Transcript of the Power BI Screen Reader Accessibility February 2018 Video

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Meagan: This video will demonstrate how a screen reader can be used to navigate a Power BI report page and how we can redesign reports to be more screen reader friendly.

[The screen changes to show Power BI report]

Meagan: This report shows projected employment changes by occupation from 2016 to 2026. We can see there is a decorative picture in the top left and a link to retrieve the source data that is from the Bureau of Labor and Statistics in the top right. And then on the left we have slicers that interact with the main graph in the center. So, I can choose a slicer and then choose a bar within that chart and see our median annual wage for the specified occupation as well as some specific titles of people who hold that occupation. This works very well for a person navigating with a mouse that can see the charts, but let's see what happens when someone uses a keyboard and a screen reader.

[The screen changes to a different computer running the JAWS screen reader.]

[The screen reader announces objects on the page: text box, word cloud, shape, image, card, slicer. The user presses Alt+Shift+F11 to navigate to an accessible table version of the data in the slicer. The screen reader reads the values. The user presses the escape key to return to the main report.]

[The screen reader reads the title of a clustered bar chart. The user presses Alt+Shift+F11 to navigate to an accessible table version of the data in the bar chart. The screen reader reads the values in the table. The user presses the escape key to return to the main report.]

[The user navigates to a card on the main report and presses Alt+Shift+F11 to navigate to an accessible table version of the data in the slicer. The accessible table has a blank column at the beginning and a second column containing the single value shown in the card. The screen reader reads the values in the table. The user presses the escape key to return to the main report.]

[The user navigates to a text box on the main report and presses Alt+Shift+F11. No accessible table is created for the text box. The screen reader cannot read the contents.]

Meagan: This is the same projected employment change data as before, but we've rearranged the charts so that our findings are summarized by the charts themselves without requiring a user to click and interact with the charts. So we still see our link to source data, but it's also got alt text behind it so the link is available to the screen reader. And then we've got our highest and lowest growth occupations by percent change already here with alt text for each chart that describes those occupations. So I've summarized to make it more obvious what I want the users to get out of this data. I've added alt text. I took away the decorative-only images and shapes. And then I made sure that all visuals on the page have an accessible Show data table that's actually useful, as you'll see in this next demonstration.

[The screen changes to the computer running the JAWS screen reader.]

[The user presses Ctrl+F6 to navigate to the next page in the report. The user presses Ctrl+F6 to navigate to the report main content.]

[The screen reader reads the chart titles and alt text as the user navigates to each visual.]

[The user navigates to the Top Paying Occupations – Master's Degree table and presses Alt+Shift+F11 to navigate to an accessible table version of the visual. The screen reader reads each value in the table. The user presses the escape key to return to the main report.]

[The user navigates to the Highest Growth Occupations By Percent Change bar chart. The screen reader reads the title and alt text containing a summary of the data. The user presses Alt+Shift+F11 to navigate to an accessible table version of the visual. The screen reader reads each value as the user navigates within the table. The user presses the escape key to return to the main report.]

[The user navigates to the Lowest Growth Occupation By Percent Change bar chart. The screen reader reads the title and alt text for the chart.]

[The user navigates to the Top Paying Occupations – Doctoral or Professional Degree table. The screen reader reads the title and alt text containing a summary of the data in the table.]

[The user navigates to the Top Paying Occupations – Associate's Degree table. The screen reader reads the title and alt text containing a summary of the data in the table.]

Meagan: So that demonstration was slowed down to make sure we caught everything the screen reader was saying. Let's look at how an experience screen reader user actually would browse a report. It's much faster than what we heard before.

[The screen changes to the computer running the JAWS screen reader.]

[The screen reader reads the alt text of the text box on the report: "Projected Employment Changes By Occupation 2016 – 2026".]

[The user navigates to Top Paying Occupations – Master's Degree table. The screen reader reads the title and alt text containing a summary of the data in the table. The user presses Alt+Shift+F11 to navigate to an accessible table version of the visual. The screen reader reads each value as the user navigates within the table. The user presses the escape key to return to the main report.]

[The user navigates to the Top Paying Occupations – Doctoral or Professional Degree table. The screen reader reads the title and alt text containing a summary of the data in the table. The user presses Alt+Shift+F11 to navigate to an accessible table version of the visual. The screen reader reads each value as the user navigates within the table. The user presses the escape key to return to the main report.]

[The user navigates to the column chart titled Percent of Occupations By On-The-Job Training Required To Achieve Competency and presses Alt+Shift+F11 to navigate to an accessible table version of the visual. The user increases the speed of the screen reader voice. The screen reader reads each value as the user navigates within the table. The user presses the escape key to return to the main report.]

[The screen reader reads the title and alt text of the Percent of Occupations By On-The-Job Training Required To Achieve Competency chart.]

Meagan: Hopefully, that helps you understand how a screen reader navigates a Power BI report page and the design tradeoffs you might need to make in order to make your report accessible. Thanks for watching this video.