



The Accessibility Debate of Large Print vs. Photocopying

Many organizations that use photocopying to enlarge regular print statements are doing themselves, their large print customers, and their brand a great disservice. To fully address accessibility issues, and communicate effectively with the low vision customer population, organizations must go beyond standard design methods.

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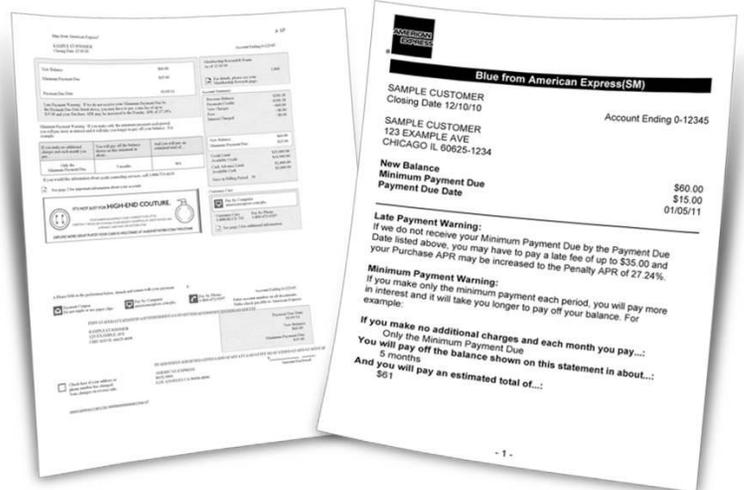
Due to existing accessibility legislation and other related standards and regulations, financial institutions must consider how they are communicating statement information to their low vision users and it is also good business. Financial clients with disabilities have a combined disposable income of an estimated \$20-25 billion per year. And the fully sighted community assigns brand equity to companies and organizations who consider inclusiveness and accessibility as first class operating principles.

(Reference: <http://drumbeatconsulting.com/market/>). In light of these facts, organizations must ask and answer some critical questions:

Can I afford to exclude this important audience simply because my products and services are not fully accessible?

If I have made an attempt to accommodate, how can I be sure that my solution is truly good enough?

Many organizations that use photocopying to enlarge regular print statements are doing themselves, their large print customers and their brand a great disservice. To fully address accessibility issues, and communicate effectively with the low vision customer population, organizations must go beyond standard design methods. Customer focused access must be taken into consideration to fully address the particular needs of this important audience.



In this white paper, you will learn:

- The fundamental problems surrounding photocopy enlargement
- Interpreting accessibility legislation as it relates to your business

- The features that contribute to the readability and accessibility of large print statements
- Feedback received from the large print community on their usability and readability preferences

Compelling statistics that you need to know

- Because of our longer life expectancy, we are experiencing loss of physical and sensory ability as we age. It is reasonable to expect that the group of older individuals who have low vision will grow.
- With the growing number of seniors, the demand for large print can expect to rise. It is estimated that senior citizens are expected to make up about 60% of our North American population and own about 70% of our banking assets. *Jeff N Marquis and Kerry J Harrison January 2006 - Special Business Needs Consultants.*
- In 2001, *Statistics Canada* identified 610,950 Canadians as having difficulty seeing ordinary newsprint or clearly seeing the face of someone from four metres.
- According to *Statistics Canada*, seniors will make up 21 percent of the Canadian population alone by 2026 compared to 13 percent in 2000.
- According to the World Health Organization, 285 million people are visually impaired worldwide; 39 million are blind; and 246 million have low vision.

Is photocopying 'good enough'?

Using a photocopier's zoom feature to increase readability for users requiring large print is not recommended. Photocopying can result in reproduction issues such as low contrast and poor quality.

Also, it does not adhere to the large print standards and conventions established to maximize readability through the uniformity of font size and style, high contrast, and layout design.

In addition to brand image issues, here are some of the fundamental problems surrounding photocopy enlargement:

- Incompatible with assistive technology (i.e. magnifiers, CCTV etc.) which rely upon 8.5x11 format, high contrast, sans serif fonts, etc.
- Incompatible with reading style of most low vision readers (i.e. columnar layouts, mixed font types etc.).

- Does not adhere to widely accepted guidelines and standards for AODA & ADA accommodation.
- Large paper size creates unwieldy filing problems.
- Photocopy enlargement can result in blurry, fuzzy images that are unintelligible and unrecognizable to low vision readers.

Your asset mix and holdings

Your asset mix



Regional Equity	41.5%
Sector/Specialty Funds	58.5%
Total	100.00%

Details of your holdings

Sales charge
Securities purchased under the Front-End (FE) load option (also referred to as the sales charge option) may be subject to a sales charge at the time of purchase. There is no charge when the units are sold. Securities purchased under the Back-End (BE) load option (also referred to as the redemption charge option) may be subject to redemption fees that decline over time. Typically, these funds have a 7-year redemption schedule. For details, see the simplified prospectus for the fund.

Adjusted cost base (ACB)
The adjusted cost base in the table below is used to calculate capital gains or losses for tax purposes. The adjusted cost base (commonly referred to as book value) of a fund is:
 • the total amount you paid for the shares or units that you hold of the fund, plus
 • the amount of any dividends or income that you reinvest to acquire additional shares or units of the fund.
 Note - if you transfer or exchange funds, the Adjusted Cost Base may be altered to reflect the market value of your investment at that time.

Type of asset and fund name	Type of sales charge	Adjusted cost base(\$)	Number of shares or units	X Price per share or unit (\$)	= Market value (\$)	Percentage of your total account value
Regional Equity						
Mackenzie Universal European Opportunities Cls-A #1028	Front-end	11,450.42	708.320	14.5259	10,288.99	41.5%
Total Regional Equity		\$11,450.42			\$10,288.99	41.5%
Sector/Specialty Funds						
Mac Univ Canadian Resource-A #653	Front-end	6,627.22	356.898	29.8046	10,637.20	42.9%
Mackenzie Universal World Real Estate Cls-A #1043	Front-end	6,139.04	234.769	16.9006	3,873.83	15.6%
Total Sector/Specialty Funds		\$14,767.06			\$14,511.03	58.5%
Total		\$26,217.48			\$24,800.02	100.0%

Text is too small. Text size is not uniform throughout document.

Text loses clarity when enlarged, while varying fonts and sizes decrease readability.

Leading (space between lines) is too small, impeding flow and readability.

This information is completely missed by partially sighted customers.

This graphic, or those in colour, remain inaccessible when simply enlarged.

Use of columns very distracting to partially sighted reader.

How to Remain Compliant

We are often asked by our customers to provide them with specific guidance in interpreting accessibility legislation as it relates to their business. In general, we advise our customers that in order to remain compliant, they must consider the marriage with specific banking regulations that apply across their entire customer base. For example, consider the combination of U.S regulation known as "Truth in Lending, Reg Z" (<http://www.fdic.gov/regulations/laws/rules/6500-1400.html>), which governs such things as

disclosure of fees and the requirement for periodic statements of credit with the requirements of the Americans with Disabilities Act , (ADA), (which prohibits discrimination against individuals with disabilities by businesses that serve the public).

Among other things, the ADA requires financial institutions, accountants, lawyers, doctors and other businesses to provide auxiliary aids and services that are necessary for effective communication. In the case of blind and low vision individuals, auxiliary aids include qualified readers, assistance in filling out forms and written materials provided in alternate formats, such as braille, large print, audio recordings or accessible electronic formats such as e-text or accessible HTML.

For those businesses that operate in Ontario, Canada the Accessibility Standard for Information and Communications of the Accessibility for Ontarians with Disabilities Act, 2005 (AODA) legislation must be considered to ensure businesses and organizations make their information accessible for people with disabilities.

To be compliant with AODA, the ADA, and Reg Z information whose disclosure is governed by Reg Z MUST be furnished in a form that is seen by the recipient to be fully accessible and MUST provide service at a level equivalent to those without a disability (privacy protection, timely delivery etc.). While providing photocopy enlargement may be seen by sighted individuals as a valid attempt to accommodate, the fact that blindness organizations, or low vision individuals strongly prefer a large print presentation means that the organization can be found offside of applicable disability legislation. And to the extent that photocopy enlargement is inaccessible to many low vision customers, the organization could further be found to be in violation of the original disclosure regulation!

The Solution is Clear!

In addition to accessibility legislation, below are links to various documents published by respected blindness organizations. They cite a range of features that contribute to the readability and accessibility of large print statements, and make clear that photocopy enlargement is NOT an acceptable solution in the eyes of the intended audience.

<http://acb.org/node/750>

<http://www.aph.org/edresearch/lpguide.htm>

<http://www.cclvi.org/large-print-guidelines.html>

Case Study

To help illuminate specifics, it is best to make reference to recent case law that most explicitly demonstrates how the US Department of Justice is applying the ADA laws in the financial services industry, and to specific guidance from the ADA that pertains to the banking sector:

http://www.ada.gov/wells_fargo/

In this case, Wells Fargo was found to be offside by virtue of their refusal to replace a system that they had in place, and believed to be adequate or “good enough”, with an accommodation preferred by their deaf and hard of hearing customers. This was seen to be a failure to accommodate, and thus discriminatory. A choice to use Photocopy Enlargement, rather than designed large print (which is clearly preferred by the low vision community) could easily be seen in this light. Title III of the ADA is specifically interpreted, in this Department of Justice judgment, to require that financial institutions accommodate blind and low vision customers with alternate formats such as braille, large print and audio – formats that they find maximally accessible, and that they therefore prefer.

Large print vs. Photocopying

In this section we will summarize a number of key attributes of a properly formatted large print document, and indicate specifically how a photocopy enlargement misses the mark:

Font Size

Large Print Standards	Photocopy Enlargement
<p>Large print standards prescribe fonts of 18pt or higher, and call for the uniformity of font size and style, high contrast, and layout design.</p>	<ul style="list-style-type: none"> • Poor reproduction quality • Fonts lose quality as they are enlarged • Text can be cut off unintentionally • Font size does not comply with large print standards – either in absolute size, or in uniformity of size or style • High contrast required for legibility is not attainable • Layout design is compromised • Partially sighted customers may not be able to read all elements of the statement

Emphasis

Large Print Standards	Photocopy Enlargement
<p>Large Print standards call for added contrast, in bold format (as opposed to italics, or box enclosure or other approaches utilized in standard print design), to specify the important parts of text.</p>	<p>Points of emphasis to demonstrate importance cannot be adjusted when using the photocopy method. No added contrast to text can be modified to ensure visibility of important statement information.</p>

Leading

Large Print Standards	Photocopy Enlargement
<p>Large Print Standards call for spacing between lines of at least 40% (known as "leading") to accommodate better flow and comprehension of text.</p>	<p>Space between lines cannot be modified individually. Leading adjustments are made throughout the entire document when blown up, rather than certain areas where they are needed, and the photocopy method compromises' the clarity and contrast of the entire document in this important aspect of print design - leading.</p>

Font Type

Large Print Standards	Photocopy Enlargement
<p>Here, standards prescribe use of a sans serif font that declutters the text and gives the illusion of larger text without additional space, and is thus most clear and concise for readers who are partially sighted. Uniformity of font style is another important consideration.</p>	<p>Font types are not changed or adjusted when using the photocopy method. They are simply enlarged; Enlargement of font is not more visually appealing or easier to read among partially sighted customers. It simply makes cluttered text and design bigger; it does not enhance readability.</p>

Charts and Graphs

Large Print Standards	Photocopy Enlargement
<p>Graphs that contain important data are presented in a narrative, linear fashion.</p>	<ul style="list-style-type: none"> • Data in charts and graphs is not represented in an accessible fashion – it is just made larger • This information is therefore at risk of being completely missed by partially sighted customers

Justification

Large Print Standards	Photocopy Enlargement
<p>Large print standards prescribe the use of consistent left justification, and prohibit the use of columnar layout styles. Columnar information is “linearized” and presented in consistent left justified format.</p>	<p>Adjustments to justification cannot be made; if the original document uses mixed justification, and/or columns, then so too will the photocopy enlarged version.</p>

Orientation

Large Print Standards	Photocopy Enlargement
<p>Page orientation is chosen based on the nature of the information being presented, and the nature of the assistive device preferred by the low vision reader. This said; the majority of customers prefer portrait layout for documents such as bills and financial statements.</p>	<p>Page orientation can be modified, however compromise in size and contrast is made. It is difficult to maintain the layout of text when orientation is made because the text can be cut off with improper margin justification. In order to adjust accordingly, the size of the text must be compromised.</p>

Brand / Logo

Large Print Standards	Photocopy Enlargement
<ul style="list-style-type: none"> • Branding is represented in narrative. • Appropriate use of black and white contrast is used to render graphical logos. 	<p>Does not accommodate appropriate use of high contrast black and white for graphical logos and thus they are not visible or accessible to reader.</p>

Disclosure Information

Large Print Standards	Photocopy Enlargement
<ul style="list-style-type: none"> • Any disclosure information, terms and conditions, or legal information, (usually found on the back of the original first page in very small print), is extracted, formatted and printed at the end of the large print statement. • As pagination will differ from the original, this formatting standard ensures that the statement details will remain uninterrupted and that the important disclosure information is fully accessible. 	<p>Disclosure material (terms and conditions, legal information) is not presented in a format that is easily read by partially sighted customers for the same reasons as referenced in "Font Size", "Leading", "Justification" and "Font Style".</p>

Final Format Presentation

Large Print Standards	Photocopy Enlargement
<p>Large print standards call for the use of specific paper weight and binding (70 lbs or higher) to ensure no bleed through which heavily diminishes readability. Larger documents (over 30 sheets) are xerox paper produced on industry standard paper weight and size to ensure quality representation and cerlox bound to increase usability with assistive devices.</p>	<p>The information is presented on larger paper, and is not bound, resulting in an unwieldy format which can create difficulties in manipulation, readability and storage.</p>

Remittance Forms, Tear offs and/or Coupons

Large Print Standards	Photocopy Enlargement
<p>A line of text may be strategically inserted according to standards in the large print statement to clearly direct the reader to the location of the remittance form, which necessarily is rendered in conventional print to ensure it can be processed by remitting organization.</p>	<p>Notification of the location of remittance forms; tear offs and / or coupons are not communicated, and therefore missed completely by partially sighted readers. Photocopy enlargement also enlarges remittance form, which creates special handling issues for receiving organization</p>

Inserting Materials Specific to a Product Special Offer

Large Print Standards	Photocopy Enlargement
An insert will be printed in the same format as the statement for maximum readability.	Notification of insert material is not communicated and can therefore be missed completely by partially sighted readers.

About us

T-Base has developed and refined large format guidelines that are a direct result of consultations with large print users and the leading low vision organizations that represent them. Over many years of development and refinement we have incorporated their valued feedback for usability and readability preferences, accommodating changes in access methods and assistive technology – and this experience is embodied into every single large print statement and document produced.

T-Base is the North American leader in the design, production and delivery of information in formats fully accessible to, and preferred by, your blind, deafblind, low vision and print disabled customers. Specializing in the provision of alternate format communication solutions, T-Base Communications assists leading education institutions, government and Fortune 100 organizations in communicating with their students, constituents and customers who are unable to access information in conventional print.

At T-Base, it has been our longstanding mission to help our customers communicate effectively with their blind and partially sighted customers in a timely and accurate fashion, with the same level of quality, privacy and service enjoyed by their sighted customers.

We are your full service accessible communications department.

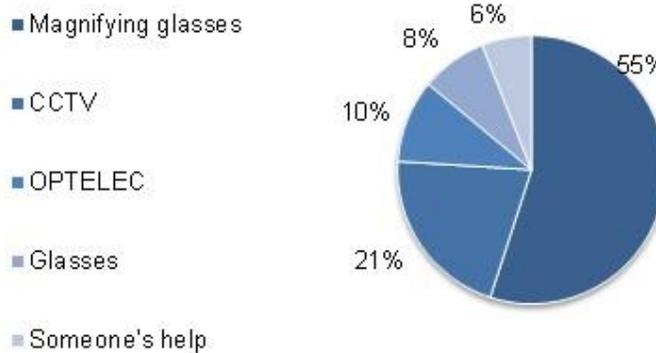
The Results Are In

The following data constitutes the results of a large print survey of a sampling of partially sighted individuals which outline their preferences for reading and clarity of large print statement design.

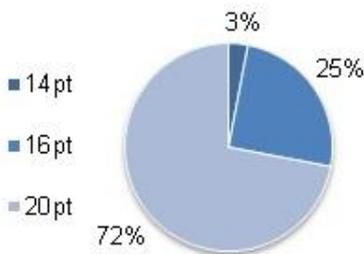
Here is a summary of those findings:

- Portable Print Magnification Systems are the top Assistive Technologies preferred by partially sighted people
- 97% of those surveyed preferred between 15-20pt font size and 85% preferred accessible (sans serif) fonts such as Arial and Verdana.
- Identified by over half of those surveyed, the preferred line spacing is 40% between lines, something that cannot be produced in a photocopy
- An overwhelming 97% preferred an accessible black and white logo type (only achieved with large print formatting) with a minority of only 3% citing grey scale – which is achieved through photocopying.
- 91% of low vision respondents preferred emphasis on important information in a statement such as outlined with bold font (something that can only be achieved by incorporating large print standards).

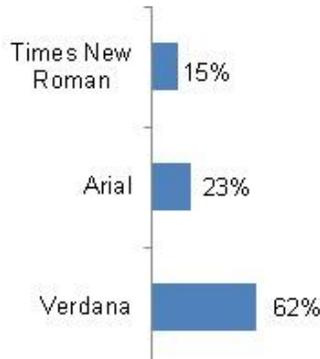
What are the Top 5 Assistive Technologies/Approaches for Dealing with Hard Copy Documents?



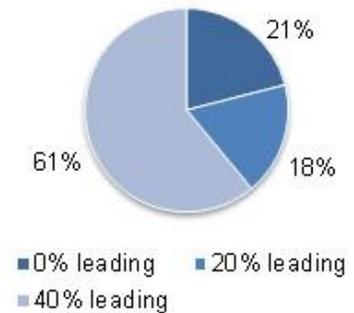
Which point size is preferred?



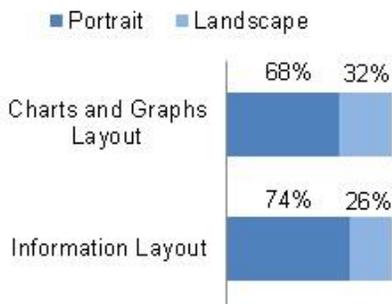
Which font type is preferred?



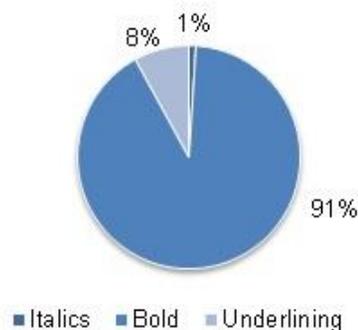
What is the preferred line spacing (leading)?



What is the preferred orientation of a document?



Which emphasis is preferred?



Which is the preferred logo type?

