R.T. Time:** 2:30 --- 2:30
- **Total O.T. Time:** --- --- ---
- **Total Travel Time:** 2:21 --- 2:21
- **Total Bonus:** 1:38 --- 1:38
- **Total Time Paid:** 43:00 1:35 41:25

**Correction:** June 28, 1982

**Rev. For:** September 19, 1982

5-4-1-0-0
### CALENDARS:

<table>
<thead>
<tr>
<th>Weekdays</th>
<th>Saturdays</th>
<th>Sundays</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1983</td>
<td>September 1982</td>
<td></td>
</tr>
</tbody>
</table>

### METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

#### DEPARTMENT OF TRANSIT OPERATIONS

#### STATISTICS SUMMARY

<table>
<thead>
<tr>
<th>OPERATING MONTH</th>
<th>September 1983</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THIS MONTH</strong></td>
<td><strong>FISCAL YEAR TO DATE</strong></td>
</tr>
<tr>
<td><strong>Rail Statistics</strong></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>Total System</strong></td>
<td>14,105,052</td>
</tr>
<tr>
<td><strong>Total System</strong></td>
<td>14,491,563</td>
</tr>
</tbody>
</table>

| **Bus Statistics** | **Total** | **Last Year** | **Total** |
| **Total System** | 2,376,807 | 453,529 | 2,830,336 |
| **Total System** | 2,830,336 | 453,529 | 2,830,336 |

### MILES AND HOURS:

<table>
<thead>
<tr>
<th><strong>Vehicle Miles</strong></th>
<th><strong>System Speed</strong></th>
<th><strong>Vehicle Hours</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2,376,807</td>
<td>13,96</td>
<td>190,271</td>
</tr>
<tr>
<td>2,830,336</td>
<td>13,96</td>
<td>236,139</td>
</tr>
</tbody>
</table>

### PASSENGERS:

<table>
<thead>
<tr>
<th><strong>Revenue Pass.</strong></th>
<th><strong>Total Pass.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>3,393,000</td>
<td>6,312,300</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Total Pass./Mile</strong></th>
<th><strong>Total Pass./Hour</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.64</td>
<td>135.24</td>
</tr>
</tbody>
</table>

### EXPENSES:

<table>
<thead>
<tr>
<th><strong>Operating Expense</strong></th>
<th><strong>Opr. Exp./Rev. Pass.</strong></th>
<th><strong>Opr. Exp./Veh. Mi.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.861,132</td>
<td>.5447</td>
<td>2.64</td>
</tr>
</tbody>
</table>

### REVENUES:

<table>
<thead>
<tr>
<th><strong>Passenger (Reg. Serv.)</strong></th>
<th><strong>Total Pass. Related</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.861,132</td>
<td>2,376,807</td>
</tr>
</tbody>
</table>

### SUBSIDIES:

<table>
<thead>
<tr>
<th><strong>Local Opr. Subsidy</strong></th>
<th><strong>Federal Opr. Subsidy</strong></th>
<th><strong>Sales Tax Collected</strong></th>
<th><strong>Local Sub./Sales Tax</strong></th>
<th><strong>Total Sub./Rev. Pass.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>4,793,500</td>
<td>418,287</td>
<td>3,210,171</td>
<td>3,210,171</td>
<td>1,984,500</td>
</tr>
<tr>
<td>STATISTICS SUMMARY</td>
<td>FISCAL YEAR TO DATE</td>
<td>12 MONTH MOVING TOTAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WAGES:</strong></td>
<td><strong>Bus</strong></td>
<td><strong>Rail</strong></td>
<td><strong>Total System</strong></td>
<td><strong>Bus</strong></td>
</tr>
<tr>
<td>Basic Top Opr.</td>
<td>$7.83</td>
<td>$7.83</td>
<td>$7.83</td>
<td>$7.83</td>
</tr>
<tr>
<td>C.O.L.A.</td>
<td>$2.51</td>
<td>$2.51</td>
<td>$2.51</td>
<td>$2.51</td>
</tr>
<tr>
<td>Tot. Top. Opr.</td>
<td>$10.30</td>
<td>$10.30</td>
<td>$10.30</td>
<td>$10.30</td>
</tr>
<tr>
<td>Oper. Benefits</td>
<td>$2.38</td>
<td>$2.38</td>
<td>$2.38</td>
<td>$2.38</td>
</tr>
<tr>
<td>Number of Operators</td>
<td>7191</td>
<td>66</td>
<td>1299</td>
<td>7191</td>
</tr>
<tr>
<td><strong>VEHICLES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Active Fleet</td>
<td>755</td>
<td>120</td>
<td>875</td>
<td>755</td>
</tr>
<tr>
<td>A.M. Veh. Sch.</td>
<td>569</td>
<td>68</td>
<td>636</td>
<td>569</td>
</tr>
<tr>
<td>P.M. Veh. Sch.</td>
<td>516</td>
<td>64</td>
<td>580</td>
<td>516</td>
</tr>
<tr>
<td>Sat. Veh. Sch.</td>
<td>217</td>
<td>20</td>
<td>237</td>
<td>217</td>
</tr>
<tr>
<td>Sun. Veh. Sch.</td>
<td>194</td>
<td>14</td>
<td>168</td>
<td>194</td>
</tr>
<tr>
<td><strong>ENERGY CONSUMPTION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gallons of Fuel Con.</td>
<td>702,908</td>
<td></td>
<td>702,908</td>
<td>702,908</td>
</tr>
<tr>
<td>Avg. Mi./Gallon</td>
<td>3.20</td>
<td></td>
<td>3.20</td>
<td>3.20</td>
</tr>
<tr>
<td>Kilowatt-Hrs. Used</td>
<td>6,906,991</td>
<td></td>
<td>6,906,991</td>
<td>6,906,991</td>
</tr>
<tr>
<td>Avg. Mi./Kilowatt-Hr</td>
<td>0.065</td>
<td></td>
<td>0.065</td>
<td>0.065</td>
</tr>
<tr>
<td><strong>ACCIDENTS:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tot. Mo. Accidents</td>
<td>50</td>
<td></td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Tot. Accidents/100,000 Mi</td>
<td>2.14</td>
<td></td>
<td>2.10</td>
<td>1.10</td>
</tr>
<tr>
<td><strong>ROUTES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Rts./Lines</td>
<td>140</td>
<td>2</td>
<td>142</td>
<td>140</td>
</tr>
<tr>
<td>Ml. of Rts.</td>
<td>1,920.83</td>
<td></td>
<td>1,942.93</td>
<td>1,920.83</td>
</tr>
<tr>
<td>Ml. of directional St</td>
<td>2134.25</td>
<td></td>
<td>2,134.25</td>
<td>2134.25</td>
</tr>
<tr>
<td>Fresh Miles</td>
<td>191</td>
<td>36.7</td>
<td>35.7</td>
<td>191</td>
</tr>
</tbody>
</table>
| **SPECIAL NOTES:** * Based on Net Operating Expense. ** Average Fare based on Linked Passengers minus "Free Day" Linked Passengers of 220,000. *** Weighted average based on relative number of operators. Total linked and unlinked passengers for August were revised to 5,220,000 and 10,722,000 respectively. September ETD and 12-month totals reflect this revision.
## MARTA FARE SCHEDULE

**BASE FARE** - All regularly scheduled services in Fulton/DeKalb County area - including the Stadium Shuttle--- $ .60

**MONTHLY TRANSCARD** - Unlimited travel, one calendar month all regular services - including the Stadium Shuttle--- 21.00

**WEEKLY TRANSCARD** - Unlimited travel, 7-day week all regular services - including the Stadium Shuttle--- 5.00

**HALF-FARE** - For Elderly & Handicapped Patrons (9 a.m. - 6 a.m.) Weekdays - all day Saturday, Sunday & Holidays--- .30

### OUT OF DISTRICT ROUTES

- **#50-Farmers Market; #54-Forest Park, to Clayton County; #94-Northeast Industrial, to Gwinnett County** - TransCards & Transfers Accepted as 60c credit toward full fare---
- **#201-Six Flags - NO Transfer - NO TransCard Usage---** 1.25 Flat Fare

*HALF-FARE for Elderly & Handicapped patrons 9 a.m. - 6 a.m. Weekdays - All Day Saturday, Sunday & Holidays*

**STADIUM SHUTTLE** - Downtown to Stadium --- TransCards & Transfers Accepted .60

**FALCON FLYER** - Shopping Centers & Suburban Locations to Games: Lenox Square/Northlake/Perimeter/Abernathy - (Pre-purchased Tickets via Mail or RideStore) **NO Transfers** - **NO TransCards---** 2.25 One-Way

**E-BUS** - Elderly Bus Services (connects Sr. Citizens Apartment Residences to Major Shopping Centers) **Transfers Accepted---** 60 One-Way

**L-BUS** - Physically Handicapped-Lifts for Wheelchair Patrons--- (40c with valid Transfer or TransCard) --- 1.00 One-Way

**CHARTER SERVICE** - First Five Hours or Less--- ($30.00 for each additional hour) 175.00

*One-Way Trips - Two Hours or Less---* 115.00

*Eligible Non-Profit Groups or Organizations - Three Hours or Less---* 115.00

*($30.00 for each additional hour)*

---

**DATE ISSUED:** July 7, 1982

*Office of Assistant General Manager/Planning & Public Affairs*
DIVISION OF CUSTOMER SERVICES

Director of Customer Services

Manager of Sales

Manager of Advertising and Promotion

Supervisor of Transcards

Transcard Agent

Transearcher Clerk

Charter Representative

Charter Clerk

Additional Positions

Pending Classification

20 Non-Represented Positions
25 Represented Positions
35 Total Positions
# MARTA Board of Directors

## Officers

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Term</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clay C. Long</td>
<td>Chairman</td>
<td>(12/31/84)</td>
<td>City of Atlanta</td>
</tr>
<tr>
<td>Amos Beasley, Jr.</td>
<td>Secretary</td>
<td>(12/31/85)</td>
<td>Dekalb County</td>
</tr>
<tr>
<td>Malcolm S. Murray, Sr.</td>
<td>Vice Chairman</td>
<td>(12/31/86)</td>
<td>Dekalb County</td>
</tr>
<tr>
<td>J. David Chesnut</td>
<td>(12/31/87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.A. McMillion</td>
<td>Treasurer</td>
<td>(12/31/87)</td>
<td>City of Atlanta</td>
</tr>
<tr>
<td>Kenneth M. Gregor</td>
<td>General Manager</td>
<td>(12/31/87)</td>
<td>Fulton County</td>
</tr>
</tbody>
</table>

- **John G. Glover, Jr.**
  - (12/31/84)
  - Clayton County

- **G.W. Hogan**
  - State Properties Commission

- **R. Charles Loudermilk**
  - (12/31/87)
  - City of Atlanta

- **K.A. McMillon**
  - (12/31/87)
  - Gwinnett County

- **Malcolm S. Murray, Sr.**
  - (12/31/86)
  - Dekalb County

- **Lyndon A. Wade**
  - (12/31/85)
  - City of Atlanta

- **Clay C. Long**
  - (12/31/84)
  - Fulton County

- **Blanche R. Henderson**
  - (12/31/87)
  - Dekalb County

- **Clay C. Long**
  - (12/31/84)
  - Fulton County

- **Joseph E. Lowery**
  - (12/31/86)
  - Fulton County

- **Sue S. Trotter**
  - (12/31/86)
  - City of Atlanta

- ***G.W. Hogan***
  - State Properties Commission

*Serve as members of the MARTA Board while holding respective State Offices.*
THURSDAY
MARTA RAIL SYSTEM

SAFETY AND EMERGENCY FEATURES

a. Features of Car
b. Features of Station Area
c. Features of Tunnel Area
Reporting of Emergency Conditions
Including Emergency Evacuation Steps

1. Identify yourself and offer assistance to the operator.

2. Advise the operator from which car you are calling.

3. If evacuation becomes necessary, advise the operator you are available to head up the front or bring up the rear.

4. Keep the passengers calm; avoid a "panic" situation.

5. Reassure the passengers that help is on the way.
**IDENTIFICATION:** Exterior Equipment

"A" Type, "B" Type, and "C" Type Exterior Equipment Arrangement

**Location:** The center door has a hand hold and a step at the center door location. They are located away from the third rail collector shoes at either end of each car unit (both sides).
IDENTIFICATION: Car Coupler Assembly

LOCATION: A step attached to the extreme front end of the coupler.

PURPOSE: Used for the purpose of entering or leaving the train from track level.
IDENTIFICATION: THIRD RAIL SHOE ASSEMBLY

LOCATION: There are four shoes mounted on each car, one on each side of each truck. When only one shoe is in contact with the third rail all four shoes are energized.

PURPOSE: The third rail shoe is the primary source to collect 500 to 900 volts DC from the third rail to power the electrically operated components on the car.

COMMENTS: The third rail collector shoe is considered to be energized at all times, and is never to be used as a step.
**Identification:** THIRD RAIL AND COVER

**Location:** Traction power is supplied from wayside substations to a contact third rail system at 750 VDC. Negative traction current return is through the running rail.

**Purpose:** To supply 750 VDC to power the rail cars.

**Comments:** The third rail is considered energized at all times, and the third rail cover shall never be used as a step or seat.
Identification: Passenger Intercom Station

Location: The intercom is located next to each cab in every car.

Purpose: The press to call operator access switch actuates intercom when switch is pressed and released and operator will be signaled by a visual flashing passenger intercom light and alarm.
IDENTIFICATION: Left Side Control Panel

LOCATION: In operator cab on left side of the control panel.

PURPOSE: The emergency stop switch, when pressed in, causes an emergency application of pneumatic brakes.

When the emergency stop button is depressed it will cause an automatic stop of the train.

COMMENTS: If the above is observed, please notify the operator of the condition and offer assistance to restore button to normal position.

The button must be "pulled out" to restore the emergency stop button to the normal position.
IDENTIFICATION: Emergency Door Release Access Panel

LOCATION: Located at each door panel

PURPOSE: Pulling on this handle will release over-center lock and door panel can be pushed open.

COMMENTS: This door release handle is not to be activated without the knowledge of the train operator.
Identification: Fire Extinguisher Locations

Location: Two fire extinguishers are located on each car.

One unit is attached to each operator's cab door (inside of door).

One unit is attached between seats midway between each car. There is a "picture" of the extinguisher at the seat location.

Purpose: To be used in case of fire emergency.
IDENTIFICATION: Emergency Trip Station (ETS)

LOCATION: These ETS’s are located at either end of each platform and approximately 600 feet along the right-of-way.

PURPOSE: Emergency Trip Stations (ETS’s) can be used to de-energize third rail power in a specific zone.

COMMENTS: There is also a telephone with a direct line into Central Control, and the person depressing the ETS switch must use the telephone to advise Central Control of their identity and for what purpose. Emergency Trip Station’s are identified by a blue light indication.
IDENTIFICATION: RED TELEPHONE ON STATION PLATFORM

LOCATION: THIS TELEPHONE IS LOCATED IN CLOSE PROXIMITY TO THE FIRE HOSE CABINET.

PURPOSE: THE RED “FIRE EMERGENCY” TELEPHONE PROVIDES A DIRECT LINK TO CENTRAL CONTROL FACILITY.

THIS TELEPHONE CAN BE USED FOR ANY EMERGENCY SITUATION.
IDENTIFICATION:  Blue Telephone on Station Platform

LOCATION:  This telephone is located in close proximity to the fire hose cabinet.

PURPOSE:  The blue "Marta Police" telephone provides a direct link to the Zone Center and is primarily used for soliciting police assistance, if needed.
Identification: White Telephone on Concourse

Location: This telephone is located in the general area of faregates in each station.

Purpose: The white "Marta Assistance" telephone provides a direct link to the Zone Center. This telephone is primarily used for general information requested by patrons, but can also be used for emergency purposes if necessary.
IDENTIFICATION: Catwalk

LOCATION: The catwalks are located inside all tunnel areas.

PURPOSE: Their primary use is for evacuation purposes during an emergency, if necessary.

COMMENTS: During evacuation conditions, special precautions must be taken so as not to walk into the swing down fire hose connections.

Special Conditions: The catwalk is only 30" wide and is not designed to accommodate wheel chair patrons.
1. Emergency operating procedure for a fire on a train.

2. Train operator must immediately inform Central Control.

3. Train I.D. number, source of information, location of fire, direction and distance to the next station.

4. Proceed if possible to that next station to evacuate passengers, governed by Central Control.

5. Avoid panic to passengers by making clear, calm P.A. announcements and instructions.

6. Inform the passengers that the train has a problem and will be out of service at the next station, all passengers must leave the train.

7. Instruct the passengers to be aware that emergency personnel will be entering the station to assist you with the train.

8. Assure that all the passengers have departed. If practical, use the on board fire extinguisher on the fire area.

9. Emergency personnel will govern on their arrival. Inform Central Control should the emergency personnel request that the train be moved away from the platform.
FIRE EMERGENCY

1. **Emergency uncoupling procedure** for a fire on a train disabled between stations with four or more cars.

2. Train operator must immediately inform Central Control.

3. Train I.D. number, source of information, location of fire, location of disabled train, and distance to nearest station.

4. Advise Central Control that an attempt can be made to evacuate passengers from the smoke filled cars into the cars to be uncoupled, stating the possible direction of travel.

5. Avoid panic to passengers by making clear, calm P.A. announcements and instructions.

6. Inform the passengers that the train is disabled and it will be necessary to evacuate from the smoke filled cars into the cars to be uncoupled.

7. To avoid delay and confusion, be specific in the direction the passengers are told to WALK through the cars: To the front of the train towards the operator or to the rear of the train away from the operator.

8. If necessary to shut off the HVAC unit, key down and depress Auxiliary Off button. After three seconds, depress Auxiliary On button for the emergency lights.

9. Be sure that all the passengers have evacuated the affected car(s) before attempting to uncouple at the proper console of the good order cars.

10. Proceed with an attempt to uncouple with the normal uncoupling procedure.

11. Should the normal uncoupling procedure attempt fail, use the Electro Pneumatic Valves under the Tertiary Panel: V-3, V-4, V-2. Recharge brake pipe, place MCSS in Wash Mode and buff the cars. Depress Reverse Jog button to uncouple.

12. Change to the operating end of the good order cars and proceed to the next station, governed by Central Control. Be aware of possible emergency personnel on the right-of-way.
FIRE EMERGENCY

1. **Emergency evacuation procedure** for a fire on a train disabled between stations.

2. **Train operator** must immediately inform Central Control.

3. Train I.D. number, source of information, location of fire, location of disabled train, and distance to nearest station.

4. Advise Central Control that the passengers must be evacuated to the trackway or walkway, stating the safest possible direction of travel.

5. Before starting the evacuation, request Central Control to deenergize the third rail power. When in a tunnel area request the emergency fans to be energized.

6. Avoid panic to passengers by making clear, calm P.A. announcements and instructions.

7. Inform the passengers that the train is disabled and it will be necessary to evacuate the train on your instructions, and that emergency personnel are enroute.

8. To avoid delay and confusion, be specific to the passengers that the doors will open on one side of the train.

9. After leaving the train they must walk in a specific direction: To the front of the train towards the operator, or to the rear of the train away from the operator.

10. At-grade level the passengers may be enlisted to assist in the evacuation to the trackway.

11. On aerial structures the passengers will be instructed to step down to the metal walkway.

12. In subway and tunnel areas the passengers will be instructed to step down to the concrete walkway.

13. Be sure that all the passengers have evacuated the train before guiding them to a safe area, governed by Central Control.
FRIDAY
Transit Related Educational Programs

1. Northwestern University

Graduate Study and Research in "Transportation Systems"

a) Master of Science and Ph.D
Transportation Program Director
The Technology Institute
Department of Civil Engineering
Northwestern University
Evanston, Illinois 60201
312-492-5183

Related University Programs

a) Master of Science in Transportation
Academic Programs Office
The Transportation Center
Leverone Hall
Northwestern University
Evanston, Illinois 60201
312-492-5015

b) Master of Management in Transportation
Director of Admissions
Graduate School of Management
Leverone Hall
Northwestern University
Evanston, Illinois 60201
312-492-3308

2. University of California - Berkeley

Master in City Planning and Ph.D
Specialization: Transportation
Admissions Secretary
Department of City and Regional Planning
University of California - Berkeley
Berkeley, California 94720
415-642-1641 or 3256
3. University of Pennsylvania Transportation Program

a) Master of City Planning
   Focuses on Urban transportation
   City and Regional Planning Department
   127 Fine Arts Building/CJ
   University of Pennsylvania
   Philadelphia, Pennsylvania 19104

b) Ph.D. in City Planning
   Focuses on Urban Transportation
   Chairman, Graduate Group in City Planning
   Same address as above

Joint Degree Programs

a) Master of Business Administration and Master of Science in Engineering
   Focuses on Transportation Management
   Chairman, Civil and Urban Engineering Department
   113 Towne Building/D3
   University of Pennsylvania
   Philadelphia, Pennsylvania 19104

b) Master of Science of City Planning and Master of Science in Engineering
   Focuses on Transportation Engineering and Planning
   Same address as above

c) Master of City Planning and Master of Arts in Regional Science
   Focuses on Transportation and Theory of Methods of Regional Analysis
   Chairman, City and Regional Planning Department
   127 Fine Arts Building/CJ
   University of Pennsylvania
   Philadelphia, Pennsylvania 19104

d) Master of Business Administration and Juris Doctor
   Focus on Transportation Management and Regulatory Law
   Chairman, Wharton Transportation Program
   130 McNeil Building/CR
   University of Pennsylvania
   Philadelphia, Pennsylvania 19104
5. Cornell University
   a) Master in Regional Planning & Ph.D
      Graduate Faculty Representative
      Department of City and Regional Planning
      200 West Sibley Hall
      Cornell University
      Ithaca, New York 14853
   b) Master of Science, Master of Engineering, Ph.D.
      Department of Environmental Engineering
      School of Civil and Environmental Engineering
      Cornell University
      Ithaca, New York 14853

6. Morgan State University
   Master of Science in Transportation
   Office of Admission
   School of Graduate Studies
   Morgan State University
   Baltimore, Maryland 21239
   301-444-3185

7. Georgia Institute of Technology
   Master of City Planning and Ph.D.
   Specialization: Transportation
   Director
   Graduate City Planning Program
   Georgia Institute of Technology
   Atlanta, Georgia 30332
   404-894-2350

8. University of North Carolina At Chapel Hill
   Master in Regional Planning and Ph.D.
   Specialization: Transportation
   Department of City and Regional Planning
   New East Building, 033A
   University of North Carolina at Chapel Hill
   Chapel Hill, North Carolina 27514
   919-962-3983
Joint Degree

Master of Science (Civil Engineering) and Master of Regional Planning
Specialization: Transportation
Department of City and Regional Planning
New East Building, 033A
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina 27514
919-962-3983

9. University of California at Irvine

Master of Science and Ph.D.
Specialization: Transportation Engineering
Dr. W.W. Recker
Civil Engineering Department
University of California, Irvine
Irvine, California 92714
714-856-6504

10. Massachusetts Institute of Technology

Master of City Planning and Ph.D.
Specialization: Transportation
Department of Urban Studies and Planning
M.I.T.
Cambridge, Massachusetts 02139

11. Managing Organizational Performance Workshop
Designed Learning Inc.
1009 Park Avenue
Plainfield, New Jersey 07060
201-754-5100
April 11, 12, & 13, 1984
October 24, 25, 26, 1984

12. Transit Operations Institute
Georgia Institute of Technology/MARTA
Graduate City Planning Program
Georgia Institute of Technology
Atlanta, Georgia 30332
SELECTED BIBLIOGRAPHY

Transportation


4. Express, a newsletter of WIS, WTS, P.O. Box 4702, Atlanta, Georgia 30302.


10. HQ, the monthly newsletter of Institute for Transit Management Inc., P.O. Box 12480, San Francisco, CA. 94112.


Management


6. The Instructor's Handbook for Management Training, Management Education Ltd., 12326 Riverview Road, Tantallon, Maryland 20744.


10. Sources, The Magazine for Management and Training, Source Publications, Inc., P.O. Box 8089, Atlanta, Georgia 30306.


Women


