

Date: January 8, 2008

Committee Meeting Date: January 17, 2008

Board Meeting Date: N/A

**BOARD MEMORANDUM**

**INFORMATION ITEM**

**TO:** Congestion Management Program and Planning Committee  
Santa Clara Valley Transportation Authority  
Board of Directors

**THROUGH:** Michael T. Burns  
General Manager

**FROM:** John H. Ristow  
Chief CMA Officer

**SUBJECT:** VTA Sustainability Program

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**FOR INFORMATION ONLY**

**BACKGROUND:**

There is widespread international attention given to energy efficiency and environmental sustainability as they relate to greenhouse gas (GHG) emissions and to the effect on global climate change. In response to this, many public agencies, businesses and individuals are proactively taking steps to reduce GHG emissions. VTA supports these efforts and is implementing programs for the conservation of natural resources, the reduction of GHG, the prevention of pollution and the use of renewable energy and materials. VTA's Sustainability Program guidelines are included as Attachment A.

Although the only previous related VTA Board program action was in June 2001 with the adoption of specific Energy Conservation Initiatives in response to the energy crisis, VTA has been involved in sustainability programs for a number of years. For example, beginning in 1998, VTA began replacing over ninety rooftop air conditioners with Energy Star rated equipment. In 2001, VTA installed the first of 19 solar powered bus stops in South County. New water treatment plants were installed at the North Division in 2002 and at the Cerone Division in 2006. Since October of 2002, VTA has installed approximately 200,000 square feet of cool energy efficient roofing over thirteen buildings. In 2005, VTA began operating three Zero-Emission buses using fuel-cell technology. And, in 2006, the VTA Outreach Program began operating the first of 60 Toyota Prius Hybrid vehicles now in service. Attachment B provides a more detailed listing of activities and projects underway.

The Fiscal Year 2008 and 2009 transfer capital budgets approved by the Board of Directors included a total of \$3 million for "green sustainability facility improvements". The purpose of

this project was to assess and implement improvements at VTA facilities to address issues of environmental concern and energy efficiency.

VTA's Environmental Programs and Resource Management and Facilities Maintenance departments are responsible for identifying and implementing the green sustainability facility improvements with the assistance of an interdepartmental team. In the first six months of the project, the team has initiated certifications of VTA as a Green Business with Santa Clara County and with the U.S. Green Building Council, replaced 10 high-emission vehicles with 10 hybrid vehicles for Protective Services and Construction staff, collected data on VTA's baseline energy, water/sewer, and solid waste use, and is researching various sustainable actions including installation of solar power facilities. The team is also working with the Santa Clara Valley Water District and PG&E to conduct facility audits that identify no-cost and low-cost as well as larger capital investment projects that can be considered for implementation. Attachment B provides a more detailed listing of activities and projects underway.

### **DISCUSSION:**

VTA currently does not have formal guidelines for sustainability program goals and implementation. By establishing guidelines for the program, including goals and implementation strategies, VTA can more consistently consider sustainability in the procurement of products and in the planning, design, construction, and operation of VTA's facilities. The Sustainability Program guidelines will allow VTA to consider the long term benefits, as well as shorter term budgetary issues, during the procurement evaluations. Approving the Sustainability Program would be the first step in improving VTA's practices and procedures to consider the environmental benefits and the operational efficiencies of sustainability in the planning, designing, supporting and operating transportation facilities throughout the county as well.

One of the major challenges in considering sustainability is evaluating the potentially higher upfront cost versus the longer term benefits of the more sustainable but higher cost product. In many cases, sustainable products or sustainable project features may initially cost more than conventional products or technologies. Sustainable features such as renewable energy systems energy-efficient lighting or drought-resistant landscaping may have a higher initial capital costs but may prove to be cost-effective when a consideration of sustainability and long term efficiency goals are taken into consideration.

Environmental sustainability is just one of many factors that would be considered in the planning and procurement process. Over the longer term, the Sustainability Program should result in a financial benefit to VTA in terms of facility operating efficiencies and energy savings. However, the approval of the Sustainability Program could also result in an increase in the initial project and procurement costs for VTA. One of the implementation strategies of program is to evaluate the best practices and products which can offset the higher upfront costs with cost savings from the efficient use of energy, the reduction in waste, and the conservation of natural resources. One of the next steps of the Sustainability Program will be to develop product procurement cost/benefit decision-making criteria incorporating analysis of the lifecycle return on investments and guidelines on the allowable increase in cost for incorporating sustainable features into a project or purchase.

In the future, as additional technologies and other specific implementation approaches are developed, VTA staff will report back to the Board of Directors on progress at accomplishing the goals and strategies contained in the Sustainability Program.

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