

Memorandum



Date: October 19, 2004

Agenda Item No. 7(J)(1)(B)

To: Honorable Chairperson Barbara Carey-Shuler, Ed. D.
and Members, Board of County Commissioners

From: George M. Burgess
County Manager

A handwritten signature in black ink, appearing to read "Burgess", written over the printed name of George M. Burgess.

Subject: Resolution Approving an Amendment to the People's Transportation Plan Clarifying the Miscellaneous Capital Improvement Projects List to Permit Procurement of 12 New Metromover Vehicles and the Retrofit and Modification of the 17 Remaining vehicles

RECOMMENDATION

It is recommended that the Board approve the attached resolution, as recommended by the Citizens' Independent Transportation Trust (CITT), amending the People's Transportation Plan (PTP) to clarify that the line item, included in the Miscellaneous Capital Improvement Projects list and pertaining to the Metromover vehicle rehabilitation, include the procurement of 12 new Metromover vehicles and the retrofit and modification for compatibility of the remaining 17 vehicles.

BACKGROUND

In the process of developing its plans to rehabilitate the existing fleet of Metromover vehicles, Miami- Dade Transit (MDT) determined that it was more cost effective to replace rather than rehabilitate its 12 oldest Metromover vehicles. Because the approved listing of Miscellaneous Capital Improvement Projects (Resolution No. R-1154-03) specifically references only the rehabilitation of existing Metromover vehicles, the County Attorney advised that the PTP be clarified by resolution to accommodate the purchase of new vehicles. This resolution was subsequently approved by the CITT at its meeting of July 28, 2004.

The Metromover procurement is being handled by MDT through a separate sole-source negotiation with Bombardier Transportation and is expected to be brought to the Board and CITT for approval within the next few months.

On April 15, 1980, Westinghouse Electric Corporation, now Bombardier Transportation, entered into Contract DPM-02 with the County to supply a fully operational Metromover System in downtown Miami. The Metromover System, operating on an electrically powered elevated guideway, started servicing the public in April 1986 and presently extends 8.8 (double track) miles, serving 21 stations and utilizing a total of 29 vehicles. The Metromover consists of a proprietary guideway, vehicle and automated train control system fully compatible with one another.

On September 9, 2003 (Resolution No. R-931-03), the Board awarded Contract TA02-MR26 to Washington Infrastructure Services, Inc, now Washington Group International, to provide engineering services for the Metrorail and Phase 1 Metromover mid-life vehicle fleet overhaul and modernization project. The original 12 Metromover vehicles, purchased in 1984 from Westinghouse Electric Corporation (now Bombardier Transportation), have reached their 20 years of useful life and

are due for replacement. As a result of a thorough evaluation of these 12 original Metromover system vehicles, the estimated cost to overhaul each car is approximately \$1.5 million or a total of \$18.7 million dollars. The estimated cost to purchase 12 new vehicles is approximately \$20.7 million dollars or \$1.725 million per vehicle. Twelve (12) new vehicles could be delivered in 22 months compared to 52 months for twelve (12) overhauled vehicles. Furthermore, a rehabilitation of Metromover vehicles would only extend their useful life for 10 years, whereas new vehicles would offer a useful life of 20 years. Retrofit and modification for compatibility of the remaining 17 vehicles is estimated at \$1.105 million. In addition, modification to the wayside and central control to support the Vehicle Monitoring and Control System (VMCS), as outlined below, is estimated at \$1.059 million. The total project cost, including a 5% allowance for unforeseen changes at \$1.14 million, is approximately \$24 million.

Bombardier is the only manufacturer of Metromover vehicles compatible with the existing Metromover System. The suggested replacement vehicle, the new generation CX100 vehicle, modified to operate in a tropical environment, is the only available replacement vehicle that is compatible with our existing guideway. These new vehicles would possess the following improvements:

- Vehicle Structure: The CX100 vehicle design has been modified with improved assembly techniques, improved corrosion resistance, and changes to the interior resulting in a vehicle with significantly improved longevity of 20 years.
- Air Comfort System: The new vehicles possess an improved air conditioning system that not only provides better cooling, but dries the air. This will eliminate the moisture on the interior of the cars and enhance passenger comfort and reduce maintenance.
- Automatic Train Control: The proposed vehicle is compatible with the existing Metromover system and includes key technical improvements that improve reliability and will alleviate obsolescence issues on the current vehicles.
- Couplers: The vehicle possesses an electrical/mechanical coupler that allows coupling in lieu of manual coupling. The 12 replacement vehicles will possess this coupler. It is recommended to retrofit the remaining 17 vehicles with these couplers, for compatibility. This is both a safety and maintenance improvement. The cost is estimated at \$65,000 per vehicle or \$1.105 million for all 17 vehicles.
- Vehicle Monitoring and Control System: The vehicles will possess a VMCS. This technology allows for real time diagnostic and troubleshooting of vehicles and vehicle equipment from Central Control. Central Control upgrades costs for the VMCS will also be required, at an estimated cost of \$1.059 million.

FISCAL IMPACT

The total cost for the procurement of 12 new Metromover vehicles and the retrofit and modification for compatibility of the remaining 17 vehicles is approximately \$24 million and will be funded 100% by the Transit Surtax.


Surface Transportation Manager

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MEMORANDUM

(Revised)

TO: Hon. Chairperson Barbara Carey-Shuler, Ed.D.
and Members, Board of County Commissioners

DATE: October 19, 2004

FROM: Robert A. Ginsburg
County Attorney

SUBJECT: Agenda Item No. 7(J)(1)(B)

Please note any items checked.

- "4-Day Rule" ("3-Day Rule" for committees) applicable if raised
- 6 weeks required between first reading and public hearing
- 4 weeks notification to municipal officials required prior to public hearing
- Decreases revenues or increases expenditures without balancing budget
- Budget required
- Statement of fiscal impact required
- Bid waiver requiring County Manager's written recommendation
- Ordinance creating a new board requires detailed County Manager's report for public hearing
- Housekeeping item (no policy decision required)
- No committee review

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 7(J)(1)(B)
10-19-04

RESOLUTION NO. _____

RESOLUTION APPROVING AN AMENDMENT TO THE PEOPLE'S TRANSPORTATION PLAN (PTP) TO CLARIFY THAT THE MISCELLANEOUS CAPITAL IMPROVEMENT PROJECTS LIST INCLUDE THE PROCUREMENT OF 12 NEW METROMOVER VEHICLES AND THE RETROFIT AND MODIFICATION FOR COMPATIBILITY OF THE REMAINING 17 VEHICLES

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS, that the People's Transportation Plan (PTP) be amended to clarify that the Miscellaneous Capital Improvement Projects List include the procurement of 12 new Metromover vehicles and the retrofit and modification for compatibility of the remaining 17 vehicles, as outlined in the accompanying memorandum, in substantially the form attached hereto and made a part hereof.

The foregoing resolution was offered by Commissioner _____, who moved its adoption. The motion was seconded by Commissioner _____ and upon being put to a vote, the vote was as follows:

Dr. Barbara Carey-Shuler, Chairperson	
Katy Sorenson, Vice-Chairperson	
Bruno A. Barreiro	Jose "Pepe" Diaz
Betty T. Ferguson	Sally A. Heyman
Joe A. Martinez	Jimmy L. Morales
Dennis C. Moss	Dorrin D. Rolle
Natacha Seijas	Rebeca Sosa
Sen. Javier D. Souto	

The Chairperson thereupon declared the resolution duly passed and adopted this 19th day of October, 2004. This resolution shall become effective ten (10) days after the date of its adoption unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF COUNTY
COMMISSIONERS

HARVEY RUVIN, CLERK

Approved by County Attorney as
to form and legal sufficiency. 

Bruce Libhaber

By: _____
Deputy Clerk

Office of the
Citizens' Independent
Transportation Trust

Memo

To: All CITT Members 
From: Irma San Roman, Interim Executive Director
Date: July 22, 2004
Re: Procurement of Twelve (12) Metromover Vehicle Cars and Rehabilitation of the remaining Metromover Vehicles

RECOMMENDATION:

It is recommended that the Citizens' Independent Transportation Trust (CITT) approve a resolution amending the People's Transportation Plan's (PTP) Capital Improvement List to include the procurement of 12 new Metromover vehicles at a cost of \$20.7 million and the retrofit and rehabilitation of the remaining 17 Metromover vehicles for a total cost of approximately \$24 million.

BACKGROUND:

On July 29, 2003, the CITT approved an amendment to the PTP that included a list of capital improvements with a total value of \$397.2 million. One of the twenty-four (24) projects listed was the rehabilitation of Metromover vehicles at a cost of \$15.4 million. The amendment was subsequently approved by the BCC on October 7, 2003. On October 29, 2003, the CITT approved the action of the BCC to award a contract to Washington Infrastructure Services, Inc., to provide the necessary engineering services to inspect the Metrorail and Metromover vehicles, review the latest technologies, and prepare bid specifications for the purpose of rehabilitating the Metromover vehicles.

During this review and inspection process, it was determined that it would be more cost effective to replace these vehicles than to rehabilitate them. The estimated cost to overhaul each vehicle is approximately \$1.5 million for a total of \$18.7 million. The estimated cost to purchase 12 new vehicles is approximately \$1.725 million for a total of \$20.7 million. It would take 52 months to overhaul 12 vehicles compared to 22 months to deliver new ones. More importantly, whereas the useful life of a rehabilitated vehicle is 10 years, the useful life of a new vehicle is 20 years. As a result of the evaluation process, Miami-Dade Transit (MDT) is pursuing a sole-source negotiation with Bombardier Transportation that is expected to be brought before the BCC and the CITT for approval within the next few months.

Additionally, there were 17 Phase II Metromover vehicles purchased in 1994 that have not reached their useful life, but will need to be modified for compatibility with the 12 new replacement vehicles.

Upgrades include providing Couplers and a Vehicle Monitoring Control System (VMCS) on the 17 vehicles at an estimated cost of \$2.245 million dollars. The estimated total cost of replacement and modification will be \$22.945 million dollars.

A complete list of enhancements, as provided by MDT, is delineated below:

- **Vehicle Structure:** The CX100 vehicle design has been modified with improved assembly techniques, improved corrosion resistance, and changes to the interior resulting in a vehicle with significantly improved longevity.
- **Air Comfort System:** The new vehicles possess an improved air conditioning system that not only provides better cooling, but dries the air. This will eliminate the moisture on the interior of the cars and enhance passenger comfort and reduce maintenance.
- **Automatic Train Control:** The proposed vehicle is compatible with the existing Metromover system and includes key technical improvements that improve reliability and will alleviate obsolescence issues on the current vehicles.
- **Couplers:** The vehicle possesses an electrical/mechanical coupler that allows coupling in lieu of manual coupling. The 12 replacement vehicles will possess this coupler. It is recommended to retrofit the remaining 17 vehicles with these couplers, for compatibility. This is both a safety and maintenance improvement. The cost is estimated at \$65,000 per vehicle or \$1.105 million for all 17 vehicles.
- **Vehicle Monitoring System:** The vehicles will possess a Vehicle Monitoring and Control System (VMCS). This technology allows for real time diagnostic and troubleshooting of vehicles and vehicle equipment from Central Control. Central Control upgrades costs for the VMCS will also be required, at an estimated cost of \$1.14 million, which includes a 5% allowance for unforeseen changes.

This item was previously approved by the Project Review and Budget and Finance Committee with the understanding that it would cost approximately \$20.7 million to purchase 12 new Metromover vehicles and a retrofitting cost of approximately \$2.245, for a total project cost of \$22.945 million.

MDT has submitted new information requesting an additional 5 percent allowance of the total cost for unforeseen changes, which now brings the total cost to \$24 million. Based on the additional information submitted by MDT, it is recommended that the PTP Capital Improvement List be modified to reflect the procurement of 12 Metromover vehicle cars and the upgrade and modification for compatibility of the remaining 17 Metromover vehicles, for a cost not to exceed \$24 million.

cc: Carlos F. Bonzon, Ph.D., P.E., Surface Transportation Manager
Bruce Libhaber, Esq., CAO
Roosevelt Bradley, Director, Miami-Dade Transit

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RESOLUTION NO. 04-047

RESOLUTION BY THE CITIZENS' INDEPENDENT
TRANSPORTATION TRUST (CITT)
RECOMMENDING TO THE MIAMI-DADE BOARD
OF COUNTY COMMISSIONERS (BCC) THAT THE
PEOPLE'S TRANSPORTATION PLAN'S (PTP)
TRANSIT CAPITAL PROJECTS LIST BE AMENDED
TO INCLUDE THE PROCUREMENT OF TWELVE
(12) METROMOVER VEHICLE CARS AND THE
RETROFIT AND REHABILITATION OF THE
REMAINING SEVENTEEN (17) METROMOVER
CARS

WHEREAS, the Citizens' Independent Transportation Trust (CITT) desires to accomplish the purposes outlined in the accompanying OCITT Interim Executive Director's memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE CITIZENS' INDEPENDENT TRANSPORTATION TRUST, that this Trust recommends to the BCC that the People's Transportation Plan's (PTP) Transit Capital Projects List be amended to include the procurement of twelve (12) new Metromover vehicles and the retrofit and rehabilitation of the remaining seventeen (17) Metromover cars, as outlined in the corresponding document, in substantially the form attached hereto and made a part hereof.

The foregoing resolution was offered by LtCol Antonio Colmenares, who moved its adoption. The motion was seconded by Henry Lee Givens and upon being put to vote, the vote was as follows:

Marc A. Buoniconti, Chairman Aye
Hon. Luis C. Morse, Vice-Chairman Aye

Hon. Michael Abrams	Aye	Yolanda Aguilar	Absent
Harold Braynon, Jr.	Absent	LtCol. Antonio Colmenares	Aye
Henry Lee Givens	Aye	Franklin Kelly	Aye
Thamara Labrousse	Absent	Miles Moss	Absent
Maureen O'Donnell	Aye	Hon. James Reeder	Absent
Theodore Wilde	Aye		

The Chairperson thereupon declared the resolution duly passed and adopted this 28th day of July 2004.

Approved by County Attorney as
to form and legal sufficiency. B.L.

By: 
Interim Executive Director

NOTICE OF PUBLIC HEARING

Notice is hereby given that a public hearing will be held by the Miami-Dade County Board of County Commissioners' Transportation Committee in the Miami-Dade County Commission Chambers, second floor, 111 N.W. First St., Miami, Florida, at approximately 2 p.m., Friday, September 17, 2004, to discuss an amendment to the People's Transportation Plan (PTP) to clarify that the Miscellaneous Capital Improvement Projects List includes the procurement of 12 new Metromover vehicles and the retrofit and modification for compatibility of the remaining 17 vehicles.

At this meeting, the Transportation Committee will afford an opportunity for interested persons or agencies to be heard with respect to the social, economic, and environmental aspects of the amendment. Interested persons may submit orally or in writing evidence and recommendations with respect to said amendment.

A person who decides to appeal any decision made by any board, agency, or commission with respect to any matter considered at this meeting or hearing, will need a record of all proceedings. Such person may need to insure that a verbatim record of the proceedings is made, including testimony and evidence upon which the appeal is based.

Miami-Dade County provides equal access and equal opportunity in employment and does not discriminate on the basis of disability in its programs or services. Auxiliary aids and services for communication are available with advance notice. This form can be made available in accessible format upon request (audiotape, Braille, or computer disk). For material in alternate format, a sign-language interpreter, or other accommodations, please contact Maud Lizano at 305-375-1962, (TDD) 305- 375-1839, or Florida Relay Services (FRS) 1-800-955-8770, at least five days in advance.

George M. Burgess
County Manager