

PRESENTED & ADOPTED: MAY 11, 1995  
SUBJECT: APPROVAL OF SUBSIDY ALLOCATION FORMULAS

#95-14  
RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WHEREAS, Metrobus, Metrorail and Paratransit operating costs are expected to exceed the respective operating revenues; and

WHEREAS, the Board of Directors, the Budget Committee, the staffs of the local jurisdictions and WMATA staff have over the last several years analyzed the various factors used to distribute Metrobus and Paratransit costs and revenues, and the Metrorail subsidy.

NOW THEREFORE BE IT RESOLVED that the Metrobus and Paratransit costs and revenues and the Metrorail operating assistance shall be allocated among the jurisdictions using the formulas in effect in Fiscal 1995 and as stated in Attachment I of this Resolution commencing with FY 1996 and continuing until changed by the Board of Directors.

BE IT FURTHER RESOLVED, that this resolution shall be effective July 1, 1995.

Reviewed as to form and legal sufficiency.

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Robert L. Polk  
General Counsel

Motion by Mr. Barnett, seconded by Mrs. Mack, and unanimously approved, as amended.

Ayes: 6 - Mr. Wineland, Mrs. Whipple, Mr. Evans, Mr. Barnett, Mrs. Mack,  
and Mr. Berger

## ATTACHMENT I

### I. METROBUS

A cost-revenue formula is used to allocate jurisdiction subsidy for Metrobus operations. Metrobus costs net of subcontract charter are assigned to one of three categories - fixed, mileage, or hourly. Fixed costs, as defined for allocation purposes, include all expenses for overhead, operator training and utility payhours, wages for service vehicle mechanics, general insurance premiums, security, safety, revenue collection, scheduling, residual liabilities, and all supervisory costs except lead mechanic wages and a portion of the salary for the garage shift supervisors. Mileage-related costs include revenue vehicle mechanic wages and overtime, current year expenses for workers' compensation for operators and third party claims, general liability insurance, and all revenue vehicle costs for diesel fuel, tire rental, and parts. Hourly-related costs are primarily operator wages and related fringe benefits plus workers' compensation for all personnel other than bus operators.

Each allocation cost category is charged to the jurisdictions as follows:

- (a) All fixed costs are charged to the District, the two Maryland Counties, and Northern Virginia based on the percent distribution of 1975 peak period buses. Fixed costs are allocated among the Virginia jurisdictions in proportion to the variable cost allocation within Virginia.
- (b) All mileage-related costs are allocated in proportion to each jurisdiction's share of platform miles.
- (c) All hourly-related costs are allocated in proportion to each jurisdiction's share of platform hours.

Platform miles and platform hours are measured from the time a bus leaves a garage until it returns to a garage. This data is compiled for each route and route variation and within each jurisdiction where operated. The platform miles and hours are associated with either a revenue trip (in-service) or a non-revenue trip (deadhead). All revenue trips are assigned, a "dedication" code that specifies (1) which jurisdiction(s) is charged for the miles and hours and (2) for trips serving more than one jurisdiction, how the miles and hours are shared. The miles and hours for all deadhead trips and layover time on a given bus line are prorated among the jurisdictions in accordance with each jurisdiction's share of revenue miles and hours for that line. The sum, by jurisdiction, of all miles and hours scheduled for regular route service is computed for the fiscal year, taking into consideration all scheduled service adjustments and running time adjustments.

For each revenue bus trip that a jurisdiction pays for (cost), the jurisdiction receives credit for all or a portion of the revenue collected on that trip, based on the dedication code of the trip. The allocated passenger revenues are subtracted from each jurisdiction's allocated cost to determine the jurisdiction bus subsidy. The Authority contracts for a bus passenger survey every one or two years to determine the appropriate share of revenue for each jurisdiction. The sampling techniques, survey design, and revenue allocation procedures have all been reviewed and validated by the University of Maryland Transportation Department and are incorporated into the scope of services. The accuracy objectives for the survey and revenue allocations are  $\pm 5$  percent for each jurisdiction and  $\pm 3$  percent for the system with a 95 percent confidence level. This has traditionally required a survey sample of approximately 2,600 weekday and 1,500 weekend revenue trips selected at random within a stratified universe file of 16,000 weekday and weekend trips. The passengers on each sampled trip are asked to complete a questionnaire. The questionnaire asks for each passenger's location of boarding and alighting, the method of fare payment, and the passenger type. The passenger response rate is then factored to the total data collected on sampled trips. Revenues are distributed among the jurisdictions using the data collected from the survey, plus passenger revenue computations, garage revenue collections, and flash pass sales.

The following revenue allocation rules have been approved by the Board and are applied as follows:

- All farebox revenues from service dedicated to a single jurisdiction are allocated to that jurisdiction, unless a transfer is made to service dedicated to another jurisdiction.
- In the District of Columbia and Maryland, the farebox revenues of passengers transferring from service dedicated to one jurisdiction to service dedicated to another jurisdiction are allocated in proportion to the fares which would be charged from origin to the transfer point and from the transfer point to the destination.
- Metrobus revenues from interstate non-dedicated service are assigned on the basis of the passenger's miles in each state.
- Within Virginia, Metrobus revenues are (a) dedicated to one jurisdiction, or (b) assigned to the boarding jurisdiction, or (c) assigned to the alighting jurisdiction, or (d) joint dedicated to two or more jurisdictions.
- MD base flash pass revenues are assigned to Maryland and VA base flash pass revenues to Virginia. DC base flash passes may be used for the base fare in any jurisdiction and revenues are allocated based on Metrobus trip patterns of users of these passes as determined by the passenger survey.
- Revenues from the interstate flash passes are distributed based on Metrobus trip patterns of the users of these passes as developed from the Bus Passenger Survey.

- The intra-Virginia distribution of the revenues from the VA base pass and the intra-Maryland distribution of revenues from the MD base pass also use the results from the Bus Passenger Survey.

The WMATA Board of Directors on May 10, 1984 adopted resolutions regarding the bus transfer arrangement with Ride-On and the bus transfer agreement and acceptance of flash passes by Alexandria Transit Company and the Fairfax Connector. The revenue allocation programs are designed to comply with these resolutions.

## II. METRORAIL

Two allocation formulas are used to determine the subsidy for each jurisdiction - the rail subsidy allocation formula and the max fare subsidy formula.

### (A) Metrorail Subsidy

Each jurisdiction's share is determined as follows:

- One-third of the subsidy is distributed on the basis of the relative number of stations in operation in each jurisdiction. This factor includes all stations in the system with the exception of the Arlington Cemetery Station.
- One-third of the subsidy is distributed on the basis of a weighted average of urbanized area population and population density using the most current census data and the most current census population definition of the urbanized area.
- One-third of the subsidy is distributed on the basis of the weekday Metrorail passengers by jurisdiction of residence. This factor is computed using data from the most recent Metrorail Passenger Survey.

### (B) Max Fare Subsidy

The max fare subsidy is one-half the revenue differential between what riders travelling more than six composite miles actually pay and what they would have paid without a tapered mileage charge or a fare cap. The max fare subsidy by jurisdiction is determined from the Metrorail passenger survey. The charge to each jurisdiction reflects the residence of the riders receiving the benefit of the reduced peak period fares and the value of the benefit received.

### III. PARATRANSIT<sup>1</sup>

The costs to the Authority for providing paratransit services shall be divided among four tiers:

#### TIER 1 - FIXED COSTS

Fixed costs are continuing fixed overhead costs that do not fluctuate relative to the level of paratransit service that is operated. The allocation of fixed costs will be allocated based on the proportion of ADA-certifications by jurisdiction of residence of the participating jurisdictions.

#### TIER 2 - ALLOCATED ADMINISTRATIVE COSTS

Allocated administrative costs are continuing overhead costs that fluctuate and are related to the level of paratransit service provided. The allocation of allocated administrative costs will be based on actual demand (trips requested) for the regional paratransit system.

#### TIER 3 - DIRECT OPERATING SUBSIDIES

Direct operating subsidies are the direct paratransit-related operating costs, including costs paid to regional paratransit contractors less revenues collected from patrons. These subsidies will be allocated on the basis of actual usage of the regional paratransit system by the jurisdiction of residence of the user.

#### TIER 4 - VISITOR TRIP SUBSIDIES

Visitor trips are those trips taken by a non-resident of the participating jurisdictions who utilize the 21-day visitor temporary certification allowed by the ADA regulations. The subsidies (costs less revenues) of trips provided to visitors will be allocated based on the origin of boarding of each one-way trip.

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<sup>1</sup> Prior to Fiscal 1995 all costs incurred by the Department of ADA were distributed by the paratransit formula, regardless of whether the costs were paratransit costs. Paratransit costs incurred by other departments within the Authority were not distributed by this formula. In Fiscal 1995, the paratransit formula was modified to eliminate all departmental restrictions - all departments can now charge appropriate expenses and staff time to paratransit and the Department of ADA can charge non-paratransit costs to the other appropriate modes. This is consistent with the way all other charges are distributed by formula.