



Millennial Access Platform 2009-2010 Results

MAPS to Radically Different Learning Environments

2009-2010 Millennium Access Platform (MAP): Zero Carbon Footprint

Strategic Pillar: Operational Efficiency

Description: This initiative has as its primary goal, to achieve cost efficiencies in all areas of the District's operations through reduced consumption, greater use of sustainable 'green' products, and the consistent use of (best) sustainable practices to inform organizational behavior.

Objectives:

1. To reduce the District's overall energy and water consumption in FY 09-10 by an average of 15%, as compared to FY 08-09, with an estimated cost savings to the District of approximately \$12 million for the year.
2. To reduce by at least 15% in FY 09-10, the expenses associated with printers, ink cartridges/ toners, and paper purchased through Procurement, for an estimated cost reduction of \$1.5 million in savings, as compared to FY 08-09 expenditures of approximately \$10 million
3. To establish FY 08-09 as the District's Carbon Footprint baseline, establish yearly GhG reduction targets, and quantify GhG emission reductions in FY 09-10 and every year going forward

Deliverables:

1. Combined FY 09-10 expenditure reductions in the areas covered under Objectives 1 and 2 above of approximately \$13 million
2. Quantifiable GhG emission reductions for FY 09-10

Implementing Bureau: Office of School Facilities, Department of Planning, Design and Sustainability

Implementation Summary: Relative to Objective 1, energy consumption reduction targets were established at the individual site level, ranging from 5% to 15% depending on past consumption patterns and projected ability to reduce further. Once the targets were established, an application was developed to track actual consumption v. target and deployed to the individual sites. Monthly, the department tracked overall consumption reduction not only v. the targets but also against the prior year as a means of testing the viability of the established targets.

Relative to Objective 2, an initial memorandum and weekly briefing was issued to all sites advising of a 15% reduction target for costs associated with the purchase of printers, toners/cartridges and paper through the central procurement process. A freeze was placed on purchase of new printing equipment, except for specialized needs associated with the delivery of a specific curriculum, and a 'printer matching' program was implemented which allowed the surplus and matching of printers from donor district offices to school sites with need to replace outdated or non-functioning printing equipment.



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Relative to Objective 3, the department used the US EPA GhG protocol to quantify GhG emission reductions for FY 09-10.

New Cost/Cost Savings: Expenditure projections through yearend indicate a reduced cost in energy and water/sewer of approximately \$9.4 million. Based on data provided by Procurement for purchase of new printers, toners and paper, the projected reduction (from the FY 08-09 baseline of approximately \$10 million) in expenditures for these products through fiscal year end is approximately \$5 million. Collectively, projected expenditure reductions in the areas (energy/water and printers and related products) total approximately \$14 million.

Measurable Results: See above for expenditure reductions relative to Objectives 1 and 2. As it relates to GhG emissions, the estimated 50,000,000 KWH reduction this fiscal year translates into approximately 35,900 metric tons of CO₂ Equivalent avoided, which in turn is the equivalent of:

- Eliminating the annual CO₂ emissions from about 6,800 passenger vehicles;
- Eliminating the CO₂ emissions associated with the consumption of approximately 4 million gallons of gasoline;
- Eliminating the CO₂ emissions for the electricity use of about 4,300 homes for one year;
- The GhG emissions avoided by recycling about 12,000 tons of waste instead of sending it to the landfill.

Continuation/Replication/Expansion: For FY 10-11, further reductions in the areas of energy and water consumption, as well as in waste collection volume as a result of the restructured newly awarded contract and an increase in recycling can be expected. MAPS will be prepared to capture the objectives in these areas and to quantify the anticipated cost reductions.

Lessons Learned: The first year results were positive and show a collective desire to achieve meaningful cost reductions and display good environmental stewardship. More could be accomplished however, by raising the stakes and, as a pilot project selecting a few locations and delegating to them the ability and the responsibility for managing their energy budget. Targets for next year also need to be further refined to more accurately reflect the individual sites' activities, e.g. schools with night or weekend programs need to be looked at differently from schools with more traditional daytime/workweek only schedules.