WCAG 2.0 Impact Statements

Ties to Section 508 Functional Performance Criteria

# Principle 1 – Perceivable

## Guideline 1.1 – Text Alternatives

### 1.1.1 Non-text Content

Methods and techniques related to 1.1.1 Non-text Content can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.4 Without Hearing | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

## Guideline 1.2 – Time-based Media

### 1.2.1 Audio-only and Video-only

Methods and techniques related to 1.2.1 Audio-only and Video-only can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.4 Without Hearing | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 1.2.2 Captions (Prerecorded)

Methods and techniques related to 1.2.2. Captions (Prerecorded) can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.4 Without Hearing | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 1.2.3 Audio Description or Media Alternative (Prerecorded)

Methods and techniques related to 1.2.3 Audio Description or Media Alternative (Prerecorded) can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 1.2.4 Captions (Live)

Methods and techniques related to 1.2.4 Captions (Live) or Media Alternative (Prerecorded) can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.4 Without Hearing | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 1.2.5 Audio Description (Prerecorded)

Methods and techniques related to 1.2.5 Audio Description (Prerecorded) can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

## Guideline 1.3 – Adaptable

### 1.3.1 Info and Relationships

Methods and techniques related to 1.3.1 Info and Relationships can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.4 Without Hearing | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 1.3.2 Meaningful Sequence

Methods and techniques related to 1.3.2 Meaningful Sequence can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |

### 1.3.3 Sensory Characteristics

Methods and techniques related to 1.3.3 Sensory Characteristics can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.3 Without Perception of Color | Some users may not be able to perceive differences between certain colors, and therefore do not receive information conveyed by the colors (e.g., using gradients of color between red, yellow, and green to indicate an item’s status from poor to good). In such cases, ICT must provide additional information by alternative means that conveys the same meaning (e.g., shapes and/or textual labels in addition to the color). |
| 302.4 Without Hearing | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |

## Guideline 1.4 – Distinguishable

### 1.4.1 Use of Color

Methods and techniques related to 1.4.1 Use of Color can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.3 Without Perception of Color | Some users may not be able to perceive differences between certain colors, and therefore do not receive information conveyed by the colors (e.g., using gradients of color between red, yellow, and green to indicate an item’s status from poor to good). In such cases, ICT must provide additional information by alternative means that conveys the same meaning (e.g., shapes and/or textual labels in addition to the color). |

### 1.4.2 Audio Control

Methods and techniques related to 1.4.2 Audio Control can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 1.4.3 Contrast (Minimum)

Methods and techniques related to 1.4.3 Contrast (Minimum) can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.3 Without Perception of Color | Some users may not be able to perceive differences between certain colors, and therefore do not receive information conveyed by the colors (e.g., using gradients of color between red, yellow, and green to indicate an item’s status from poor to good). In such cases, ICT must provide additional information by alternative means that conveys the same meaning (e.g., shapes and/or textual labels in addition to the color). |

### 1.4.4 Resize Text

Methods and techniques related to 1.4.4 Resize Text can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |

### 1.4.5 Images of Text

Methods and techniques related to 1.4.5 Images of Text can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.3 Without Perception of Color | Some users may not be able to perceive differences between certain colors, and therefore do not receive information conveyed by the colors (e.g., using gradients of color between red, yellow, and green to indicate an item’s status from poor to good). In such cases, ICT must provide additional information by alternative means that conveys the same meaning (e.g., shapes and/or textual labels in addition to the color). |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

# Principle 2 – Operable

## Guideline 2.1 – Keyboard Accessible

### 2.1.1 Keyboard

Methods and techniques related to 2.1.1 Keyboard can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |

### 2.1.2 No Keyboard Trap

Methods and techniques related to 2.1.2 No Keyboard Trap can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |

## Guideline 2.2 – Enough Time

### 2.2.1 Timing Adjustable

Methods and techniques related to 2.2.1 Timing Adjustable can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 2.2.2 Pause, Stop, Hide

Methods and techniques related to 2.2.2 Pause, Stop, Hide can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| Photosensitive epilepsy/photosensitive seizure disorders | Some users may be vulnerable to seizures from content that flashes, blinks, or pulses. Flashing could, therefore, interfere with a user's ability to interact with content or could make the content entirely unusable. Content designers and developers must not include any content that could cause seizures. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

## Guideline 2.3 – Seizures

### 2.3.1 Three Flashes or Below Threshold

Methods and techniques related to 2.3.1 Three Flashes or Below Threshold can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| Photosensitive epilepsy/photosensitive seizure disorders) | Some users may be vulnerable to seizures from content that flashes, blinks, or pulses. Flashing could, therefore, interfere with a user's ability to interact with content or could make the content entirely unusable. Content designers and developers must not include any content that could cause seizures. |

## Guideline 2.4 – Navigable

### 2.4.1 Bypass Blocks

Methods and techniques related to 2.4.1 Bypass Blocks can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 2.4.2 Page Titled

Methods and techniques related to 2.4.2 Page Titled can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 2.4.3 Focus Order

Methods and techniques related to 2.4.3 Focus Order can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 2.4.4 Link Purpose (In Context)

Methods and techniques related to 2.4.4 Link Purpose (In Context) can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 2.4.5 Multiple Ways

Methods and techniques related to 2.4.5 Multiple Ways can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 2.4.6 Headings and Labels

Methods and techniques related to 2.4.6 Headings and Labels can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 2.4.7 Focus Visible

Methods and techniques related to 2.4.7 Focus Visible can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

# Principle 3 – Understandable

## Guideline 3.1 – Readable

### 3.1.1 Language of Page

Methods and techniques related to 3.1.1 Language of Page can affect the following types of disabilities:

|  |  |
| --- | --- |
| Type of Disability | Description of Impact |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.4 Without Hearing | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 3.1.2 Language of Parts

Methods and techniques related to 3.1.2 Language of Parts can affect the following types of disabilities:

|  |  |
| --- | --- |
| Type of Disability | Description of Impact |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.4 Without Hearing | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

## Guideline 3.2 – Predictable

### 3.2.1 On Focus

Methods and techniques related to 3.2.1 On Focus can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 3.2.2 On Input

Methods and techniques related to 3.2.2 On Input can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 3.2.3 Consistent Navigation

Methods and techniques related to 3.2.3 Consistent Navigation can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 3.2.4 Consistent Identification

Methods and techniques related to 3.2.4 Consistent Identification can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

## Guideline 3.3 – Input Assistance

### 3.3.1 Error Identification

Methods and techniques related to 3.3.1 Error Identification can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.3 Without Perception of Color | Some users may not be able to perceive differences between certain colors, and therefore do not receive information conveyed by the colors (e.g., using gradients of color between red, yellow, and green to indicate an item’s status from poor to good). In such cases, ICT must provide additional information by alternative means that conveys the same meaning (e.g., shapes and/or textual labels in addition to the color). |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 3.3.2 Labels or Instructions

Methods and techniques related to 3.3.2 Labels or Instructions can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 3.3.3 Error Suggestion

Methods and techniques related to 3.3.3 Error Suggestion can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 3.3.4 Error Prevention (Legal, Financial, Data)

Methods and techniques related to 3.3.4 Error Prevention (Legal, Financial, Data) can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

# Principle 4 – Robust

## Guideline 4.1 – Compatible

### 4.1.1 Parsing

Methods and techniques related to 4.1.1 Parsing can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

### 4.1.2 Name, Role, Value

Methods and techniques related to 4.1.2 Name, Role, Value can affect the following types of disabilities:

| **Type of Disability** | **Description of Impact** |
| --- | --- |
| 302.1 Without Vision | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.7 With Limited Manipulation | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |

# Appendix A – FPC Definitions and Impact Statements

| **FPC Reference** | **FPC Definition** | **FPC Impact** |
| --- | --- | --- |
| 302.1 Without Vision | Where a visual mode of operation is provided, ICT shall provide at least one mode of operation that does not require user vision. | Users who are blind cannot use a mouse to interact with electronic content and typically use an assistive technology, such as a screen reader, to get audible or other alternative output for the information represented visually. To be able to navigate the content, understand its structure and relationships, and understand the meaning of content represented in graphics and images, the content must provide textual and programmatic cues in addition to the content presented purely visually. |
| 302.2 With Limited Vision | Where a visual mode of operation is provided, ICT shall provide at least one mode of operation that enables users to make use of limited vision. | Users with limited vision may have widely different visual perception. Individuals with limited vision may or may not use assistive technologies. Therefore, in addition to textual and programmatic cues necessary for assistive technologies, ICT must also present content consistently and predictably. Users who view content with magnifiers may not pick up alerts, warnings, or other content if such content is presented outside of a consistent and predictable navigation pattern or if the content is not itself viewable at large magnification. Content that becomes distorted when magnified can also prevent some users with limited vision from being able to understand or interact with the content. |
| 302.3 Without Perception of Color | Where a visual mode of operation is provided, ICT shall provide at least one visual mode of operation that does not require user perception of color. | Some users may not be able to perceive differences between certain colors, and therefore do not receive information conveyed by the colors (e.g., using gradients of color between red, yellow, and green to indicate an item’s status from poor to good). In such cases, ICT must provide additional information by alternative means that conveys the same meaning (e.g., shapes and/or textual labels in addition to the color). |
| 302.4 Without Hearing | Where an audible mode of operation is provided, ICT shall provide at least one mode of operation that does not require user hearing. | When ICT provides information, instructions, or cues audibly, users who are deaf will not receive the information. Typically, providing the same information visibly (e.g., providing a warning light or textual dialog to accompany an audible warning sound or captions for audio dialog and other audible information in a video) will enable users who are deaf to get equivalent information. |
| 302.5 With Limited Hearing | Where an audible mode of operation is provided, ICT shall provide at least one mode of operation that enables users to make use of limited hearing. | Some users cannot hear sounds below certain volumes or at certain frequencies and may not be able hear certain audio outputs from ICT. Background noise can also be problematic for users with limited hearing. Providing modes of operation that enhance audio clarity (e.g., filtering out hisses and pops, blocking sounds at specific frequencies, normalizing voice volumes, removing constant tone patterns), increase the range of volume, increase volume at higher frequencies, and/or give users control over such settings can help users with limited hearing understand, navigate, and operate the ICT. Users with limited hearing may also benefit from some of the same methods used to provide information to users without hearing. |
| 302.6 Without Speech | Where speech is used for input, control, or operation, ICT shall provide at least one mode of operation that does not require user speech. | Some users have no vocal capability or can speak only with limited volume, clarity, or duration. When ICT requires speech for input, control, or operation, it must provide alternatives, such as keyboard or other touch user interfaces, to provide the input or perform the operation (e.g., enter a phone number via a number pad in addition to the ability to speak the number). |
| 302.7 With Limited Manipulation | Where a manual mode of operation is provided, ICT shall provide at least one mode of operation that does not require fine motor control or simultaneous manual operations. | Some users may not be able to perform actions that require fine motor control (clicking and dragging), path dependent gestures (pattern-based passcodes), or simultaneous actions (Ctrl + Alt + Del). Providing alternative means to perform the same actions, such as entering the size specifications in an input field to resize an object or allowing sequential key entries, can enable users with limited manipulation to interact with the same content. |
| 302.8 With Limited Reach and Strength | Where a manual mode of operation is provided, ICT shall provide at least one mode of operation that is operable with limited reach and limited strength. | Some users may lack sufficient strength to perform actions such as squeezing, grasping, or depressing a hardware control. Some users, including those in wheelchairs or of shorter stature, may not be able to reach controls that are placed too high or too far away from where a user would access the device controls or interface. ICT designers and developers must consider a broad range of statures, strength and dexterity limitations, and the needs of wheelchair users in order to provide interfaces that are operable with limited reach and/or strength. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | ICT shall provide features making its use by individuals with limited cognitive, language, and learning abilities simpler and easier. | Some users require more time than average to process information while others may find complicated instructions difficult to follow. Furthermore, some ICT content can distract or overwhelm users, preventing them from being able to interact with or understand other ICT content. Designers and developers of ICT must consider a broad range of cognitive abilities in order to provide ICT that is simple and easy to use. |
| N/A - Photosensitive Epilepsy / Photosensitive Seizure Disorders | N/A - Photosensitive Epilepsy / Photosensitive Seizure Disorders | Some users may be vulnerable to seizures from content that flashes, blinks, or pulses. Flashing could, therefore, interfere with a user's ability to interact with content or could make the content entirely unusable. Content designers and developers must not include any content that could cause seizures. |

# Appendix B – WCAG SC to FPC Mapping

| WCAG Success Criteria | Section 508 Functional Performance Criteria |
| --- | --- |
| 1.1.1 Non-text Content | 302.1 Without Vision  302.2 With Limited Vision  302.4 Without Hearing  302.5 With Limited Hearing  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 1.2.1 Audio-only and Video-only | 302.1 Without Vision  302.2 With Limited Vision  302.4 Without Hearing  302.5 With Limited Hearing  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 1.2.2 Captions (Prerecorded) | 302.4 Without Hearing  302.5 With Limited Hearing  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 1.2.3 Audio Description or Media Alternative (Prerecorded) | 302.1 Without Vision  302.2 With Limited Vision  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 1.2.4 Captions (Live) | 302.4 Without Hearing  302.5 With Limited Hearing  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 1.2.5 Audio Description (Prerecorded) | 302.1 Without Vision  302.2 With Limited Vision  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 1.3.1 Info and Relationships | 302.1 Without Vision  302.2 With Limited Vision  302.4 Without Hearing  302.5 With Limited Hearing  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 1.3.2 Meaningful Sequence | 302.1 Without Vision  302.2 With Limited Vision |
| 1.3.3 Sensory Characteristics | 302.1 Without Vision  302.2 With Limited Vision  302.3 Without Perception of Color  302.4 Without Hearing  302.5 With Limited Hearing |
| 1.4.1 Use of Color | 302.1 Without Vision  302.2 With Limited Vision  302.3 Without Perception of Color |
| 1.4.2 Audio Control | 302.1 Without Vision  302.2 With Limited Vision  302.5 With Limited Hearing  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 1.4.3 Contrast (Minimum) | 302.2 With Limited Vision  302.3 Without Perception of Color |
| 1.4.4 Resize text | 302.2 With Limited Vision |
| 1.4.5 Images of Text | 302.1 Without Vision  302.2 With Limited Vision  302.3 Without Perception of Color  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 2.1.1 Keyboard | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength |
| 2.1.2 No Keyboard Trap | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength |
| 2.2.1 Timing Adjustable | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 2.2.2 Pause, Stop, Hide | 302.1 Without Vision  302.2 With Limited Vision  302.9 With Limited Language, Cognitive, and Learning Abilities  Photosensitive epilepsy/photosensitive seizure disorders) |
| 2.3.1 Three Flashes or Below Threshold | Photosensitive epilepsy/photosensitive seizure disorders) |
| 2.4.1 Bypass Blocks | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 2.4.2 Page Titled | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 2.4.3 Focus Order | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 2.4.4 Link Purpose (In Context) | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 2.4.5 Multiple Ways | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 2.4.6 Headings and Labels | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 2.4.7 Focus Visible | 302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.1.1 Language of Page | 302.1 Without Vision  302.2 With Limited Vision  302.4 Without Hearing  302.5 With Limited Hearing  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.1.2 Language of Parts | 302.1 Without Vision  302.2 With Limited Vision  302.4 Without Hearing  302.5 With Limited Hearing  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.2.1 On Focus | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.2.2 On Input | 302.1 Without Vision  302.2 With Limited Vision  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.2.3 Consistent Navigation | 302.1 Without Vision  302.2 With Limited Vision  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.2.4 Consistent Identification | 302.1 Without Vision  302.2 With Limited Vision  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.3.1 Error Identification | 302.1 Without Vision  302.2 With Limited Vision  302.3 Without Perception of Color  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.3.2 Labels or Instructions | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.3.3 Error Suggestion | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 3.3.4 Error Prevention (Legal, Financial, Data) | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 4.1.1 Parsing | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |
| 4.1.2 Name, Role, Value | 302.1 Without Vision  302.2 With Limited Vision  302.7 With Limited Manipulation  302.8 With Limited Reach and Strength  302.9 With Limited Language, Cognitive, and Learning Abilities |

# Appendix C – FPC to WCAG SC Mapping

| Section 508 Functional Performance Criteria | WCAG Success Criteria |
| --- | --- |
| 302.1 Without Vision | 1.1.1 Non-text Content  1.2.1 Audio-only and Video-only  1.2.3 Audio Description or Media Alternative (Prerecorded)  1.2.5 Audio Description (Prerecorded)  1.3.1 Info and Relationships  1.3.2 Meaningful Sequence  1.3.3 Sensory Characteristics  1.4.1 Use of Color  1.4.2 Audio Control  1.4.5 Images of Text  2.1.1 Keyboard  2.1.2 No Keyboard Trap  2.2.1 Timing Adjustable  2.2.2 Pause, Stop, Hide  2.4.1 Bypass Blocks  2.4.2 Page Titled  2.4.3 Focus Order  2.4.4 Link Purpose (In Context)  2.4.5 Multiple Ways  2.4.6 Headings and Labels  3.1.1 Language of Page  3.1.2 Language of Parts  3.2.1 On Focus  3.2.2 On Input  3.2.3 Consistent Navigation  3.2.4 Consistent Identification  3.3.1 Error Identification  3.3.2 Labels or Instructions  3.3.3 Error Suggestion  3.3.4 Error Prevention (Legal, Financial, Data)  4.1.1 Parsing  4.1.2 Name, Role, Value |
| 302.2 With Limited Vision | 1.1.1 Non-text Content  1.2.1 Audio-only and Video-only  1.2.3 Audio Description or Media Alternative (Prerecorded)  1.2.5 Audio Description (Prerecorded)  1.3.1 Info and Relationships  1.3.2 Meaningful Sequence  1.3.3 Sensory Characteristics  1.4.1 Use of Color  1.4.2 Audio Control  1.4.3 Contrast (Minimum)  1.4.4 Resize text  1.4.5 Images of Text  2.1.1 Keyboard  2.1.2 No Keyboard Trap  2.2.1 Timing Adjustable  2.2.2 Pause, Stop, Hide  2.4.1 Bypass Blocks  2.4.2 Page Titled  2.4.3 Focus Order  2.4.4 Link Purpose (In Context)  2.4.5 Multiple Ways  2.4.6 Headings and Labels  2.4.7 Focus Visible  3.1.1 Language of Page  3.1.2 Language of Parts  3.2.1 On Focus  3.2.2 On Input  3.2.3 Consistent Navigation  3.2.4 Consistent Identification  3.3.1 Error Identification  3.3.2 Labels or Instructions  3.3.3 Error Suggestion  3.3.4 Error Prevention (Legal, Financial, Data)  4.1.1 Parsing  4.1.2 Name, Role, Value |
| 302.3 Without Perception of Color | 1.3.3 Sensory Characteristics  1.4.1 Use of Color  1.4.3 Contrast (Minimum)  1.4.5 Images of Text  3.3.1 Error Identification |
| 302.4 Without Hearing | 1.1.1 Non-text Content  1.2.1 Audio-only and Video-only  1.2.2 Captions (Prerecorded)  1.2.4 Captions (Live)  1.3.1 Info and Relationships  1.3.3 Sensory Characteristics  3.1.1 Language of Page  3.1.2 Language of Parts |
| 302.5 With Limited Hearing | 1.1.1 Non-text Content  1.2.1 Audio-only and Video-only  1.2.2 Captions (Prerecorded)  1.2.4 Captions (Live)  1.3.1 Info and Relationships  1.3.3 Sensory Characteristics  1.4.2 Audio Control  3.1.1 Language of Page  3.1.2 Language of Parts |
| 302.7 With Limited Manipulation | 2.1.1 Keyboard  2.1.2 No Keyboard Trap  2.2.1 Timing Adjustable  2.4.1 Bypass Blocks  2.4.2 Page Titled  2.4.3 Focus Order  2.4.4 Link Purpose (In Context)  2.4.5 Multiple Ways  2.4.6 Headings and Labels  2.4.7 Focus Visible  3.2.1 On Focus  3.3.2 Labels or Instructions  3.3.3 Error Suggestion  3.3.4 Error Prevention (Legal, Financial, Data)  4.1.1 Parsing  4.1.2 Name, Role, Value |
| 302.8 With Limited Reach and Strength | 2.1.1 Keyboard  2.1.2 No Keyboard Trap  2.2.1 Timing Adjustable  2.4.1 Bypass Blocks  2.4.2 Page Titled  2.4.3 Focus Order  2.4.4 Link Purpose (In Context)  2.4.5 Multiple Ways  2.4.6 Headings and Labels  2.4.7 Focus Visible  3.2.1 On Focus  3.3.2 Labels or Instructions  3.3.3 Error Suggestion  3.3.4 Error Prevention (Legal, Financial, Data)  4.1.1 Parsing  4.1.2 Name, Role, Value |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | 1.1.1 Non-text Content  1.2.1 Audio-only and Video-only  1.2.2 Captions (Prerecorded)  1.2.3 Audio Description or Media Alternative (Prerecorded)  1.2.4 Captions (Live)  1.2.5 Audio Description (Prerecorded)  1.3.1 Info and Relationships  1.4.2 Audio Control  1.4.5 Images of Text  2.2.1 Timing Adjustable  2.2.2 Pause, Stop, Hide  2.4.1 Bypass Blocks  2.4.2 Page Titled  2.4.3 Focus Order  2.4.4 Link Purpose (In Context)  2.4.5 Multiple Ways  2.4.6 Headings and Labels  2.4.7 Focus Visible  3.1.1 Language of Page  3.1.2 Language of Parts  3.2.1 On Focus  3.2.2 On Input  3.2.3 Consistent Navigation  3.2.4 Consistent Identification  3.3.1 Error Identification  3.3.2 Labels or Instructions  3.3.3 Error Suggestion  3.3.4 Error Prevention (Legal, Financial, Data)  4.1.1 Parsing  4.1.2 Name, Role, Value |
| Photosensitive epilepsy/photosensitive seizure disorders) | 2.2.2 Pause, Stop, Hide  2.3.1 Three Flashes or Below Threshold |