



General Administration  
STATE OF WASHINGTON



# GA Sustainability Progress Report 2008

## Message from the Director



General Administration is committed to taking a leading role in helping state government make changes that contribute to improving Washington's environment. We will continue to promote sustainability in the design and construction of public facilities and the operation of state services.

Our partnerships help ensure a more sustainable future for all Washington residents.

Linda Villegas Bremer  
Director  
October 15, 2008

General Administration is a central support agency for state government. Our customers include state agencies, city and county government, school districts, colleges and universities, and a number of not-for-profit organizations. GA consists of 659 employees in 3 divisions:

- Administrative Services Division
- Facilities Division
- Services Division

### What we do:

- Oversee more than \$900 million of contracts annually for a multitude of services and commodities.
- Provide solutions in managing supplies, logistics and warehousing services.
- Manage more than \$500 million annually in the design and construction of public buildings. The department has a lead role in promoting and developing "green" building practices in Washington.
- Conserve energy and utility costs for public agencies statewide by using Energy Savings Performance Contracting. Serve as a real estate agent for state agencies, arranging leases for office, warehouse and other space throughout Washington.
- Deliver about 63 million pieces of mail annually as manager of the state's internal mail service.
- Run a Motor Pool fleet of 1,800 vehicles, offering hundreds of fuel- efficient, low-emission hybrids to state agency customers.
- Welcome more than 300,000 visitors each year to the historic buildings and grounds of the Capitol Campus in Olympia.
- Recycle and find second use for surplus public agency goods, keeping more than 600,000 pounds of materials out of landfills annually.

# TABLE OF CONTENTS

# PAGE

General Administration Services .....	2
Executive Summary .....	4
Goals and Objectives .....	4
Sustainable Building Practices.....	5
Transportation Related Pollution.....	7
Recycling and Paper Products.....	11
Energy and Water Use.....	13
Toxic Products and Chemicals.....	17
Education and Outreach .....	18
Future Goals .....	19
Achievements .....	20

## Executive Summary

The Department of General Administration (GA) developed a sustainability plan as required under Executive Orders 02-03 and 05-01.

### The plan identifies 5 major goals:

1. Implement sustainable building practices.
2. Reduce transportation related pollution.
3. Maximize recycling, minimize waste, and use of products with 100% virgin materials.
4. Minimize facility related energy and water use.
5. Reduce use of toxic products and toxic chemicals.



These goals demonstrate GA's commitment to sustainable practices. As a central-service provider to state and other public agencies, GA has the opportunity to be a leader in sustainable stewardship several key areas:

- The procurement of goods and services.
- Design and construction management of public works projects.
- Operation of state facilities.
- Management of the Motor Pool fleet of 1,800 vehicles.

GA is on track to meet the established sustainability goals and will continue to improve on these in future years.

Goals, objectives, current measurements and related comments for 2008 are presented. The base year, where applicable, is fiscal year 2003, unless otherwise stated.

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# Green Buildings

## Goal 1

GA is the lead agency in implementing the state's Green Building law.

- The first set of projects required to be LEED will be completed in the last quarter of calendar 2008.
- In FY09, thirteen LEED projects are scheduled to be completed.

### Implement sustainable building practices

Agency Objectives /Targets	Progress to Date (Measurables)
<p><b>1.1</b> 5% of GA-managed, state-owned new construction and major remodel projects will be LEED (Leadership in Energy and Environmental Design: U.S. Green Building Council national design guidelines) Gold certified.</p>	<ul style="list-style-type: none"> <li>• Thirteen projects will be completed in FY 09. Four of those projects are targeting LEED Gold (31%).</li> <li>• No LEED projects were completed during FY08. The projects completed in FY08 pre-dated the requirement to build to LEED Silver.</li> </ul>
<p><b>1.2</b> 5% of new and major (more than 30,000 SF) remodel leased projects will be LEED Silver certified.</p>	<ul style="list-style-type: none"> <li>• One leased project is pending to be certified LEED Silver: DOH/L&amp;I Building</li> <li>• One new project is under development targeting LEED Gold: Parks Department</li> </ul>
<p><b>1.3</b> Achieve LEED Existing Buildings (EB) Silver rating for existing buildings over 10,000 s.f. on the Capitol Campus by 2015.</p>	<ul style="list-style-type: none"> <li>• LEED EB plan under development. In process of selecting a pilot building to take through the LEED EB certification process.</li> </ul>

### Buildings (Remodeled or New Construction)

Year (FY)	2003	2004	2005	2006	2007	2008
Conventional Buildings	14	18	27	14	15	20
LEED Silver	-	-	1	-	-	-
LEED Gold or Higher	-	1	-	-	-	-
Total LEED Certified	-	-	-	-	-	-
<b>Total</b>	<b>14</b>	<b>19</b>	<b>28</b>	<b>14</b>	<b>15</b>	<b>20</b>

**Comments.** Two of the 20 pending projects required (per ESSB 5509) to meet LEED Silver, requested a "not practicable" exemption.

## Leased Buildings

Year (FY)	2003	2004	2005	2006	2007	2008
LEED Buildings	NA	NA	NA	1 LEED Gold - Edna Goodrich Building	1 LEED Silver - AG Office Building 1 LEED Certified - Dept. of Health	

### Progress to Date:

- GA has integrated LEED requirements and processes into project management guidelines and instructions for state-owned buildings. GA is also incorporating these requirements into the lease building specifications and process.
- GA is working with the Department of Ecology to provide free *Build-it LEED* training for contractors on state projects.
- GA continues to track all state LEED projects and provides assistance as needed.
- GA worked with state agencies and universities to develop tracking processes and to collect relevant green building data as projects move through the design and construction process. Training is also provided to ensure success.

### Challenges:

- Savings are determined once projects are LEED certified and in operation for at least one year. Data collection is starting and will be available in the fall of 2009
- Approximately 5% of the E&AS project managers are LEED Accredited Professionals. This is a lower rate than at other public entities with similar functions. To become LEED certified requires a one-time fee and extensive preparation for successful completion of a two-hour test. The challenge for E&AS is workload. In response, the GA Green Building Advisor is preparing an action plan for the development and delivery of an in-house training program and testing.



Spokane Falls CC, Business and *Social Sciences Building*,  
Spokane is pursuing LEED Gold.

# Transportation

## Goal 2

### Motor Pool Statewide Fleet Services

GA's Motor Pool fleet is the second largest in the state with over 1,800 vehicles. Of these, 779 (43 percent) are fuel-efficient hybrid vehicles.

GA has surpassed its target for 30 mpg+ vehicles by more than 100%.

### Reduce Transportation Related Pollution.

Agency Objectives /Targets	Progress to Date (Measurables)
2.1 20% of GA's Motor Pool fleet will be rated to achieve 30 mpg or better and meet federal emission standards.	<ul style="list-style-type: none"> <li>42% of GA's fleet (779 vehicles) are hybrids that achieve 30 mpg or better and meet target EPA emission standards.</li> </ul>
2.2 15% improvement in fleet fuel efficiency (MPG) compared to the 2004 baseline.	<ul style="list-style-type: none"> <li>17.5% improvement in fleet fuel efficiency.</li> <li>The transfer of agency vehicles to GA's Motor Pool for fleet management has increased the number of vehicles, so fuel use has increased 13.6% compared to 2004.</li> </ul>
2.2.1 Total fleet miles driven by motor pool vehicles compared to the 2004 baseline.	<ul style="list-style-type: none"> <li>Due to the additional vehicles transferred to Motor Pool for fleet management, vehicle miles increased by 33.5%.</li> </ul>
2.2.2 Stop the purchase of four-wheel drive (4WD) vehicles, except those with fuel economy > 30 mpg or purchased for law enforcement or emergency response. All others to be approved by agency director.	<ul style="list-style-type: none"> <li>Only two 4WD's were approved and purchased.</li> </ul>
2.2.3 Give priority to fuel efficient/low emission vehicles	<ul style="list-style-type: none"> <li>FY 08 = 23.5 mpg fleet average – 17.5% improvement. GA purchased 326 vehicles of which 279 (85%) are fuel efficient.</li> </ul>

### Motor Pool Fleet Information:

Year (FY)	2004	2005	2006	2007	2008
Petroleum	952,916	964,522	977,109	1,059,449	1,082,450
Fleet Vehicle Miles	19,062,204	19,359,633	20,210,823	24,228,053	25,438,685
Motor Pool-Owned Fleet Size	1,340	1,480	1,500	1,600	1,800
Fuel Efficiency (MPG)	20.0	20.07	20.68	22.87	23.5

**Comments:** 2007 was the first year that we separated GA miles from the Motor Pool fleet.

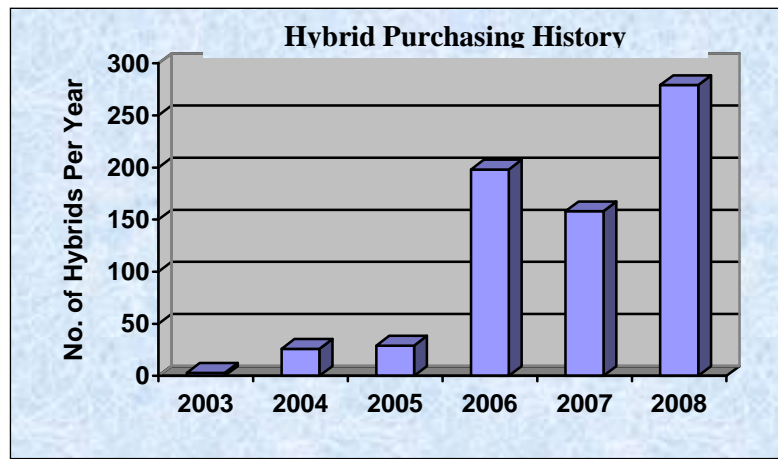
As agencies have transferred their light duty vehicles to Motor Pool for fleet management, the size of the fleet has increased 34 percent since 2004. This has also increased miles driven by 34 percent, but only increased fuel use by 13.6 percent due to a nearly 20 percent improvement in the fuel efficiency of the fleet.

### Motor Pool Fleet Vehicles by Type Purchased Each Year:

Vehicle Type	2003	2004	2005	2006	2007	2008
Toyota Prius Hybrids	3	26	29	69	46	177
Ford Escape Hybrids	0	0	0	129	112	102
Taurus/Stratus/ Impalas (In 06 Capable of using E-85)	65	99	85	84	38	38
Ford Taurus Wagon	7	15	12	0	0	0
Ford Explorers/Rangers/ (Capable of using E-85)	1	62	53	5	0	0
Conventional	18	8	0	28	37	7
4WD Vehicles					2	2
Total Purchases:	94	210	179	315	235	326



*Motor Pool Fleet has 779 hybrids. Hybrid vehicles are available to all public agencies through a state contract.*



#### **Progress to Date:**

- The purchase of fuel efficient vehicles has increased 123% from the 2007 report. More efficient vehicles results in lower emissions, cost savings and a reduction of the state's impact on the environment.
- An Olympia area service station recently became the first to offer E-85 (a blend of 85% ethanol and 15% gasoline) fuel, allowing the Motor Pool to begin purchasing the product for their flex-fuel vehicles.
- GA has transferred ownership of 98% of its light-duty vehicles to the Motor Pool.
- GA required the state-contracted rental car company to rent the most fuel-efficient vehicles as a first choice to state employees.
- GA bought two electric vehicles for the Capitol Campus maintenance and grounds staff. Consolidated Mail Services eliminated the need for individual agency courier vehicles, resulting in less petroleum fuel consumption, emissions and traffic congestion.

#### **Challenges:**

- Ethanol fueling stations are scarce in Washington, so it is difficult for the state to use this alternative fuel.
- GA only tracks vehicles rented from the state-contracted vendor, missing non-contract commercial rentals.
- EPA revised estimated vehicle fuel consumption ratings this year. As a result, 2008 mpg figures are down for all vehicles, including hybrids. The state is reviewing the exemption criteria.

# Transportation

## Goal 2

### GA Agency Only Fuel Usage

GA is balancing the need to provide quality services while helping the state reduce fuel use.

- Increased employee CTR participation.
- Increased fuel efficiency of agency vehicles.

Agency Objectives /Targets	Progress to Date (Measurables)
<b>2.3</b> 5% reduction in single-occupancy vehicle (SOV) rate through Commute Trip Reduction (CTR) Program.	<ul style="list-style-type: none"> <li>• 3% increase in CTR trips from previous year; \$34,400 in incentives paid to GA employees.</li> <li>• Next survey will be conducted in spring 2009. (2007 survey showed a 4.5% decrease from 2003).</li> </ul>
<b>2.4</b> 20% of cars rented by GA will achieve 30 mpg or better.	<ul style="list-style-type: none"> <li>• 32% of car rentals by GA employees were fuel-efficient economy/compact class.</li> </ul>
<b>2.5</b> 20% of GA's diesel vehicles will use 5% biodiesel.	<ul style="list-style-type: none"> <li>• 100% of the diesel trucks (except Building and Grounds [B&amp;G] program) are using 5% biodiesel, 13 trucks (B-5 fuel). B&amp;G vehicles are not currently using 5% biodiesel due to lack of availability.</li> </ul>
<b>2.5.1</b> Miles driven by GA.	<ul style="list-style-type: none"> <li>• 7% increase in miles.</li> </ul>
<b>2.5.2</b> Replace pre-1996 light duty vehicles (those under 8,500 pounds gross vehicle weight) by January 2009.	<ul style="list-style-type: none"> <li>• B&amp;G has 60 vehicles that are pre-1996 and are driven more than 2,000 miles. Current replacement plans are on hold due to the governor's spending restriction.</li> </ul>

### GA Fuel Consumption (non-diesel) for Agency Use in Gallons:

Year (FY)	2003	2004	2005	2006	2007	2008
<i>Petroleum:</i>						
Permanently Assigned Vehicles	41,345	Not Available	Not Available	Not Available	63,939	54,731
Daily Rental Vehicles	1,896	Not Available	Not Available	Not Available	2,638	2,976
Agency Owned Vehicles (AOV)		Not Available	Not Available	Not Available	15,517	19,422
Personally Owned Vehicles (POV)		Not Available	Not Available	Not Available	10,485	10,193
<b>Total</b>	<b>43,238</b>				<b>92,578</b>	<b>87,322</b>

- Consumption is tracked through the Voyager Card system, which captures the majority of fuel. GA did not track its own fuel usage separately from the Motor Pool until 2007.
- Fleet Size: 106 (78 light-duty vehicles) – FY 07 was 106. Savings of 5.7% fuel from 2007.
- Pre-1996 Vehicles Remaining: 60 (FY 07 – 62). Vehicles will be replaced with Motor Pool leased vehicles as budget allows.

## GA Diesel Fuel Consumption for Agency Use

Year (FY)	2003	2004	2005	2006	2007	2008
Ultra Low Sulfur (Highway)	Not Available	Not Available	Not Available	Not Available	8,538	12,043
Biodiesel	Not Available	Not Available	Not Available	Not Available	62,934	68,478
<b>Total</b>					<b>71,472</b>	<b>80,551</b>
Units	<input checked="" type="checkbox"/> gallons <input type="checkbox"/> liters					

- GA's consumption was not tracked separate from Motor Pool prior to 2007.
- Consolidated Mail Services has three trucks, two diesels and one gasoline. The diesel trucks are meeting the "clean burn" exhaust federal emission standards, which restricts polluting emissions such as carbon monoxide and non-methane gases.
- Material Management Center (MMC) added three vehicles to meet increased service demands. It also has three trucks and three semi-tractors that are meeting the "clean burn" emission standards. All fuel associated with MMC miles are in biofuel. MMC use is tracked through DOT invoices (currently B-5 is available). The biodiesel number is the total amount of biodiesel blended fuel, not B100 gallons.)

## GA Miles Driven for Agency Use

Year (FY)	2003	2004	2005	2006	2007	2008
Permanently Assigned Vehicles (GA MP Use)	Not Available	Not Available	Not Available	Not Available	974,723	685,076
Daily Trip Rental Vehicles (GA MP Use)	57,350	Not Available	Not Available	Not Available	73,769	68,208
Agency Owned Vehicles (AOV)	Not Available	Not Available	Not Available	Not Available	318,806 402,441	315,568 416,077*
Personally Owned Vehicles (POV)	Not Available	254,936	211,760	88,134	212,228	206,514
<b>Total</b>		<b>254,936</b>	<b>211,760</b>	<b>88,134</b>	<b>1,981,967</b>	<b>1,691,443</b>
Units	<input checked="" type="checkbox"/> miles <input type="checkbox"/> kilometers					

\* Material Management Center (MMC) miles (416,077) were not reported in 2007, and all fuel associated with these miles is bio-fuel. The tracking system to report AOV was only able to capture this kind of data starting July 2007.

### **Commute Trip Reduction (CTR) program:**

GA manages the state Commute Trip Reduction (CTR) program for state agencies. The goal is to reduce traffic congestion, air pollution and fuel consumption. To achieve these goals, agency employers are asked to develop location-specific CTR programs that encourage employees who drive alone to work to consider using an alternative way to get to work, such as buses, vanpools, carpools, biking or walking. Here are some ways GA contributes to CTR:

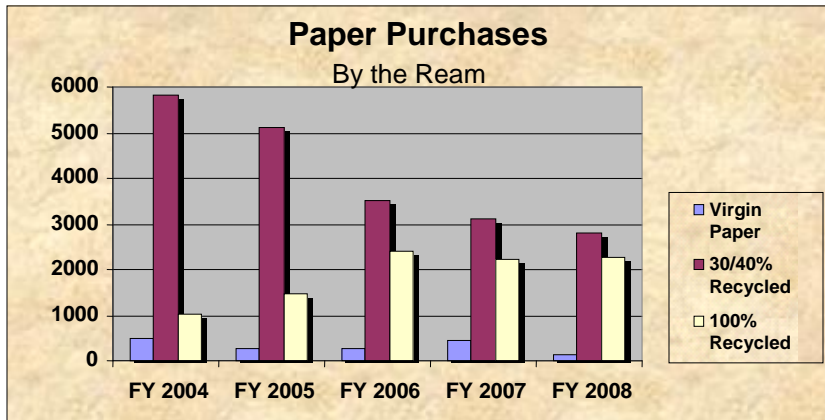
- Provides assistance to agencies to help them implement sustainable CTR programs and policies; ensures that state facilities are located close to transit routes; and develops mandated parking management programs.
- A guaranteed ride home program is provided to state employees in Thurston, Pierce, King and Spokane counties.
- Fare-free transit passes are provided to all state employees assigned to a worksite in Thurston County.

# Recycling and Waste

## Goal 3

GA has the highest recycle rate of any recycling program in the state.

- Significantly reduced office paper use.
- All janitorial paper used has 50% recycled content.



GA has reduced paper use by 35%, and increased use of 100% recycled content paper by 117% from 2003 levels.

### GA Internal Agency Use - Maximize recycling, and minimize waste

Agency Objectives /Targets	Progress to Date (Measurables)
<b>3.1</b> 10% reduction of office paper use per employee (FY 04 base year).	<ul style="list-style-type: none"> <li>• 25% reduction in paper use per employee.</li> <li>• 30% reduction in overall paper purchased.</li> </ul>
<b>3.2</b> 50% of copy paper purchased from Central Stores for agency use will be 100% recycled content (white 8½x11).	<ul style="list-style-type: none"> <li>• 43.6% of all paper purchased in FY 08 was 100% recycled content.</li> </ul>
<b>3.3</b> 80% of office paper will be recycled.	<ul style="list-style-type: none"> <li>• 99% of all paper is recycled.</li> </ul>
<b>3.4</b> 30% of janitorial paper products will be of 50% recycled content and processed chlorine free.	<ul style="list-style-type: none"> <li>• 100% of janitorial paper is 50% recycled content and processed chlorine free. We are currently testing an 85% post-consumer content bath tissue.</li> </ul>
<b>3.5</b> 60% of solid waste in GA's campus operations will be recycled. (Solid waste refers to discarded materials we remove; materials and recycled, or sent to the landfill (garbage).	<ul style="list-style-type: none"> <li>• 54% of solid waste collected campus-wide was recycled in 2008, saving \$83,039.</li> </ul>
<b>3.6</b> Study the potential for composting food wastes from GA-managed buildings. The goal is to expand composting to all buildings on campus.	<ul style="list-style-type: none"> <li>• Plan is 50% complete, now collecting data to determine quantity and source points.</li> <li>• The Resource Conservation Management (RCM) Plan includes composting as a significant component.</li> </ul>

## Office Paper Purchased (8.5 x 11)

Year (FY)	2003	2004	2005	2006	2007	2008
<i>Employee Count</i>		707	646	678	686	659
Virgin	NA	478	247	252	454	142
30 -40% recycled	NA	5,841	5,116	3,517	3,112	2,779
100% recycled/EPP	NA	1,042	1,493	2,412	2,225	2,260
Total		7,361	6,846	6,181	5,791	5,181
% reduced per employee			6.4%	19.5%	25.5%	25.2%
Units		<input type="checkbox"/> sheets	<input checked="" type="checkbox"/> reams	<input type="checkbox"/> cases	<input type="checkbox"/> tons	

Comments: FY 2003 paper numbers are not available.

## Waste Disposed in GA and on Capitol Campus

Year (FY)	2003	2004	2005	2006	2007	2008
Amount	Not Available	41% Disposed 59% Recycled	41% Disposed 59% Recycled	41% Disposed 59% Recycled	45% Disposed (972 tons) 55% Recycled (1,147 tons)	46% Disposed (887 tons) 54% Recycled (1,034 tons)
<i>Non-Paper Material Recycled Amount</i>	45 - Scrap	Not Available	Not Available	Not Available	138 - Scrap	481 - metal 49 - solid waste
Units		<input type="checkbox"/> pounds	<input checked="" type="checkbox"/> tons	<input checked="" type="checkbox"/> Prior to 2006 was reported in %		

- Comments: Recycled content is not tracked separately. B&G is in process of purchasing a scale to separate the weight of recycled materials.

### Progress to Date:

- Electronic forms are used, instead of paper, as a standard business practice.
- GA recycles 99% of all campus office paper, reducing landfill waste by over 1,100 tons a year and cutting yearly landfill fees by \$83,039.
- Central Stores reuses about 50,000 boxes a year, saving about \$10,000, and Consolidated Mail Services recycles nearly 50 tons of paper annually.
- Capitol Campus automatic paper towel dispensers have reduced paper use by 25%.
- B&G is in process of purchasing a scale to separate the weight of recycled materials.
- GA recycles cardboard, metal, cans, plastic and glass bottles, and wood pallets. GA also recycles dry cell batteries, fluorescent lamps and ballasts, tires, oil filters, used oil, car batteries, vehicle parts, cleaning solvents, ceiling tile, and printer and fax cartages.
- GA's Plant Operations program helps members find new uses for discarded equipment.
- A pilot compost program will be implemented prior to the end of fiscal year 2009 for one building on campus. Prompt removal of the waste on a daily basis will be critical.

### Challenges:

- Some customers are opposed to toilet tissues with higher recycle content because it is not as soft as the standard product. Adequate recycling bins and educating tenants about recycling are challenges in reaching a 60% recycling rate.

# Energy and Water

## Goal 4

GA is a leader in energy and water efficiency, providing Energy Savings Performance Contracting services to state agencies, school districts and local governments.

- Drastically reduced irrigation and interior water consumption from 2003 levels.
- Initiating Energy Star and LEED EB for buildings on the Capitol Campus.

### Minimize facility related energy and water use

GA-owned and operated facilities consists of 3,334,637 square feet.

Agency Objectives /Targets	Progress to Date (Measurables)
4.1 5% reduction of energy use on a square footage basis in GA-managed, state-owned and operated facilities.	<ul style="list-style-type: none"> <li>• 3.3% increase in energy use (gas and electricity) compared to 2003 levels.</li> <li>• The 2009 report will include a review of energy use in all GA-owned and operated facilities.</li> </ul>
4.2 10% reduction of potable water use for GA managed grounds. (2004 baseline).	<ul style="list-style-type: none"> <li>• 45% reduction in the use of potable water for irrigation.</li> </ul>
4.3 10% reduction of interior potable water use per square foot (2004 baseline).	<ul style="list-style-type: none"> <li>• 24% reduction in the use of potable water for interior water.</li> </ul>
4.4 Pursue installing a renewable energy project and/or purchase 5% Green power for a GA-owned and managed project.	<ul style="list-style-type: none"> <li>• 17% of electricity used for GA facilities comes from Green power, and from the Legislative Building's solar panels.</li> </ul>
4.5 Baseline 100% of existing Capitol Campus buildings using Energy Star	<ul style="list-style-type: none"> <li>• Plan is 75% complete, now collecting energy consumption data.</li> </ul>
4.6 Study potential of obtaining energy star rating on leased buildings.	<ul style="list-style-type: none"> <li>• One project has obtained an Energy Star rating (a federal building efficiency program).</li> </ul>
4.7 5% increase in annual savings from Energy Performance Contracting.	<ul style="list-style-type: none"> <li>• Increased annual program savings by 25% compared to 2005.</li> </ul>

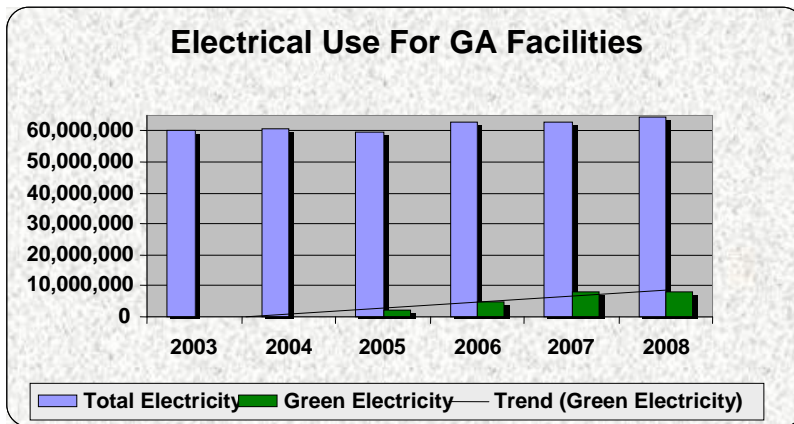
#### Progress to Date:

- Separate energy monitoring of almost all buildings on the Capitol Campus will start in 10/08.
- Metering of energy and water by building is being required for all state LEED projects.
- A study has been approved to evaluate the conversion of the current steam system on the Capitol Campus to a low temperature hot water system to conserve energy.
- Evaluating energy conservation opportunities on leased properties prior to lease negotiations and re-negotiations, as part of Real Estate Services process.
- The Legislative Building solar panels added to the south side of the roof continue to produce 20,000 kilowatt-hours of energy per year.
- Installed cubicle sensors and motion sensors in various areas in GA and around the campus to reduce plug loads when away from workstations.
- All agency computer monitors go into a "sleep" mode after a period of inactivity. All computers have Energy Star rating and contracted appliances are EPA Energy Star.

## Total Electricity used in GA-managed, state-owned and operated facilities

Year (FY)	2003	2004	2005	2006	2007	2008
Conventionally Purchased	60,148,092	60,530,678	63,016,881	57,893,473	53,516,509	56,177,165
Green Electricity	NA	NA	2,410,000	4,820,000	8,020,000	8,020,000
Total	60,148,092	60,530,678	65,426,881	62,713,473	62,988,450	64,197,165
Units	☒ kWh ☒ One GA off-campus facility was overstated in 2005					

**Comments:** With the addition of the RCM program, and building energy monitoring in place, the 2009 report will reflect a review of all GA-owned and operated facilities energy use to identify ways to meet energy reduction goals.

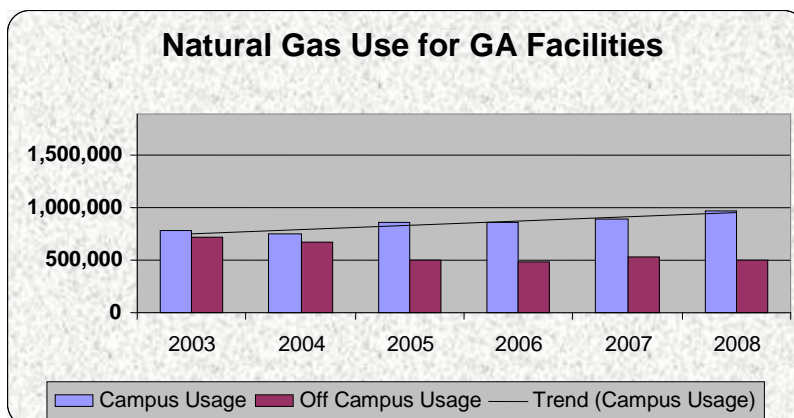


Consumption of electricity has increased due to additional office equipment use, more FTEs, steam leaks and additional construction projects on campus.

## Natural Gas for GA-managed, state-owned and operated facilities

Year (FY)	2003	2004	2005	2006	2007	2008
GA Managed on Campus	787,069	750,977	865,918	862,321	901,668	980,325
Off-Campus	719,588	678,972	508,258*	487,997	529,605	507,173
Total	1,506,657	1,429,949	1,374,176	1,350,318	1,419,051	1,487,498
Units	☒ Therms ☒ 2005 off-campus usage is an estimate based on average of FY 06-08					

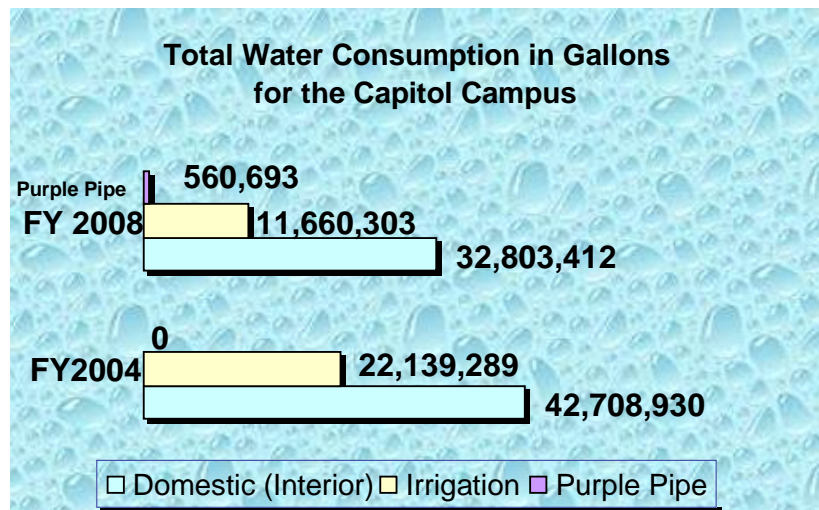
**Comments:** Emergency fuel use purchases: 55 gallons of propane and more than 7,500 gallons of diesel.



Consumption of natural gas has increased due to several steam leaks over the past year. Extended hours of building operation have also contributed to the increase.

## Water Progress to Date:

- 45% decrease of Capitol Campus potable water from 44,700 gallons a day down to 23,700.
- 24% reduction in the potable water for interior water use on the Capitol Campus from 2004.
- Efficiency measures identified in the Capitol Campus water audit will begin in the fall 2008.
- Replaced bottled water dispensers in various areas of GA with filtered tap water dispensers to reduce electricity and cost of purchased water. This also reduces transportation and energy related to making and delivering bottles on campus.
- Metering of energy and water by building is being required for all state LEED projects.
- Ability to add water into Energy Savings Performance Contracting has helped increase water saving projects.
- On-going efforts to add separate water meters for each Capitol Campus building to track domestic, irrigation and cooling tower water usage. Domestic water is currently used for all interior buildings and includes; water fountains, sinks, toilet flushing and the cooling tower.
- GA converted three water accounts to reclaimed water in January 2007 to irrigate Heritage Park, Marathon Park and along Deschutes Parkway. No buildings were converted to use reclaimed water.



The 2008 water consumption total includes 43 water accounts, both domestic and irrigation. Water consumption on the Capitol Campus was reduced by repairing leaks at Tivoli Fountain, a leaking water main at the General Administration building and Employment Security Building, and increased awareness of water conservation.

## Challenges:

- 3.3% increase in energy use (gas and electricity) compared to 2003 levels.
- The GA Building was not fully occupied in 2003. It is fully occupied now, which accounts for some of the increase in campus energy use.

## GA Energy Conservation Program Description:

Energy Savings Performance Contracting (ESPC) provides a way to use utility savings to pay for existing building energy upgrades. The program has helped state agencies, universities, community colleges and school districts throughout the state reduce electricity consumption by about 156 million kilowatts since projects began in 1986. That is enough electricity to power about 13,500 homes annually, helping taxpayers avoid about \$76 million in utility costs.

### Energy Savings in Public Facilities

<i>Quarter 1 FY '08</i>	<i>July-September 2007</i>	<i>Total</i>	<i>880,583 kWh</i>
<i>Quarter 2 FY '08</i>	<i>October-December 2007</i>	<i>Total</i>	<i>989,083 kWh</i>
<i>Quarter 3 FY '08</i>	<i>January-March 2008</i>	<i>Total</i>	<i>0 kWh</i>
<i>Quarter 4 FY '07</i>	<i>April - June 2008</i>	<i>Total</i>	<i>16,754,334 kWh</i>
<i>Total For FY '08</i>			<i>18,624,000 kWh</i>
<i>*Energy Savings are annual savings from new projects installed in FY 08</i>			

**Comments:** The total electricity savings for 2008 is equal to the amount of power used by about 1,380 homes annually.

### Additional GA Energy Program Services:

- **The Energy Life Cycle Cost Analysis (ELCCA)** encourages energy efficiency in new construction by evaluating the total cost of ownership of several competing design alternatives. Approximately 75 projects go through this process annually.
- **Resource Conservation Management (RCM)** focuses on reducing energy and water costs on the Capitol Campus. Savings will be realized through changes in building occupant behavior, improvements in maintenance practices, educational programs and catching billing errors.
- **Building commissioning** ensures that building systems are operating according to design, and can save thousands of dollars in operating costs for new and existing buildings.

# Reduce Toxins

## Goal 5

Environmentally preferred products and services are available to our clients through GA-managed state contracts.

- Added six new contracts for FY 2008.
- Increased green cleaning products on the Capitol Campus.

### Reduce use of toxic products and toxic chemicals

Agency Objectives /Targets	Progress to Date (Measurables)
<p><b>5.1</b> State Procurement will add three new Environmentally Preferred Products/Services (EPP) contracts each year.</p>	<p>Six new EPP contracts have been added:</p> <ul style="list-style-type: none"> <li>• Hybrid Vehicles (Honda) (04907)</li> <li>• WSCA Janitorial Products (00307)</li> <li>• Electric Cab Truck (AD502)</li> <li>• Recycled Paint (02007)</li> <li>• Mattresses (00708)</li> <li>• Postage &amp; Mail Processing Equipment (06907)</li> </ul>
<p><b>5.2</b> 50% of GA janitorial products used will be Green Seal approved or equivalent EPP.</p>	<ul style="list-style-type: none"> <li>• 66% of janitorial products used daily on the Capitol Campus for cleaning are Green Seal or equivalent. (2 of the 3 daily cleaners used are Green Seal approved).</li> </ul>
<p><b>5.3</b> Eliminate all persistent toxins in GA-managed landscaping and reduce overall toxins by 30% below 2003 levels.</p>	<ul style="list-style-type: none"> <li>• The Capitol Campus has reduced its toxic chemical use by 80% from the 2003 base year and does not use persistent toxins.</li> </ul>

#### **Progress to Date:**

- Working with Department of Ecology to educate and train customers about the use of environmentally preferred products.
- State Procurement offers an online Purchasing Reference Guide for environmentally preferred products.
- Capitol Campus B&G staff use paints with low volatile organic compounds to reduce health and environmental risks.
- Motor Pool eliminated the use of asbestos brake linings in state vehicles and is evaluating alternatives to lead wheel weights.
- GA bid and lease documents will include language prohibiting the purchase and require the recycling of materials with known hazardous toxics as identified in the Executive Order 04-01.

#### **Challenges:**

- Educating and working with customers to understand their needs and to address concerns about perceived cost differences with EPPs.
- Landscaping work requires the use of some fungicides and pesticides that do not contain persistent toxins due to situations where there are no organic options available to control the spread of particular pests. GA contracts with a private vendor for herbicide spraying for control of purple loosestrife, a noxious weed.

# Education & Outreach

As a leader in sustainability, GA strives to be a model agency for the public sector. Products and services provided to our clients will help them meet their sustainability goals.

## **Progress to Date:**

Sustainable efforts are being integrated where feasible at every level of GA. The following are ways GA communicates its sustainability efforts:

- Sustainability plan will be reviewed and revised annually by GA director and management team. Goals will be assessed and projected out for the next biennium.
- Divisions report quarterly on progress towards Strategic Plan objectives, and review and revise annually when appropriate.
- Annual progress report sent to the governor.
- State Procurement sends out regular broadcasts to customers announcing new contracting opportunities for improving sustainability efforts.
- GA's annual tradeshow, attended by about 650 customers and 400 vendors, includes several Environmentally Preferable Purchasing (EPP) training courses.

## **Additional Notes**

GA educates its employees and customers about sustainability and environmental policies by:

- Developing a sustainable Office Practices guideline.
- Encouraging each employee to do their part in implementing sustainable practices by printing and copying two-sided, using filtered instead of bottled water, using recycled content office products, green cleaning, and carpooling and other CTR methods.
- Sharing sustainable information, practices, and procedures with state agency facility coordinators at Quarterly Facility Services Advisory Board (FSAB) meetings.

GA is leading by example to motivate positive changes in the following areas:

**Green Building:** GA is a leader in the public-sector use and promotion of Green Building practices. GA's Green Building advisor participates in presentations for numerous public sector events and works with other states to help them establish similar programs. GA has also teamed up with the Department of Ecology to provide Green Building training for contractors of state projects. GA provides free Green Building training to other agency project managers interested in becoming a LEED-accredited professional.

**Resource Conservation Management:** GA's Resource Conservation Manager is working to save even more energy and water, and improving recycling efforts on the Capitol Campus. This model is getting attention from other state agencies that are interested in emulating this program.

**Green Cleaning:** GA's Green Cleaning program is seen as a model for other state agency custodial programs. GA's custodial manager makes presentations at many public-sector events, detailing the benefits and attributes of GA's Green Cleaning program.

**Efficient Motor Pool & Hybrid Vehicle Contract:** GA is a leader in the use hybrid vehicles in its fleet. This, along with the state contract for hybrid vehicles, is a model for other public agencies.

# Future Goals

Task List For 20 Year Goals		
	Goals	Objectives Year 2028
Goal 1	Implement Sustainable Building Practices	<p><b>1.1</b> 50% of new and major renovation, state-owned, GA-managed projects will be LEED Gold (the second highest rating from Leadership in Energy and Environmental Design: U.S. Green Building Council national design guidelines).</p> <p><b>1.2</b> 50% of new and major renovation, GA leased projects will be certified to LEED Silver for projects over 30,000 SF.</p> <p><b>1.3</b> Maintain LEED EB Silver rating for all existing buildings on the Capitol Campus over 10,000 SF.</p>
Goal 2	Reduce Transportation Associated Pollution	<p><b>2.1</b> 90% of GA's Motor Pool rental vehicle fleet will be rated to achieve 30 mpg or better, and meet federal emission standards.</p> <p><b>2.2</b> 50% reduction per vehicle mile of fuel used by Motor Pool vehicles compared to the 2003 baseline.</p> <p><b>2.3</b> 15% reduction in GA employee single-occupancy vehicle (SOV) use through Commute Trip Reduction (CTR) Program.</p> <p><b>2.4</b> 90% of daily rental cars by GA will be economy/compact class (&gt;30 mpg).</p> <p><b>2.5</b> 95% of GA's diesel vehicles will use 20% biodiesel.</p>
Goal 3	Maximize Recycling, Minimize Waste and Use of Products with 100% Virgin Materials	<p><b>3.1</b> 50% reduction in office paper use per GA employee compared to 2004 baseline.</p> <p><b>3.2</b> 90% of copy paper purchased by GA will be 100% recycled content.</p> <p><b>3.3</b> 99% of GA office paper will be recycled.</p> <p><b>3.4</b> 100% of janitorial paper products purchased by GA or offered by Central Stores will be of 70% recycled content and chlorine free, if available in the market.</p> <p><b>3.5</b> 90% of all solid waste in GA and GA managed facilities will be recycled.</p> <p><b>3.6</b> 50% of food waste from GA managed buildings will be composted.</p>
Goal 4	Minimize Facility Related Energy and Water Use	<p><b>4.1</b> 50% reduction of energy use on a square footage basis in state-owned and state operated facilities compared to 2003 baseline.</p> <p><b>4.2</b> 100% reduction of potable water use for GA managed grounds (2004 baseline).</p> <p><b>4.3</b> 50% reduction of interior potable water use per square foot compared to 2003 baseline.</p> <p><b>4.4</b> Install 15 renewable energy projects and/or purchase 30% Green Power for the GA-owned and managed projects.</p> <p><b>4.5</b> Energy Star rating (80) for all buildings on the Capitol Campus.</p> <p><b>4.6</b> Achieve Energy Star rating (75) for all GA-managed leased bldgs.</p> <p><b>4.7</b> Increase energy saving from Energy Performance Contracting by 40% compared to 2005 baseline.</p>
Goal 5	Reduce Use of Toxic Products and Use of Toxic Chemicals	<p><b>5.1</b> State Procurement will add three new Environmentally Preferred Products/Services (EPP) contracts each year.</p> <p><b>5.2</b> 95% GA janitorial products used in GA-managed facilities will be Green Seal approved or equivalent.</p> <p><b>5.3</b> Eliminate all persistent toxins in GA-managed landscaping and reduce overall toxins by 95% below 2003 levels.</p>

# Achievements

2008

- GA's Energy Team was a finalist for the 2008 Governor's Award for Sustainable Practices.
- GA's Energy Team worked with 2007 Legislature to add water conservation projects to state law (RCW 39.35A) on Energy Performance Contracting.

2007

- GA Motor Pool reached a total of 779 hybrid vehicles, representing 43% of the entire fleet.
- The combination of hybrid and alternate fuel (E85) vehicles equals 93% of the fleet, the highest percentage of any state fleet in the nation.

2006

- The Northwest Energy Coalition recognized the GA Energy Program manager for his team's multi-year effort that cut electricity and natural gas use in half on the Capitol Campus.

2005

- The assistant director of Buildings and Grounds received an award of appreciation for his leadership, dedication and work in making the Capitol Campus the most energy-efficient campus in the nation.

2004

- GA's Energy Team worked with five client agencies to receive the Governor's Energy Efficiency awards.

**FY2008 Energy Reporting\*** GA is collecting energy information on September 1 annually. Please share the information here, and supplement if you have other energy information. Capital Campus energy use is reported by GA.

**Reported Square Footage** The square footage of facilities you are able to report energy consumption for

**Not Reported Square Footage** The square footage of facilities you are NOT able to report energy consumption for

**Electricity** Any electricity that your agency is metered for.

**Natural Gas** Any natural gas that your agency is metered for.

**Biomass** Wood waste, wood pellets, biogas or similar used to generate heat, steam and/ or electricity. Biomass Btu values to be determined by reporting agency.

**Fuel Oil** Diesel, gas or bunker fuel used to generate heat, steam and/ or electricity.

**Propane** Propane purchased for electricity, heating, cooking.

**On-site renewable energy** Solar, wind or small scale hydro built on agency property and fed back into the energy grid.

**Energy offsets** Green tags or other energy offset purchased to reduce agency carbon emissions.

**Potable water** Drinking quality water. If your water information is not differentiated, please put totals in this column.

**Irrigated water** Water used for irrigation - if separately metered

**Non-potable water** Water other than potable- ground or surface sources such as rain water or Reclaimed waste water.

**CCF = 100 cubic feet** 1 Cubic Foot = 7.48 gallons

New data separated for analysis

Not required by EO but please input if you have it

Agency	FY2008 Total Square Footage	FY2008 Reported Square Footage	FY2008 Not Reported Square Footage	FY2008 Electricity kWh	FY2008 Natural Gas Therms	FY2008 Fuel Oil Gallons	FY2008 Propane Gallons	FY2008 Biomass volume	FY2008 Biomass units	FY2008 Onsite renewable generated in kWh	FY2008 Energy Offsets purchased in kWh	FY08 Potable Water Usage in CCF	FY08 Irrigation Water Usage in CCF	Non-potable Water Usage in CCF
General Administration	3,334,637	3,334,637	NA	56,177,165	1,487,498	55	0	0	0	20,000	8,000,000	43,855	15,589	750

\*If only cost is available, please report it in the narrative report.

Betty Kunz 11/19/08 converted reported water usage to CCF

**FY08 Transportation Fuel, Vehicle Miles Traveled and Fleet**

**Gasoline** Report all gallons of gasoline purchased for vehicle use. Gasoline used for heating should be reported in the Energy section.

**E85** Report ethanol only if purchased at the E85 blend level (85% ethanol, 15% petroleum gasoline). Most gasoline in WA State is E10 already.

**Petroleum Diesel** Report all gallons of conventional diesel purchased for vehicle use (report fuel used for heating/energy in energy reporting)


**Biodiesel** Report only the amount of B100 your agency purchases in bulk, example: (if you purchase 100 gallons of B10 then only report 10 gallons of B100)  
Report biodiesel purchased from WSDOT in the narrative Word document only

**Aviation** Report all gallons of aviation fuel purchased

**Vehicle** A passenger-carrying vehicle which has a primary duty for shuttling employees, not deliver equipment, etc.

**Vessel** Boats, ships, ferries that are run on state business (report fuel use separately if possible)

 Data separated for analysis

 New data separated for better analysis

Agency Name	FY2008 Fleet Gasoline	FY2008 E85 (Ethanol) purchased for vehicle use	FY2008 Petroleum Diesel purchased for vehicle use	FY2008 Bulk Pure Biodiesel (B100) purchased for vehicles	FY2008 Fleet Miles Traveled	FY2008 Number of 4WD exception vehicles purchased
General Administration Motor Pool as a whole	1,082,450	0	0	0	25,438,685	2

\*Table 49. Light-Duty Vehicle Miles per Gallon by Technology Type [http://www.eia.doe.gov/oiaf/aeo/supplement/sup\\_tran.xls](http://www.eia.doe.gov/oiaf/aeo/supplement/sup_tran.xls)

Energy Information Administration's Annual Energy Outlook 2008 report <http://www.eia.doe.gov/oiaf/aeo/>

**POV reimbursement rates current and historic**

Effective 7/1/08	.585 per mile
1/1/08 through 6/30/08	.505 per mile
1/1/07 through 12/31/07	.485 per mile
1/1/06 through 12/31/06	.445 per mile
9/15/05 through 12/31/05	.485 per mile

**FY08 Transportation Fuel, Vehicle Miles Traveled and Fleet**

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- Biodiesel** Report only the amount of B100 your agency purchases in bulk, example: (if you purchase 100 gallons of B10 then only report 10 gallons of B100)  
Report biodiesel purchased from WSDOT in the narrative Word document only
- Aviation** Report all gallons of aviation fuel purchased
- Vehicle** A passenger-carrying vehicle which has a primary duty for shuttling employees, not deliver equipment, etc.
- Vessel** Boats, ships, ferries that are run on state business (report fuel use separately if possible)
- Agency Leased (MP Perm)** A vehicle that is leased from the GA State Motor Pool by an agency for long-term use.
- Agency Owned (AOV)** A vehicle that is purchased and owned by an agency. (The agency retains the title and/or is registered as the owner.)
- GA Fleet (MP Daily Trips)** General Administration's Daily use Motor Pool; utilized by agencies for short term trip rentals.
- Personally Owned (POV)** Personally Owned Vehicles that are used for state business. Calculate miles by dividing total dollars spent by rate of agency reimbursement per mile. Calculate gallons of gas from POV by dividing POV miles by a 20.26 rate of fuel economy.\*  
(POV) If your agency does not use POV please place N/A in cell P19.

Data separated for analysis  
 New data separated for better analysis

Agency Name	FY2008 Gasoline Agency Leased (MP Perm)	FY2008 Gasoline GA Fleet (MP Daily Trips)	FY2008 Gasoline Agency Owned (AOV)	FY2008 E85 (Ethanol) purchased for vehicle use	FY2008 Petroleum Diesel purchased for vehicle use	FY2008 Bulk Pure Biodiesel (B100) purchased for vehicles	FY2008 Gasoline purchased for vessels	FY2008 E85 (Ethanol) purchased for vessels	FY2008 Diesel purchased for vessels	FY2008 Biodiesel purchased for vessels	FY2008 Fuel purchased for aviation	FY2008 Agency Leased Vehicles Miles Traveled (MP Perm)	FY2008 GA Fleet Miles Traveled (MP Daily Trips)	FY2008 Agency Owned Vehicle (AOV) Miles Traveled	FY2008 Personally Owned Vehicle Miles Traveled (POV)	FY2008 Gasoline calculated from POV reimbursement (20.26 avg fuel economy)	FY2008 Number of 4WD exception vehicles purchased
General Administration	54,731	2,976	19,422	0	12,043	68,478	NA	NA	NA	NA	NA	685,076	68,208	731,645	206,514	10,193.00	0

\*Table 49. Light-Duty Vehicle Miles per Gallon by Technology Type  
 Energy Information Administration's Annual Energy Outlook 2008 report  
[http://www.eia.doe.gov/biaf/aeo/supplement/sup\\_tran.xls](http://www.eia.doe.gov/biaf/aeo/supplement/sup_tran.xls)  
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1/1/06 through 12/31/06	.445 per mile
9/15/05 through 12/31/05	.485 per mile

**FY08 Paper Consumption:** If these supplies are purchased through Central Stores, they can provide a purchase report for your agency.

**Paper definitions**

**Office paper** Paper that is purchased already cut to 8.5 x 11 inches for use in printers and copiers

**Virgin** Paper that is made from 100 percent non-recycled fibers

**30-40% recycled content** Paper that is made with 30-40 percent post-consumer recycled fibers

Paper that is made with 100 percent recycled content with at least 50% post-consumer recycled fibers

**100% recycled content**

**Janitorial** Toilet tissue, paper towels used in restrooms and coffee/break rooms.

**White Office Paper** Pounds of white office paper that is recycled through a service. Recycling on Capital Campus is reported by GA.

Not required by EO but please input if you have it

- Comments: Recycled content is not tracked separately. B&G is in process of purchasing a scale to separate the weight of recycled materials.

Agency	FY2008 Virgin office paper (reams)	FY2008 30 -40% recycled content office paper (reams)	FY2008 100% recycled content office paper (reams)	FY2008 Recycled Content Janitorial paper products (cases)	FY2008 Virgin Janitorial paper products (cases)	FY2008 Office Paper recycled (pounds)	FY2008 Garbage sent to landfill in tons	FY2008 Material composted	FY2008 Other Material recycled in tons
General Administration	142	2,779	2,260	100% of janitorial paper purchased is 50% recycled content and processed chlorine free.	NA	99%	887	0	1564

Added together for column J:  
 other recycled 1034 tons  
 metal recycled 481 tons  
 solid waste recycled 49 tons