# ACCESSIBLE DOCUMENTS ON NASHVILLE.GOV

Nashville.gov is intended to be a web site where all residents can get information about the operation of Nashville's Metro Government. Additionally, Metro strives to give all users the ability to conduct business with itself on the web site regardless of ability or disability.

To achieve those goals, standards have been set around what document formats are allowed and how those documents should be created. This document describes those standards and explains why they are needed.

## **DOCUMENT FORMATS**

The following document formats are allowed on Nashville.gov:

- PDFs created from text-based source files: Word, Excel, PowerPoint files
- Word, Excel, and PowerPoint files

The following document formats are **not** allowed on Nashville.gov:

- PDFs created from scanners and copiers, or those containing images of text created from image editing programs, even those that have been scanned with Optical Character Recognition (OCR)
- Word, Excel, or PowerPoint files containing images of text created from image editing programs or screenshots of text

## BASIS FOR DOCUMENT RESTRICTIONS

- 1. Usability
- 2. Accessibility
- 3. Searchability

#### **USABILITY**

Our purpose is to provide accurate information in an accessible and searchable format for all users regardless of ability or disability. Documents on Nashville.gov should be presented in a well-structured, easy to read format whenever possible.

#### **ACCESSIBILITY**

A document that consists of scanned images of text is inherently inaccessible because the content of the document is images, not searchable text. Assistive technologies cannot read or extract words in images; users cannot select, edit, resize, or reflow text in images, nor can they change text and background colors; and authors cannot manipulate the PDF for accessibility. Even visually impaired users that are not dependent on screen reader technology may experience readability issues with images of text that are zoomed in.

For these reasons, authors should use actual text rather than images of text, using an authoring tool such as Microsoft Word to author and convert content to PDF. A document from a Microsoft Office application can be

converted to PDF by choosing the "Save As..." option from the File menu. In the drop-down menu below the file name field, choose PDF (\*.pdf):

Accessible Documents for Metro Website

Word Document (\*.docx)

Word Macro-Enabled Document (\*.docm)

Word 97-2003 Document (\*.doc)

Word Template (\*.dotx)

Word Macro-Enabled Template (\*.dotm)

Word 97-2003 Template (\*.dot)

PDF (\*.pdf)

Ideally, documents created in Microsoft Word should be structured using headings. Correct use of headings in a document improves indexing for search engines and improves the accessibility of the resulting PDF. Visually impaired users can use headings much like a table of contents, making it easier to find the information needed.

## USE OF OPTICAL CHARACTER RECOGNITION (OCR) ON SCANNED PDFS

Optical Character Recognition (OCR) should not be used as a substitute for converting files from the original source text file because:

- it often does not recognize the text accurately.
- it does not recognize or add necessary structure to the document.
- entire sections of the document may not be recognized and may be completely unavailable to assistive device users.

Examples of the issues with using OCR are shown at the end of this document.

## **SEARCHABILITY**

XPS Document (\*.xps)

Metro Code Title 2, Section 2.68.020.B et seq. includes a requirement for submitting board meeting agendas and minutes to be posted "in a searchable electronic format for posting onto the nashville.gov website of the submitting board or commission."

Because searchability is a requirement, the original text information should be preserved whenever possible to preserve the integrity of the document. Search engines will incorrectly index a document when OCR misinterprets sections of text.

While searchability is a requirement, signatures are not required for documents posted on our website, as Nashville.gov is not the document of record.

# OCR EXAMPLE 1

Screenshot of a scanned PDF to which OCR has been applied:

F. **Executive Director or Director**--the Executive Director of the Community Oversight Board, who reports to the Board and oversees the other COB staff.

Recognized text from OCR of that section:

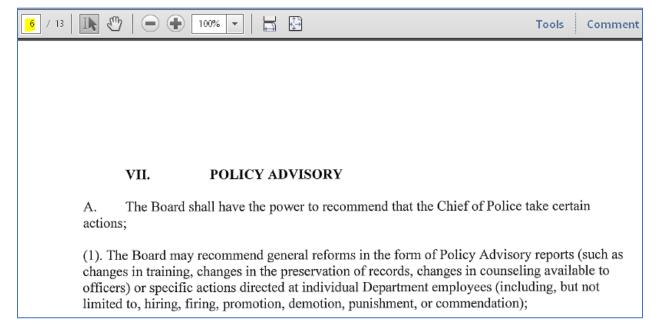
F. Executive Director or Director--the Executive Director of the Community

Oversight Board, who reports to the Board and oversees the other COB staff.

OCR in this case has incorrectly removed spaces between words and has split one sentence into two separate paragraphs. Words will be read by someone using an assistive device as "whoreports," "overseesthe," and "cobstaff."

# OCR EXAMPLE 2

Page 6 of a scanned PDF to which OCR has been applied:



Recognized text from OCR of that section:

VII. POLICYADVISORY

A. The Board shall have the power to recommend that the ChiefofPolice take certain actions:

(1). The Board mayrecommend general reforms in the form of Policy Advisory reports (such as changes in training, changes in the preservation of records, changes in counseling, available to officers) or specific actions directed at individual Department employees (including, but not limited to, hiring, firing, promotion, demotion, punishment, or commendation);

Although OCR was applied to the whole document, in this case, pages 1-5 of the document were omitted and are not read aloud to a visually impaired user using an assistive device. The information left out is necessary and contains meeting minutes, meeting agenda, and sections I-VI of the draft memorandum of understanding between the Community Oversight Board and the Metropolitan Nashville Police Department. Without this information, the integrity of the document is lost.