



ARLINGTON COUNTY, VIRGINIA

**County Board Agenda Item
Meeting of May 16, 2009**

DATE: April 29, 2009

SUBJECT: Transit Stimulus Energy/Emission Grants

C. M. RECOMMENDATION:

1. Authorize the County Manager to apply through the Washington Metropolitan Council of Governments Clean Cities Coalition for a grant of \$3.0 Million from the United States Department of Energy Clean Cities (DOE Clean Cities) FY 09 Petroleum Reduction Technologies Projects for the Transportation Sector - Funding Opportunity Number: DE-PS26-09NT01236-00; said grant to be used to construct a Compressed Natural Gas (CNG) fueling facility at the ART House site.
2. Authorize the County Manager to apply for a grant of \$3.025 Million from the Federal Transit Administration's (FTA) Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER) program; said grant to purchase five (5) CNG-Electric Hybrid buses to replace the remaining diesel powered buses in the ART fleet.

ISSUES: The DOE Clean Cities grant requires a fifty percent (50%) local match of \$1.5 Million. The FTA TIGGER grant should include a twenty percent (20%) local contribution of \$605,000.

SUMMARY: Both of these grant programs were created in the American Recovery and Reinvestment Act of 2009 (ARRA). These grants will allow the County to accelerate the delivery of necessary capital investments not funded in the current Capital Improvement Program (CIP) budget.

BACKGROUND: In Fiscal Year 2007, the County initiated a program to convert the ART fleet from smaller, light duty, body-on-chassis vehicles to heavy-duty buses that could better handle the increasing passenger loads and demands on the program. The policy direction was also to convert the fleet to buses that had low floors for greater accessibility and that used cleaner CNG fuel. The County's CNG fueling facility at the Trade Center is not adequate for fueling the new larger vehicles. The County has an agreement with the Washington Metropolitan Area Transit Authority (WMATA) to fuel twenty (20) larger CNG buses at the adjacent Four Mile Run facility. ART needs a new, larger capacity, fast fill CNG fueling facility because WMATA's facility does not have the capacity to fuel ART's growing fleet of larger vehicles.

County Manager: _____

County Attorney: _____

Staff:

The ART fleet currently includes five smaller Ford vehicles that use diesel fuel. These vehicles purchased in FY 2006 should be replaced no later than FY 2011.

DISCUSSION: The Department of Energy has \$300 Million available through the Clean Cities FY 09 Petroleum Reduction Technologies Projects for the Transportation Sector - Funding Opportunity Number: DE-PS26-09NT01236-00. Of particular interest is the Alternative Fuel and Advanced Technology Vehicles Pilot Program (DE-PS26-09NT01236-04). This grant is a competitive grant process in which thirty dispersed geographic areas will receive awards ranging from \$5.0 Million to \$15.0 Million. Arlington County would apply for \$3.0 Million as part of a metropolitan-wide consortium. This application would be coordinated by the MWCOG Clean Cities Coalition. The coordinated grant application for this metropolitan area likely will be for \$30 Million. The projects must be completed within four years. The grant application is due May 29, 2009. Arlington would use the grant funds to construct a fast-fill CNG fuel facility at the ART House site for use principally by the ART fleet and secondarily by the Arlington Public Schools' four CNG buses. The County would also make the site available via reciprocal agreements to other bus fleets including those used by the U.S. State Department and the Metropolitan Washington Airports Authority.

The FTA's Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER) program has \$100 Million available to transit agencies for capital grants that either reduce greenhouse gas emissions or reduce energy consumption. Greenhouse gas emissions will be measured in reference to carbon dioxide. Energy consumption will be measured in terms of British Thermal Units (BTUs). Grant applications are due July 1, 2009. The grant application includes a spreadsheet template to measure the net system wide impact of the proposed project. In each case, Arlington County would show a net decrease to justify the grant application. ART would apply for funds to replace the five remaining smaller, body-on-chassis, diesel buses with either CNG-Electric Hybrid or CNG buses.

As noted previously, in FY 07 Arlington County initiated a program to convert the ART fleet from smaller, light-duty, body-on-chassis vehicles to heavy duty, low floor, and CNG powered buses. While CNG buses have lower emissions for some harmful pollutants, such as particulates and NOX, than the current diesel vehicles, CNG does not perform as well as other alternatives for carbon emissions. Because the FTA TIGGER program will measure only carbon emission reductions, ART plans to seek funding for a CNG-Electric Hybrid bus. Two domestic manufacturers are now producing these hybrid buses, that also are low floor and heavy-duty. One vehicle type has a narrower wheelbase, which is better suited for some of the local circulator routes in the ART system. One impediment to this approach is that these buses must first pass the FTA's mandatory testing and inspection before being deployed in public service. Thus, the grant application will include a contingency to purchase CNG powered buses similar to those currently deployed in the ART fleet, in the event that FTA has not yet approved a CNG-Electric Hybrid.

FISCAL IMPACT: The County's currently approved CIP (FY 09 -14) does not fund the CNG fueling facility at the ART House site or the replacement of the Ford diesel vehicles. The County will need to provide funding in the CIP for the fifty percent (50%) local match of \$1.5

Million for the CNG fuel facility and \$605,000 for the CNG-Electric Hybrid buses. The local match for these grants will likely not be necessary until FY 11. Without the grants, the County will need to fund the full cost to build the CNG fueling facility and for the replacement buses.

A local match is not required for the FTA TIGGER program, but the agency will view more favorably those applications with local matches. The CNG-Electric Hybrid is more expensive than the CNG buses, which will increase the local match cost to the County. The cost for a CNG-Hybrid is \$605,000, and the total cost for five (5) buses would be \$3.025 Million. FTA usually requires a local match of twenty percent (20%) for bus purchases, which would amount to \$605,000 for this grant. Without the grant, the County would need to fund the full cost to replace these vehicles. If the County purchased five (5) CNG buses similar to those in our fleet the total cost would be \$2.210 Million.

The County should qualify for a reimbursement grant from the Commonwealth for any local matching funds expended with these grants.