Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Beverley K. Swaim-Staley
Secretary

Darrell B. Mobley
Deputy Secretary

Maryland Department of Transportation
The Secretary's Office

June 6, 2011

Mr. Hassan Raza
Division Administrator
Attn: Mr. Kwame Arhin
Federal Highway Administration
10 South Howard Street
Suite 2450
Baltimore MD 21201

Ms. Letitia Thompson
Regional Administrator
Attn: Ms. Michele Destra
Mr. Timothy Lidiak
Ms. Gail McFadden-Roberts
Federal Transit Administration
1760 Market Street. Suite 500
Philadelphia PA 19103

RE: Amendment to the Fiscal Year (FY) 2011 Maryland Statewide Transportation Improvement Program (STIP) to add Federal Funds for Howard County Electric Bus Project. MDOT Control # 11-21.

Dear Mr. Raza and Ms. Thompson:

The Maryland Department of Transportation (MDOT) hereby amends the FY 2011 Maryland STIP to reflect FY 2010 TIGGER II Discretionary Grant funds being added to the 2011-2014 Baltimore Regional Transportation Board's (BRTB) Transportation Improvement Program (TIP) for Howard County Electric Bus Project. Attached please find supporting documentation and BRTB approval of this amendment:

- FY 2010 TIGGER II Discretionary Grant of $3,778,000 for Howard County Electric Bus Project.

The funds are for FY 2010. The table below summarized the cash flow breakouts by funding source and fiscal year.

Howard County Electric Bus Project (TIP ID # 46-1101-05)
(All programmed dollars are displayed in $1,000's)

Funding Source	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2010-2014 Total
Federal - TIGGER II Discretionary Grant	$3,778	$0	$0	$0	$0	$3,778
Local Match	$0	$0	$0	$0	$0	$0
Total:	$3,778	$0	$0	$0	$0	$3,778

The Maryland Statewide Transportation Improvement Program continues to be fiscally constrained. If you have any questions or need additional information, please do not hesitate to contact me at 410-865-1295, toll-free at 888-713-1414 or via email at mnixon@mdot.state.md.us. Thank you for your assistance.

Sincerely,

Michael W. Nixon

Michael W. Nixon, Manager
Office of Planning and Capital Programming

Attachment

cc: Mr. Tyson Byrne, Regional Planner, Office of Planning and Capital Programming, MDOT
Ms. Lyn Erickson, Manager Federal Liaison, Office of Planning and Capital Programming, MDOT
Ms. Heather Murphy, Deputy Director, Office of Planning and Capital Programming, MDOT
Ms. Diane Ratcliff, MTA

MARYLAND STATEWIDE TIP F.Y. 2011-2015

MDOT STIP # 46-1101-05

SUMMARY TABLE

Project	Amendment Criteria (A/B/C/D)	Conformity Status	Environmental Status	Current Funding Level Federal	State	Total	Net Change Federal	State	Total
	A	Exempt	NA	0.0	0.0	0.0	3,778.0	0.0	3,778.0

	Administration	Area/MPO	CTP Page (with year, ex. H-22 FY2010)
Howard County Electric Bus	MTA	Baltimore	NA

Description The Howard Electric Bus Project consists of replacing three diesel buses with electric buses to operate on Howard Transit's Green Route which serves the Columbia Mall, the Village of Wilde Lake, the Howard Community College (HCC), and the Howard General Hospital. the electric bus will be fueled through an inductive charger that will be located at HCC. The inductive charger will provide energy to batteries through electromagnetic induction. Additionally, the project includes a transit shelter and an "Energy Information Station" will be designed and built to provide real-time information on the charging process including the recording of emission reductions and cost savings.

Justification These replacement buses will reduce dependency on fossil fuels and reduce emissions, while simultaneously educating the public on the benefits of electric buses.

INDIVIDUAL REQUEST FORM

STIP/TIP Amendment Criteria

- ☐ A Adds new individual projects to the current STIP/TIP.
- ☐ B Increase/decrease, scope change, advance, delay, or phase change.
- ☐ C Removes or deletes individual listed project from the STIP/TIP.
- ☑ D Other: Adds existing project not included in updated TIP

Office of Planning
Maryland Department of Transportation

	Funding	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Total
Current	Total	-	-	-	-	-	-	-
	Federal	-	-	-	-	-	-	-
	State	-	-	-	-	-	-	-
Proposed	Total	3,778	-	-	-	-	-	3,778
	Federal	3,778	-	-	-	-	-	3,778
	State	-	-	-	-	-	-	-
Net Change	Total	3,778	-	-	-	-	-	3,778
	Federal	3,778	-	-	-	-	-	3,778
	State	-	-	-	-	-	-	-

PHASE DETAIL (All dollars are displayed in $1,000's)

Current

PHASE	FY2010 Federal	FY2010 State	FY2011 Federal	FY2011 State	FY2012 Federal	FY2012 State	FY2013 Federal	FY2013 State	FY2014 Federal	FY2014 State	FY2015 Federal	FY2015 State	TOTAL Federal	TOTAL State	TOTAL Total
PP													-	-	-
PE													-	-	-
ROW													-	-	-
CON													-	-	-
OTH													-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Fed%: 0% State%: 0%

Proposed

PHASE	FY2010 Federal	FY2010 State	FY2011 Federal	FY2011 State	FY2012 Federal	FY2012 State	FY2013 Federal	FY2013 State	FY2014 Federal	FY2014 State	FY2015 Federal	FY2015 State	TOTAL Federal	TOTAL State	TOTAL Total
PP													-	-	-
PE													-	-	-
ROW													-	-	-
CON	3,778												3,778	-	3,778
OTH													-	-	-
TOTAL	3,778	-	-	-	-	-	-	-	-	-	-	-	3,778	-	3,778

Source: TIGGER II Fed%: 100% State%: 0%

Change

PHASE	FY2010 Federal	FY2010 State	FY2011 Federal	FY2011 State	FY2012 Federal	FY2012 State	FY2013 Federal	FY2013 State	FY2014 Federal	FY2014 State	FY2015 Federal	FY2015 State	TOTAL Federal	TOTAL State	TOTAL Total
PP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CON	3,778	-	-	-	-	-	-	-	-	-	-	-	3,778	-	3,778
OTH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	3,778	-	-	-	-	-	-	-	-	-	-	-	3,778	-	3,778

Source: HSIPR Fed%: 100% State%: 0%

Baltimore Metropolitan Council

Offices @ McHenry Row
1500 Whetstone Way, Suite 300
Baltimore, MD 21230-4767

Telephone: (410) 732-0500
Fax: (410) 732-8248
www.baltometro.org

Anne Arundel County
Baltimore City
Baltimore County
Carroll County
Harford County
Howard County

May 25, 2011

RECEIVED
JUN 1 2011
OFFICE OF PLANNING & CAPITAL PROGRAMMING

Ms. Diane Ratcliff, Director
Office of Planning
Maryland Transit Administration
William Donald Schaefer Tower - 9th floor
6 St. Paul Street
Baltimore, MD 21202-1614

Dear Ms. Ratcliff:

Enclosed is Resolution #11-27, amending the FY 2011 – 2014 TIP in support of an amendment to reflect a recent grant award of $3.8 million in FFY 2010 TIGGER grant money for the Howard County Electric Bus Project. Resolution #11-27 was approved by the Baltimore Regional Transportation Board (BRTB) at their May 24, 2011 meeting.

If you have any questions, please call me.

Sincerely,

Todd R. Lang, Director
Transportation Planning

Enclosure

cc: Ben Pickar, Howard County
✓Tyson Byrne, MDOT
John Powell, CMRT

BALTIMORE METROPOLITAN PLANNING ORGANIZATION

BALTIMORE REGIONAL TRANSPORTATION BOARD
RESOLUTION #11-27

AMENDMENT TO THE 2011 – 2014 BALTIMORE REGION TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, the Baltimore Regional Transportation Board (BRTB) is the designated Metropolitan Planning Organization for the Baltimore region, encompassing the Baltimore Urbanized Area, and includes official representatives of the cities of Annapolis and Baltimore, the counties of Anne Arundel, Baltimore, Carroll, Harford, and Howard, the Maryland Department of Transportation, the Maryland Department of the Environment, the Maryland Department of Planning, and the Maryland Transit Administration; and

WHEREAS, the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approved the 2011-2014 Transportation Improvement Program for the Baltimore region at its July 27, 2010 meeting; and

WHEREAS, federal regulations require that all transportation-related projects must be listed in the approved Transportation Improvement Program with accurate funding schedules in order to be eligible for federal funding; and

WHEREAS, the Transportation Improvement Program consists of projects included in, and in support of, the region's long-range transportation plan and ongoing short-range planning efforts; and

WHEREAS, Howard County and the Maryland Transit Administration requested approval of amendments (see Attachment 1) to the 2011-2014 Transportation Improvement Program through the approved Transportation Improvement Program amendment process; and

WHEREAS, the Transportation Improvement Program, as amended, continues to display financial reasonableness and re-affirms the appropriate project selection criteria whereby all requirements for a Transportation Improvement Program in the Safe, Accountable, Flexible, Efficient, Transportation Equity, Act: A Legacy for Users are met; and

WHEREAS, the Interagency Consultation Group has determined that the Howard County project – including six bridge deck replacements – is exempt from the requirement to determine conformity according to the Conformity Rule (40 CFR Parts 51 and 93) and has also determined that the Maryland Transit Administration project – an

electric bus project for Howard County – is exempt from the requirement to determine conformity according to the Conformity Rule (40 CFR Parts 51 and 93); and

WHEREAS, both proposed TIP amendments were subject to a publicized 30-day public review with a public meeting on April 26, 2011, to allow for comments. A range of comments were received from both individuals and the CAC. After careful consideration, the BRTB has responded to the comments.

NOW, THEREFORE, BE IT RESOLVED that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approves the attached amendment to the 2011-2014 Transportation Improvement Program for the Baltimore region and finds it to conform to the applicable Maryland State Implementation Plan and requirements of the 1990 Clean Air Act Amendments.

I HEREBY CERTIFY that the Baltimore Regional Transportation Board as the Metropolitan Planning Organization for the Baltimore region approved the aforementioned resolution on May 24, 2011.

May 24, 2011

Date

Emery Hines, Chairman
Baltimore Regional Transportation Board

Howard County Electric Bus Project

TIP Id #	46-1101-05	**Year of Operation**	2011
Agency	MTA - Transit	**Project Type**	Fleet Improvement
Project Category	Emission Reduction Strategy	**Functional Class**	NA
Conformity Status	Exempt	**Physical Data**	NA
STIP Reference #	NA		

Description	Justification
The Howard Electric Bus Project consists of replacing three (3) diesel buses with electric buses to operate on Howard Transit's Green Route which serves the Columbia Mall, the Village of Wilds lake, the Howard Community College, and the Howard County General Hospital. The electric busses will be fueled through an inductive charger that will be located at Howard Community College. The inductive charger will provide energy to the batteries through electromagnetic induction. Additionally, the project includes a transit shelter and an "Energy Information Station" will be designed and built to provide real-time information on the charging process including the recording of emission reductions and cost savings.	These replacement buses will reduce dependency on fossil fuels and reduce emissions, while simultaneously educating the public on the benefits of electric buses.

(All dollars are displayed in $1,000's)

TIGGER II Discretionary Grant Funds (funding for capital projects)*

	Previous Requests		Annual Element		Federal Funding Requests						Project Totals
Phase	**Previous Federal Funds**	**Previous Matching Funds**	**FY 2011 Federal Funds**	**FY 2011 Matching Funds**	**FY 2012 Federal Funds**	**FY 2012 Matching Funds**	**FY 2013 Federal Funds**	**FY 2013 Matching Funds**	**FY 2014 Federal Funds**	**FY 2014 Matching Funds**	**Estimated Project Total**
CON	$3,778										$3,778
OTH											
PE											
PP											
ROW											
Totals	$3,778	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,778

** The funds presented are for Federal Fiscal Year 2010*

Summary of Proposed TIP Amendments
May 2011

Project Name	Reason For Amendment	Requesting Agency	Project Description	Conformity Status
Howard County Electric Bus Project	▪ Accept an award for a demonstration project.	Maryland Transit Administration	▪ TIGGER II award for 3 electric buses, an inductive charger and a transit shelter with an "energy information station".	Programmatically Conforming
Bridge Repairs/Deck Replacement	▪ Project was late in requesting FY 2010 funds so now must be included in the FY 2011 TIP	Howard County	▪ Replacement of six 2-lane bridges.	Programmatically Conforming
B&P Tunnel	▪ MDOT was awarded a High Speed Intercity Passenger Rail grant	Maryland Department of Transportation	▪ Conduct preliminary engineering and NEPA analysis for a new tunnel alignment to replace the existing B&P Tunnel.	Programmatically Conforming

11-27

Maryland Department of Transportation
The Secretary's Office

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Beverley K. Swaim-Staley
Secretary

Darrell B. Mobley
Deputy Secretary

April 1, 2011

Mr. Todd R. Lang, Director
Transportation Planning
ATTN: Ms. Regina Aris
Offices @ McHenry Row
1500 Whetstone Way, Suite 300
Baltimore, Maryland 21230

RE: Amendment to FY 2011 TIP
To amend the Howard County Local Bus Replacement project with $3,778,826 million of FFY 2010 TIGGER II Discretionary Grant money

Dear Mr. Lang:

The Maryland Department of Transportation (MDOT) is forwarding the Maryland Transit Administration's (MTA) request to amend the FY2011 TIP for the Howard County Local Bus Replacement Project. The project reflects the award of $3,778,826 of FFY 2010 TIGGER II Discretionary Grant money. The MTA request memorandum and TIP Form are attached.

If you have questions or need additional information, please contact me at 410-865-1295 or via email at mnixon@mdot.state.md.us.

Sincerely,

Michael W. Nixon

Mr. Michael W. Nixon, Manager, Regional Planning
Office of Planning and Capital Programming

Attachments
cc: Mr. Jamie M. Lake, Regional Planner, Office of Planning and Capital Programming, Maryland Department of Transportation

MTA Maryland

MARYLAND TRANSIT ADMINISTRATION

MARYLAND DEPARTMENT OF TRANSPORTATION

Martin O'Malley, Governor • Anthony G. Brown, Lt. Governor

Beverley K. Swaim-Staley, Secretary • Ralign T. Wells, Administrator

MEMORANDUM

TO: Mr. Don Halligan, Director
Office of Planning and Capital Programming

ATTN: Mr. Mike Nixon

FROM: Ms. Diane Ratcliff, Director
MTA Office of Planning

DATE: March 28, 2011

SUBJECT: Amendment to FY 2011 Baltimore Region TIP
To add the Howard County Electric Bus Project with $3,777,826 of FFY 2010 TIGGER II Discretionary Grant money.

We are requesting an amendment to the Baltimore Region FY 2011 Transportation Improvement Program (TIP) to add the Howard County Electric Bus Project in the Baltimore Region. We are requesting the TIP amendment to reflect the award of $3,777,826 in FFY 2010 TIGGER II Discretionary Grant Funds.

These funds were awarded to Howard County for the replacement of 3 diesel buses with electric buses to operate on Howard Transit's Green Route. While MTA has applied for these funds, the total award amount will pass-through to Central Maryland Regional Transit (CMRT) as a subrecipient to MTA. CMRT will execute the project on behalf of Howard County, and Howard County will ultimately be the beneficiary of this project, and will own all equipment purchased with TIGGER funds.

After your review, please process the requested amendment with the Baltimore Metropolitan Council for inclusion in the FY 2011-2014 TIP. If you have any questions, please do not hesitate to contact Mr. John Gasparine, MTA Transit Analyst at (410) 767-3760 or via email at jgasparine@mta.maryland.gov.

cc: Mr. John Gasparine, Transit Analyst, Office of Planning, MTA
Mr. Robert Schleigh, Deputy Director, Office of Planning, MTA
Ms. Tawanda Carter, Manager, Capital Programming, MTA
Mr. Stephen Silva, Assistant Deputy Administrator/Chief Engineer, MTA
Mr. Charles Grant, Regional Planner, Office of Local Transit Support, MTA

Howard County Electric Bus Project

TIP Id #	46-1101-05	**Year of Operation**	2011
Agency	MTA - Transit	**Project Type**	Fleet Improvement
Project Category	Emission Reduction Strategy	**Functional Class**	NA
Conformity Status	Exempt	**Physical Data**	NA
STIP Reference #	NA		

Description	Justification
The Howard Electric Bus Project consists of replacing three (3) diesel buses with electric buses to operate on Howard Transit's Green Route which serves the Columbia Mall, the Village of Wilde Lake, the Howard Community College, and the Howard County General Hospital. The electric buses will be fueled through an inductive charger that will be located at Howard County Community College in Columbia, Maryland. The inductive charger will provide energy to the batteries through electromagnetic induction. Additionally, the project includes a transit shelter and an "Energy Information Station" will be designed and built to provide real-time information on the charging process including the recording of emission reductions and cost savings.	These replacement buses will reduce dependency on fossil fuels and reduce emissions, while simultaneously educating the public on the benefits of electric buses.

TIGGER II Discretionary Grant Funds (funding for capital projects)*

	Previous Requests		Annual Element		Federal Funding Requests						Project Totals
Phase	Previous Federal Funds	Previous Matching Funds	FY 2011 Federal Funds	FY 2011 Matching Funds	FY 2012 Federal Funds	FY 2012 Matching Funds	FY 2013 Federal Funds	FY 2013 Matching Funds	FY 2014 Federal Funds	FY 2014 Matching Funds	Estimated Project Total
CON	$3,778	$0									$3,778
OTH											
PE											
PP											
ROW											
Totals	$3,778	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,778

**The Funds represented are Federal Fiscal Year 2010 funds*

City of Annapolis
Joshua J. Cohen
Mayor

Anne Arundel County
John R. Leopold
County Executive

City of Baltimore
Stephanie Rawlings-Blake
Mayor

Baltimore County
Kevin Kamenetz (Chair)
County Executive

Carroll County
Haven Shoemaker
Member, Board of Commissioners

Harford County
David R. Craig (Vice-Chair)
County Executive

Howard County
Ken Ulman
County Executive

Maryland Department of Transportation
Beverley Swaim-Staley
Secretary

Maryland Department of the Environment
Robert Summers, Ph.D.
Secretary

Maryland Department of Planning
Richard E. Hall
Secretary

Maryland Transit Administration
Ralign T. Wells
Administrator and CEO

Offices @ McHenry Row
1500 Whetstone Way
Suite 300
Baltimore, MD 21230

May 20, 2011

On behalf of the Baltimore Regional Transportation Board, I would like to thank you for your comments on the *Howard County Moving Forward Amendments to the 2011-2014 Transportation Improvement Program.*

The BRTB is continually striving to improve the transportation plans and planning process based on the comments received. As such, all comments received were carefully considered by the BRTB. Responses to your comments are included in the enclosed matrix which summarizes all testimony received during the public comment period.

The BRTB is scheduled to vote on the final version of the *Howard County Moving Forward TIP Amendment* at their next meeting on May 24, 2011 at 9 a.m. at the Baltimore Metropolitan Council offices.

Once again, thank you for your time and effort in reviewing these amendments. We appreciate your input and encourage your continued participation in the regional transportation planning process.

Sincerely,

Emery Hines, Empowered Chair
Baltimore Regional Transportation Board

Enclosure

#	Comment	Received From	Response
Howard County Electric Bus Related Comments			
1.	No clear engineering data or justification for the expenditure.	Gus Williamson	This is a demonstration project, and it is the first rollout in the US of this technology. As a demonstration project it is one of the highest priority projects that the FTA has designated in the TIGGER II program. Clearly, the bus is twice the cost of a diesel bus. However, the infrastructure cost is minimal and can be used on other vehicles utilizing inductive charging. If one were to purchase a CNG bus, for example, it would be 1.3 – 1.5 the cost of diesel with a $1Million (or so) infrastructure cost. The additional cost is justified (clearly to the Federal government who is funding this) as this country needs to test advanced and very clean technologies. Assuming the vehicle is manufactured well, fuel use (and cost) will be ¼ of what it is on a diesel and maintenance costs will drop by 30% or more. There are no CO2 emissions on an electric bus.
2.	The CAC endorses the proposed TIP amendment conditional on the following provisions: 1. Cost benefit analysis of first and life cycle costs of electric versus natural gas powered buses and their required support infrastructure shall be conducted. 2. Equipment considered for purchase and operation shall become the standard for equipment of this type for future purchases.	CAC of the BRTB	1. The cost/benefit as well as emissions and performance data will be collected and documented as part of this demonstration project. 2. Should this electric bus and inductive charger system prove to provide the benefits projected, it would become a standard for any bus system that moved in this direction.

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION III
Delaware, District of
Columbia, Maryland,
Pennsylvania, Virginia,
West Virginia

1760 Market Street
Suite 500
Philadelphia, PA 19103-4124
215-656-7100
215-656-7260 (fax)

JUN 28 2011

Mr. Donald A. Halligan
Director
Office of Planning and Capital Programming
Maryland Department of Transportation
7201 Corporate Center Drive
P.O. Box 548
Hanover, MD 21076

Re: Amendment to the FY 2011 Statewide Transportation Improvement Program,
Baltimore, MD, Metropolitan Area Amendment MDOT control #11-21

Dear Mr. Halligan:

In a letter dated June 6, 2011, the Maryland Department of Transportation (MDOT) requested approval of an amendment to the FY 2011 Statewide Transportation Improvement Program (STIP). This STIP amendment adds the Howard County Electric Bus project and associated TIGGER II funds for this project.

Since the advancement of this project does not alter any conformity findings nor interfere with any State Implementation Plan projects, a joint Federal Transit Administration (FTA)/Federal Highway Administration (FHWA) approval of this STIP amendment is not required. In accordance with your procedures to incorporate the MTIPs into the STIP by reference, this project is part of an approved amendment to the approved FY 2011 STIP. We hereby approve the inclusion of this project as an amendment to the STIP. This approval does not constitute an obligation of federal funds. FTA finalizes federal funding for projects included in the STIP upon approval of a grant application.

Gail McFadden-Roberts, of my staff, is available if you have any questions concerning this approval.

Sincerely,

Michele Destra

Michele Destra, Director
Office of Planning and Program Development

cc: Lyn Erickson, MDOT, Office of Planning & Capital Programming
Heather Murphy, MDOT, Office of Planning & Capital Programming
Tyson Byrne, MDOT, Office of Planning & Capital Programming
Diane Ratcliff, MTA, Office of Planning