



Procedure Title:  
System-wide Print Resource Use - Procedure

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This procedure item applies to:  
Community Colleges  
Health Science Centers  
State-Operated Campuses

Category:  
Facility Management / Safety  
Financial  
Information Security  
Information Technology

Responsible Office:  
[Chief Financial Officer](#)

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## Summary

This procedure sets forth guidelines to assist state-operated, statutory, and community colleges of the State University of New York (University) to define the appropriate and acceptable use of University office print resources by all its employees and authorized individuals. Specifically, it outlines steps for campuses to reduce cost, waste, print, and paper; simplify and standardize the printer fleet (both single-function and multi-function printers), and secure and optimize the print environment. This procedure does not include devices with a primary purpose other than to support the office printing environment, such as specialty printers like label, barcode, wristband, wide-format or 3D printers.

Based on an inventory and fleet assessment of the existing print landscape, as well as an analysis of the total cost of ownership (purchase/lease cost, maintenance, supplies, paper, and physical space requirements), the University has made recommendations for a print strategy, including best practices for printing and copying, which devices should be removed from or remain in service, which devices should be reallocated, and where devices should be located in relation to their users and other print devices.

Employees and authorized users are expected to be an active participant as SUNY strives to print “smart” and print less. Doing so saves trees, reduces energy consumption, and saves water (12 oz. per sheet of paper). Reducing print volumes reduces paper consumption and waste, as well as reduces the number of printing devices which leads to decreased energy consumption. By following this procedure, SUNY’s carbon footprint is further decreased in accordance with SUNY’s stewardship and sustainability goals.

In this document, the word “printer” and “device” are used interchangeably and are in reference to any locally attached device (local), single-function printer (SFP), multi-function device (MFD), or a combination of local, SFP, and MFD.

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## Process

## I. OFFICE PRINT LEADERSHIP TEAM

### A. Composition:

1. Representatives from multiple disciplines (campuses and System Administration) and
2. Print subject-matter experts (SUNY and non-SUNY).

### B. Duties:

This group shall:

1. Develop and communicate print strategy via a System-wide policy and procedure;
2. Champion and model the desired print behavior, sustainability, security and efficiency;
3. Share the progress and challenges of the office print initiative, as well as emerging trends in office printing;
4. Define device design guidelines, standard configurations, and defaults in consultation;
5. In conjunction with Chief Information Security Officer, assess security implications and required capabilities;
6. Negotiate agreements for hardware, maintenance and supplies pricing;
7. Work with Campuses to
  - a. Implement and execute solicitations and contracts related to print;
  - b. Collaborate on the new design for device optimization, and lessen print output;
  - c. Lead change management and communications that encourage the usage of more digital, less paper;
  - d. Identify paper intensive processes for digital transformation and implement when practicable;
  - e. Collect and advocate for best practices;
  - f. Use business intelligence and analytics to help Campuses assess print volumes, user behavior and find opportunities for savings based on benchmarks internal and external to SUNY.
8. Monitor compliance to the policy and procedure;
9. Approve exceptions.

## II. EQUIPMENT

### A. Authorized and Supported Devices

1. Only University approved and procured devices and supplies will be used and supported within the University.
2. All supplies (excluding paper and staples) are included for every University printer identified on the Office Print Services contract.
3. All devices must be networked.
  - a. Local (non-networked) Desktop printers, also known as personal printers, are prohibited.
  - b. Local University-owned Desktop printers currently in service will be removed and replaced with an alternate print solution.
  - c. Employees and authorized users may not bring in their own printers or supplies from home to use.
4. All used University printers will be reclaimed by [campus designee] for reuse, recycling, or proper disposal. Disposal of any print equipment must follow the appropriate New York State, appropriate Municipal and University guidelines.
5. No new print devices will be acquired, installed, or permitted without evaluation and prior approval by the Office Print Leadership Team and must be made from the University standards list for office printing below:

Speed range	Type	Volume range	Monthly Volume Assumption for Pricing	% of New Fleet	Life expectancy
30-40ppm	A4 mono SFP	2.5-7.5K	2,750	<5%	>.75M
45-55ppm	A4 mono MFD, with simple	2.5-25K	4,000	>80%	>1.5M

	stapler				
50-60ppm	A4 mono SFP	2.5-50K	3,750	<10%	>1.5M
60-70ppm	A3 color MFD, with full finisher	15-75K	20,000	<5%	>5M

#### B. Device Distribution and Placement

1. The distribution of print devices (including model and type) will be determined based on output volumes and business requirements. Devices will be distributed to ensure:
  - a. There is a clear understanding of the total cost of the current print environment (devices, consumables, service and support, owned and leased);
  - b. Appropriate utilization;
  - c. Business processes and workflows are supported;
  - d. Availability of secure/private printing where needed;
  - e. Availability to copy, scan, and fax functionality where needed;
    - i. Availability of color printing where justified (via exception policy); and
    - ii. Device security settings and standards are implemented.
2. Actual print output device allocation may vary depending on such factors as space configuration, print volume requirements, proximity to other print devices, and clinical/non-clinical needs.
3. Location of print device(s) will be determined by the number of users, the appropriate distance of those users to the device(s), and the distance between other print devices to optimize device utilization.
4. MFDs will always be the preferred device of choice with SFPs used to provide increased access when warranted.
5. The guidelines in this procedure must be considered in all construction (new or renovation).
6. Generally, devices will be placed:
  - a. No closer than 275 feet from each other for mono devices and
  - b. No closer than 900 feet from each other for color devices.

#### C. Default Configurations

1. All University printers will be deployed with the following default configuration:
  - a. Duplex (two-sided) printing.
  - b. Mono printing.
  - c. Color printing, due to its increased cost, should be restricted to the most essential communications and used as an exception.
  - d. Secured and enabled with pull-printing, which, requires users to authenticate before using print, scan, copy, or fax at the device.
  - e. All multi-function printers will be configured for Scan-to-Email functionality.
  - f. The manufacturer default ENERGY STAR settings for sleep and powering down will be retained on all imaging equipment to maximize energy savings.

#### D. Device Optimization

1. To optimize device usage and effectively allocate devices throughout the University, preliminary target ratios for cost and the number of users per print device are:
  - a. Total Cost per printed page not to exceed \$0.01x for mono and click rates of <\$.004 for MFDs and <\$.006 for SFPs.
  - b. Total Cost per printed page not to exceed \$0.03x for color and click rates of <\$.03 for MFDs and <\$.04 for SFPs.
2. Maintenance, Repair and Supplies
  - a. Employees and authorized users shall report any malfunctioning printer immediately by contacting the number on the Service/Supply label located on the printer.
  - b. When placing a service call user will need to provide:
    - i. Site address and location (where Service will take place);
    - ii. Contact name and phone number; and

- iii. The following information available on the label located on every print device:
  - Serial Number;
  - IP Address;
  - Make / Model;
  - Print Device Name;
- c. Employees and authorized users shall not order, buy, submit payment for, or respond to telephone, fax, email, or other methods of communications, for any University print devices, maintenance, or supplies.

### III. PRINT PRACTICES

- A. Budgets for office printing within each campus are to be centralized. Office printing budget items include the variable cost components to print, such as service or maintenance agreements, and all supplies including toner, ink and paper.
- B. Campus or System-wide contracts are to be used to ensure automatic supplies replenishment and service and maintenance for the printing devices.
- C. Buying supplies, single-function printers (SFP) and multi-function devices (MFDs) outside of the established campus or System-wide contract (e.g., via separate purchase order or procurement card (P-card) with any SUNY funds, e.g., cash reserves, rollovers, etc.) is prohibited.
- D. Grant proposals shall not include the purchase of supplies, single-function printers (SFP) and multi-function devices (MFDs).
- E. SUNY employees and authorized users should be mindful of the cost of print and shall keep the usage of print and paper to an absolute minimum by adhering to the following:
  - 1. Limit the publication, printing, and storage of hard copy documents and presume that information should be provided and retained in electronic format, when permitted by law, and consistent with applicable document and records retention policies and requirements.
  - 2. Print:
    - a. Only University business
      - i. Personal printing is prohibited and may lead to disciplinary action as determined by individual campus guidelines;
    - b. Only what is needed (use print preview prior to printing);
    - c. Only when necessary; and
    - d. By using the lowest cost printing device and configuration available:
      - i. Duplex, mono printing default settings;
      - ii. Draft, economy or fast draft mode printing.
      - iii. Use "Shrink to Fit" or "Shrink One Page."
    - e. Multiple slides or pages from a presentation or document on each page.
    - f. Remove unnecessary backgrounds, shading, and graphics from print jobs.
    - g. Avoid printing one-page documents (e.g., email and Internet web pages) unless there is a business requirement to do so.
    - h. If the total number of pages (number of originals x pages per original) exceeds 100, consider sending the print job to the campus print shop. If a print shop is not located on your campus, use alternatives, such as:
      - i. Providing as a PDF via email or sending to a shared location;
      - ii. If hard copies are required, the use of a high-speed MFD will be the most economical and efficient way to print.
  - 3. Use print alternatives:
    - a. Share and distribute files electronically when possible.
    - b. Do not print materials or presentations for meetings.
      - i. Use conference room presentation technology, web conferencing, or document sharing repositories whenever possible.
      - ii. Send the information (pre-reads) out ahead of time in electronic format.
      - iii. Encourage and remind attendees not to print the materials and inform them you will be displaying the information using conference room technology.

- c. If you must print materials or presentations for meetings:
  - i. Use the 'Handouts' layout with 2, 3 or 4 slides per page which provides room for notes.
  - ii. Make use of duplex and n-up or print multiple slides per page.
- d. Instruct vendors to comply with SUNY procedures by:
  - i. Sharing information with SUNY electronically; and
  - ii. When presenting in meetings, do so via conference room presentation technology or web conferencing,
- F. All users of print, fax, copy and scan activity, as well as all SFPs and MFDs are monitored by SUNY approved software for:
  - 1. Security;
  - 2. Appropriate usage;
  - 3. Supplies and maintenance;
  - 4. Compliance; and
  - 5. Benchmarking and analytics to help every campus continuously improve printing habits, carbon footprint and the cost/performance of each department.
- G. The specific content of a document is not captured. The campus may review outliers (be it output volume, use of color, total cost of printing pages, etc.) to better understand and, if necessary, improve the print practice.

#### IV. EXCEPTIONS

- 1. Exceptions to this procedure will be rare and only in situations that involve critical business needs or legal requirements (e.g., Federal or State regulations, Americans with Disabilities Act).
- 2. Exceptions will be granted on a case-by-case basis and will require
  - 1. for a critical business need:
    - i. a business case justification;
    - ii. authorization from the requesting President or designee; and
    - iii. approval from the Office Print Leadership Team.
  - 2. for a legal requirement:
    - i. written confirmation from campus counsel; or
    - ii. written confirmation from campus ADA coordinator.
- 3. When legal regulations or protocols require exceptions to this procedure, employees are authorized to override the default printing and document settings (e.g., single-sided printing and copying).
- 4. Confidentiality, because of the availability of private/secure print features, or convenience are not valid reasons for the need of a local desktop printer.

#### Definitions

**Authorized individuals** – Any person other than University employees who are granted permission to use University print resources, including but not limited to students and consultants.

**Barcode printers** - A barcode printer is a computer peripheral for printing barcode labels or tags that can be attached to, or printed directly on, physical objects. Barcode printers are commonly used to label cartons before shipment, or to label retail items for inventory purposes.

**Campus network** – The dedicated network or networks at each campus that the user's workstation is connected to, either with a wire or wirelessly, that enables their work to be done and print jobs to be submitted and printed.

**Centralized Printing Budget (by campus)** – The process of assimilating all costs that every department spends on print supplies, maintenance and paper and bringing it together under one campus budget vs departments using their individual budgets to track, order and pay for these items.

**Critical business needs** – Documents and presentations essential to the running and operation of the university that the

user believes are better suited to be printed vs shared electronically or administrative processes which, for compliance or regulatory issues, requires a printed document.

**Device utilization** – The amount of output volume being produced on any given device. The higher the utilization, the more volume that fixed cost component can be spread over. For example, if the device has a fixed cost of \$100 per month and the volume is 10,000 pages per month, it is better utilized as compared to that same device running 1,000 pages per month.

**Duplex printing** – Printing on both sides of a sheet of paper.

**Label printer** - A label printer is a computer printer that prints on self-adhesive label material and/or cardstock (tags).

**Locally-attached device (local)** – A device that is connected directly or wirelessly to a workstation with only one user mapped to the device. Also commonly referred to as a “personal” or “desktop” printer.

**MICR (magnetic ink character recognition)** - Printers are used to verify the legitimacy or originality of paper documents, typically checks. Special ink toner that is sensitive to magnetic fields, is used in the printing of certain characters on documents.

**Mono** – Black and white.

**Multi-function device (MFD)** – A print output device that performs multiple (more than one) task such as printing, copying, scanning, and faxing.

**Print defaults and standards** – Pre-set properties on print devices which may include but not limited to functions such as mono (vs color) or duplex (vs single-sided) pages. Standards include the characteristics of the devices that SUNY has determined to be most acceptable, which may include, deploying devices that only print letter (8.5 x 11”) or legal (8.5 x 14”) vs ledger (11x17” pages).

**Secure print devices** – The process of requiring a user to verify their identity before the features of the output device are enabled. After a user submits a print job, the job is held on a server (either on-premises or in the cloud), or a user’s workstation, and **only released when the user is present and authenticates at the device**. Once the user authenticates, their print jobs submitted can either be printed or deleted in the event multiple print jobs are submitted. Print jobs not selected to be printed will be deleted based on predefined criteria. Sometimes referred to as “pull printing” or “follow me printing” as the user can authenticate and release print jobs from any device that is on the campus network.

**Single-function printer (SFP)** – A print output device that only performs one task, most often just printing as opposed to just scanning or just faxing.

**3D printers** – Also known as additive manufacturing or fabrication printing, 3D printers use a process of making three dimensional solid objects from a digital file. In an additive process an object is created by laying down successive layers of material until the object is created. Each of these layers can be a thinly sliced horizontal cross-section of the final product.

**Total Cost per Copy (TCC)** – Represents the total cost of ownership (TCO), which includes the fixed cost of the hardware (either the lease, rental or depreciation charge) combined with the cost of supplies and maintenance; divided by the monthly usage of the device (Average Monthly TCO/Monthly Usage). Sometimes paper is included in the TCO calculation.

**Wide format printers** - A wide-format printer is any printer with a maximum paper roll width of between 18 and 100 inches. In contrast, the biggest sheet of paper in the office is letter 8.5 x 11,” legal 8.5 x 14” or ledger 11x17.” Wide-format printers are used to make posters, to print on textiles, wallpaper, and more.

**Wrist band printers** - Hospital wristbands are a commonly used safety device for identifying patients undergoing medical care.

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## Forms

[Print Procedure Request Form](#)

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## Related Procedures

[SUNY Procedure 7553](#) - Purchasing and Contracting (Procurement)

[SUNY Procedure 7595](#) - PROPERTY CONTROL SYSTEM MANUAL

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## Other Related Information

[System-wide Print Resource Use](#)

[Executive Order No. 4](#)

[GreenNY: State Purchasing and Operations](#)

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## Authority

Administrative policy issued by SUNY System Administration on February 1, 2021.

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## History

SUNY assisted by Pharos, an independent print consultant, assessed the University's print landscape - print devices, print volume and type (mono or color and size), and existing campus managed print contracts. The assessment was conducted by the deployment of Pharos software on campuses' print devices and servers and the manual review of campuses' contracts, invoices and payments. Trip reports were prepared for ten (10) Campus visits. Fifty-five (55) campuses and System Administration fully or partially deployed the print software and twelve (12) managed print contracts and associated payment records were analyzed by Pharos.

The results of the assessment showed SUNY prints more than 50 million pages a month. The System has more than 40,000 devices, of which approximately 50% are personal or desktop printers. Of the networked devices, most are owned by SUNY and are 10 years old or older. Additionally, the devices are often underutilized (output vs capacity) and/or misplaced (multiple devices located in close proximity to each other). The analysis also determined that SUNY spends approximately \$50M per year on printing with color printing accounting for more than 50% of the cost.

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## Appendices

There are no appendices relevant to this procedure.