

# The "Skinny" on APM 4-5 (Policy for the Purchase of Printers, Faxes, Copiers, Paper, and Toner)

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You may have seen Monette McGuire, Kelly Beauchaine, and myself (A.K.A. The Printer Police) walking through your agency, taking an inventory of your printers, faxes, copiers, and scanners, and asking questions about your area's printing, copying, scanning, and faxing needs. You may have been wondering why we would want to change something that seems to be working just fine, or you may have been thinking, "they are going to have to pry my DeskJet printer out of my cold dead fingers". In either case, you should understand why we are doing this project and how it got its start.

In early 2007 a cross-agency staff team was formed to investigate a suggestion made to the Mayor's Office. The suggestion was to reduce the number of DeskJet printers on the City network in order to reduce printing costs and make the City's printing solution more sustainable. Because the Mayor's The Natural Step (TNS) initiative was just getting underway at this time, it was decided that this would be a good fit for a TNS project. In order to garner input from city staff, a focus group was formed, which consisted of agency office managers, administrators, and support staff from approximately 13 agencies. The focus group reviewed our draft policy and made suggestions that were incorporated into the final policy. Following is some data that the team put together as we started to look at the printing, faxing, scanning, and copying environment that existed at the time:

- As of January 1, 2007 the City had 1050+ printers, scanners, faxes, and copiers/multifunction devices in use in City agencies.
- Annual spending for toner and ink replacement cartridges in 2007 was \$100,000+
- The true cost of owning a \$649 black and white laser printer is \$5400 over 3 years
- The true cost of owning a \$129 ink jet printer is \$1600 over 3 years (and that's printing only 25 sheets per day)
- DeskJet printers and fax machines have printing costs of 35-85 cents per page whereas Multifunction Devices (MFD) can reduce these costs to 7 cents per page.
- Costs per page to print to a local printer as compared to a network printer are approximately triple.
- The paperless society is a myth; Email has actually increased printing volume by 40%
- A study by IT industry trade magazines estimate that 75% of all print output is waste.

Using data that was provided by printer manufacturers and EnergyStar.org, we were able to put together the following scenario with projected costs and savings based on replacing five DeskJet printers, a fax machine, and a scanner with one MFD. This is a typical scenario that we have found in multiple agencies:

	Small Office with 5 DeskJet Printers, 1 Fax and 1 Scanner	MFD
Pages printed daily/annually	150 / 37500	150 / 37500
Cost per Page	60 cents	9 cents
Cost for all Pages	\$ 22,500	\$ 3,375
Leasing / Write Off	\$ 400	\$ 1519
Power in Standby	70 W	5 W
Annual Energy Consumption	613.2 kWh	43.8 kWh
Annual Energy Cost	\$ 64	\$ 4.5
Annual Paper sheets used	37,500	22,500
Annual Paper Cost	\$ 225	\$ 135
Total Annual Cost	\$ 23,189	\$ 5033
<b>Money Saved Annually</b>	\$ 0	<b>\$ 18155</b>
<b>Paper Saved Annually</b>	0	<b>15,000</b>
<b>Energy Saved Annually</b>	0	<b>569.4 kWh</b>
<b>Annual Reduced Landfill</b>	0	<b>3.5 ft<sup>3</sup></b>

The team found this data to be compelling and decided to develop a sustainable policy that would save energy, natural resources, and financial resources for the City of Madison and optimize the City's printing operations. The APM has been written and signed by the Mayor and now our focus is to implement this policy, which brings us back to what Kelly, Monette,

and I are doing in your agencies.

The most challenging part of implementing the policy is to find a balance between reducing the number of devices and ensuring that staff can effectively complete their work with the devices that we recommend. The use of stand-alone devices or personal printers must be justified with legitimate business needs or a documented accommodation. The full context of the APM is available at: <http://www.ci.madison.wi.us/mayor/apm/4-5.pdf> . Following are the guidelines that we use as we evaluate printing, faxing, scanning, and copying needs within your agency:

1. The most efficient number of office equipment devices (to include multifunction devices, shared printers, personal printers, faxes and scanners) necessary to meet operational productivity is in place.
2. Shared networked devices are in use to the maximum extent possible.
3. Ideal printer to employee ratio shall be seven, or more, employees per device. Increase the employee to printer ratio by eliminating personal desktop printers through the installation of multi-function devices or network printers, which are shared in work areas.
4. Combine multiple functions into one multi-function device (fax, copier, printer, scanner) whenever one or more of these functions is needed in conjunction with printing.
5. Deploy the use of office equipment in the following order of preference:
  - 1) Multifunction Devices - Copier/Printer/Fax/Scanner
  - 2) Shared Networked Laser Printers
  - 3) Stand-alone Fax Machines
  - 4) Stand-alone Scanners
  - 5) Stand-alone Laser Printers
  - 6) Stand-alone DeskJet / Inkjet Printers

Recommendations to agencies are nearly finished with just a handful of assessments left to complete. In all cases we have tried to be flexible and have "negotiated" an acceptable solution with staff within your agency. Due to fiscal restraints it may take up to five years to implement our recommendations, but we will stay the course on this project. Our team would like to thank you for participating in this important project that will improve our environment, reduce costs, and make our printing solutions more sustainable.

For more tips about how you can help make printing on the City of Madison network more sustainable please see: [http://employeenet/IS/IShelpdesk/announcements/view.php?ann\\_id=54](http://employeenet/IS/IShelpdesk/announcements/view.php?ann_id=54)

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