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## HOW TO ADD ALTERNATIVE TEXT

Adding Alt Text to Images and Tables

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### Abstract

Under Section 508 of the Rehabilitation Act of 1973, all Federal agencies must make their electronic and information technology accessible for people with disabilities.

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U.S. Department of Transportation

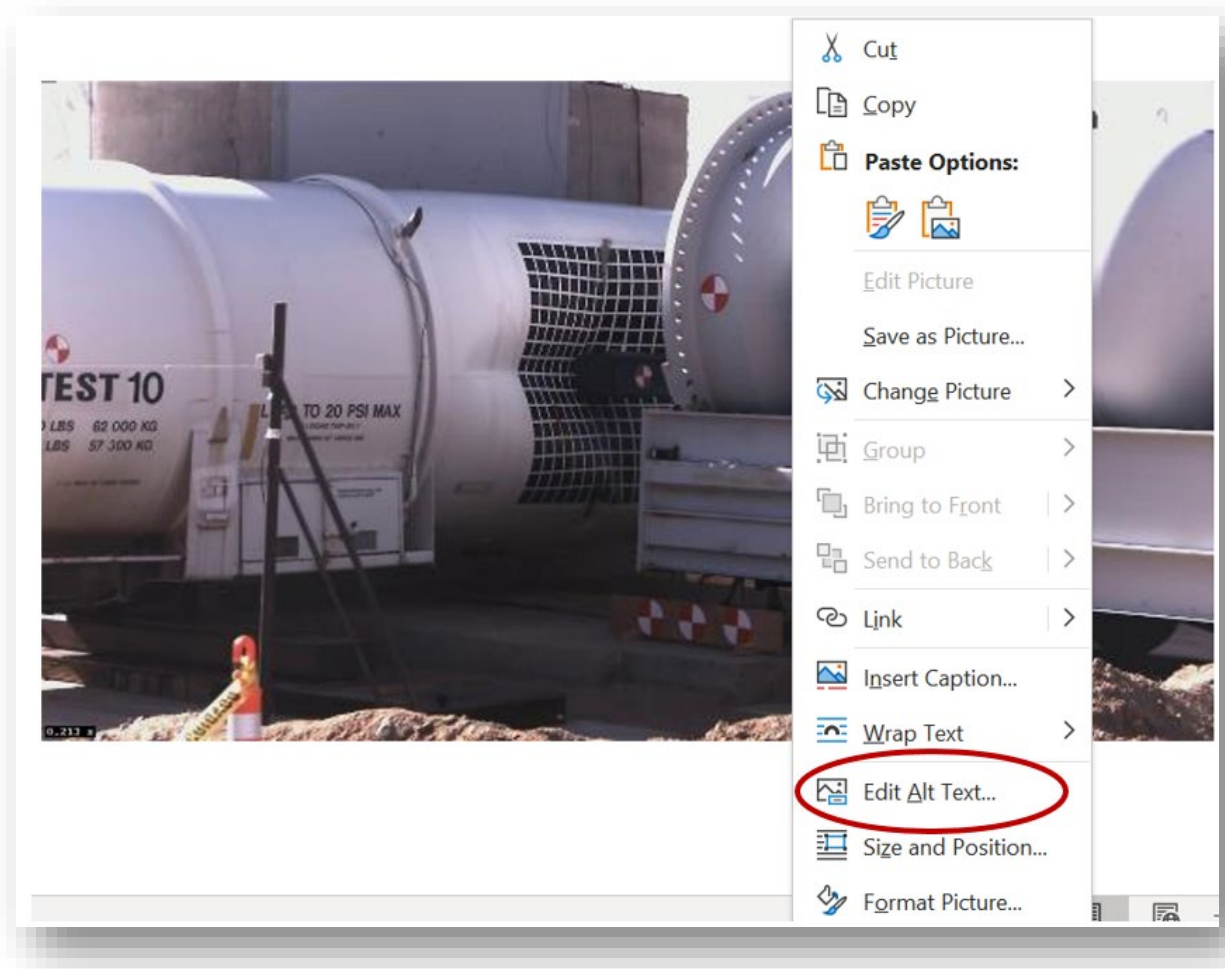
**Federal Railroad Administration**

## Overview

A disabled individual can benefit from alternative text (alt text) because when the document is converted to PDF format, the Adobe reader can read the alternative text to the disabled individual.<sup>1 2</sup>

### Making Images Accessible (Word 2016)

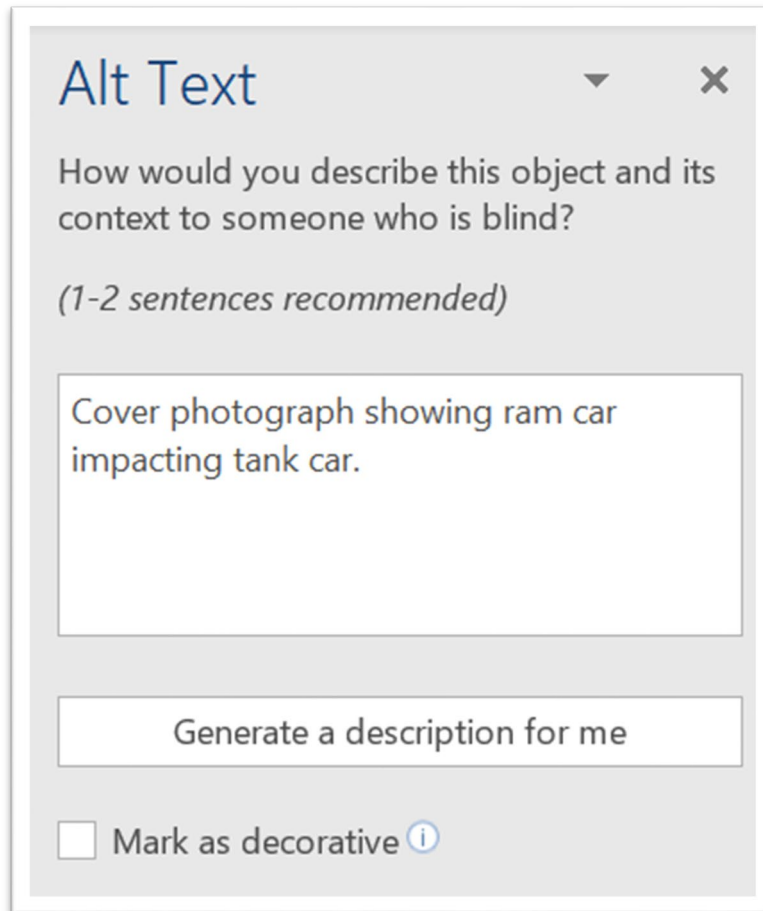
1. Right-click on the image and select Edit Alt Text (or Format Picture) as shown in [Figure 1](#). Choose the “Generate a description for me” option or manually add a short description that accurately describes the importance of the image, shown in [Figure 2](#).



**Figure 1. Step 1: Edit Alt Text**

<sup>1</sup> [Section 508 of the Rehabilitation Act of 1973](#), mandate amended January 18, 2018.

<sup>2</sup> [Revised 508 Standards](#).



**Figure 2. Step 2: Alt Text Description Example**

2. In older versions of Microsoft Word, older images may not have the above features. As an alternative, right-click on the image and select Picture. In the dialogue box, click on the **Alt Text** tab to the far right of the box. Type or copy/paste the image's description into the box, and then click OK. See [Figure 2\(a\) & \(b\)](#).

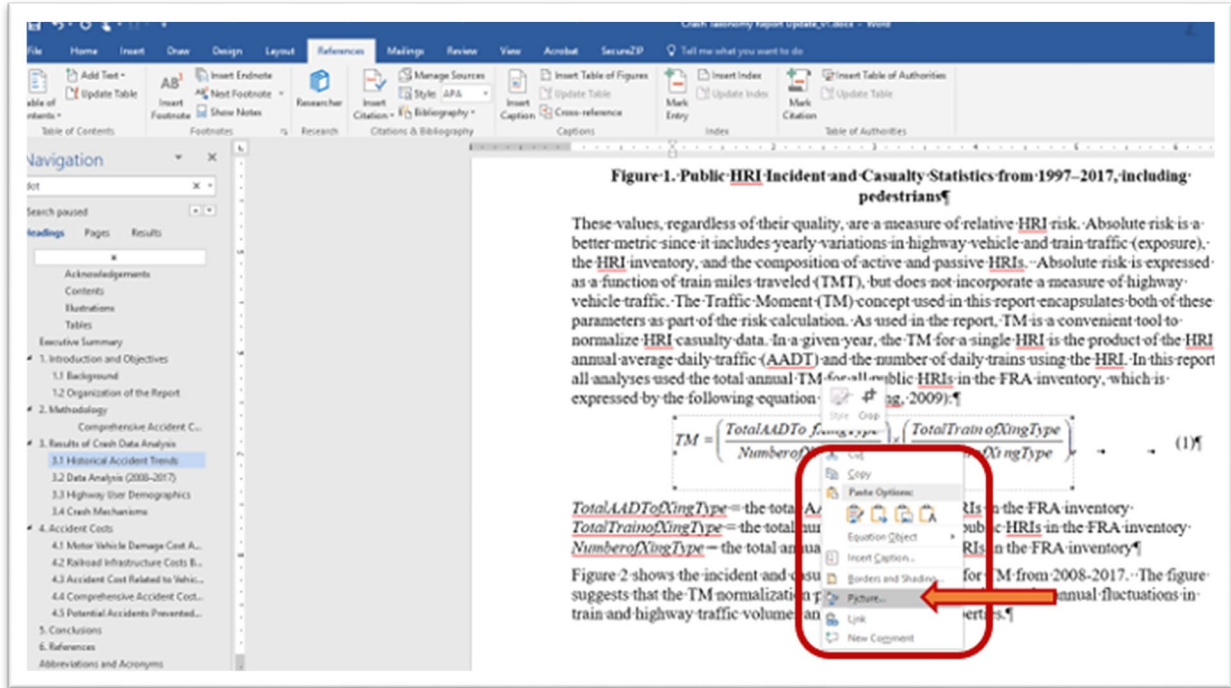


Figure 2(a). When the Figure is Older and Requires Alt Text

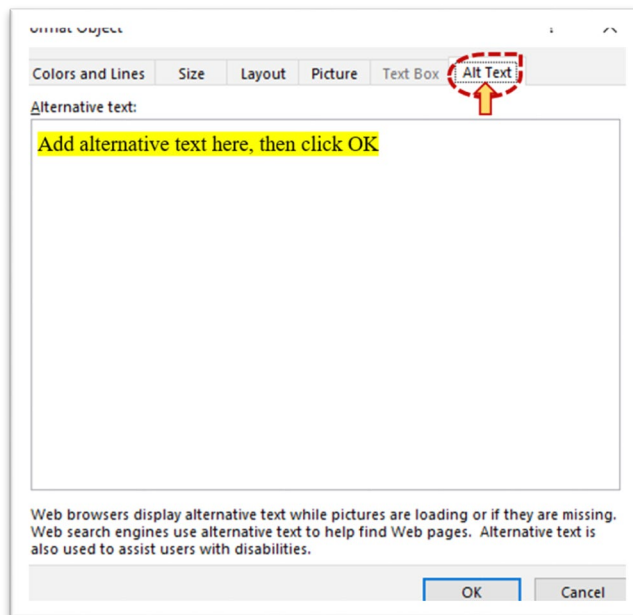


Figure 2(b). How to Add Alt Text to Older Figure

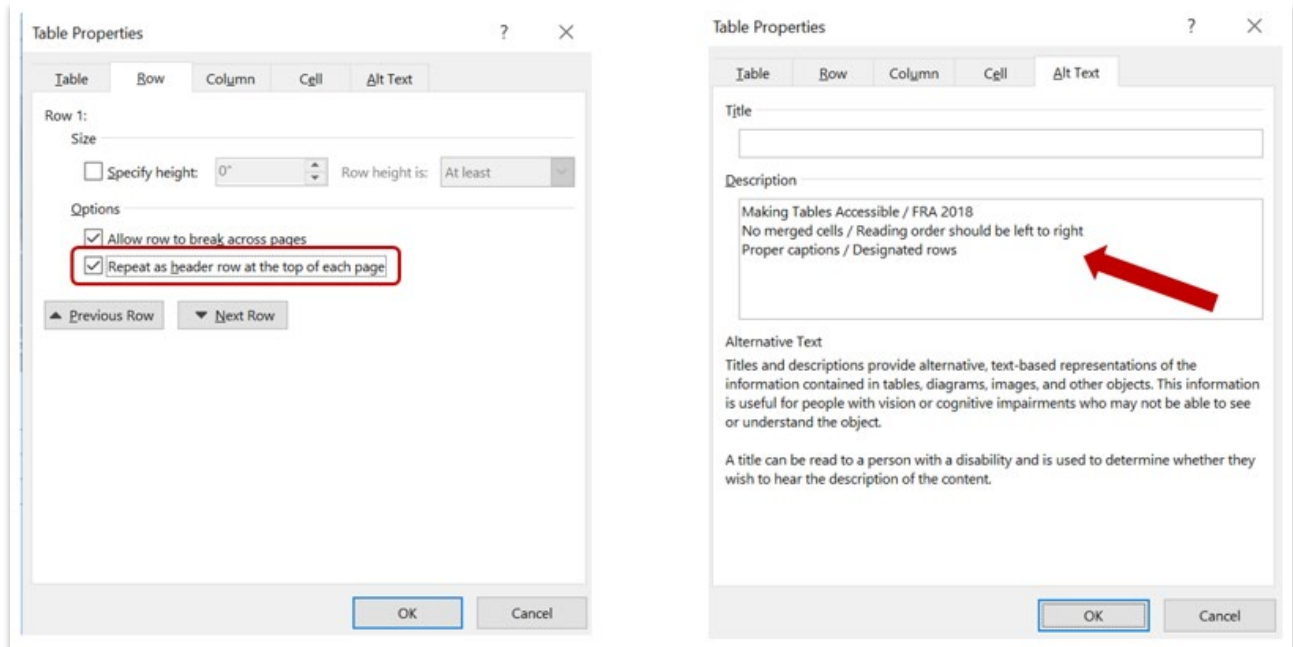


## Making Tables Accessible

1. Make sure to add a caption for the table as well.
2. When creating the table make sure that there are repeated header rows by highlighting the rows that should be the header. Right click in the table and select 'Table Properties,' then the **Row** tab. Check mark "Repeat as header row at the top of each page," then go to the **Alt Text** tab in the same dialogue box and add the appropriate description of the table, as shown in [Figure 3](#).
3. Alternatively, alt text can also be added by the 'Table Tools' ribbon by making sure to click in the table, then select 'Table Tools' from the top ribbon, then the **Layout** tab, and "Repeat Header Rows" shown in [Figure 4](#). See [Table 1](#) for additional requirements regarding tables.

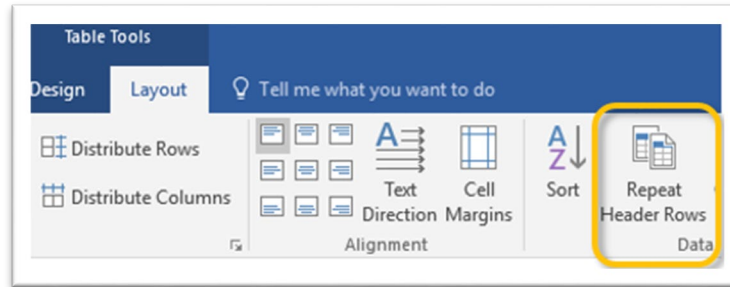
**Table 1. Sample Table**

Making Tables Accessible	
No merged cells nor split cells	Reading order should be left to right
Proper captions	Designated rows
No blank cells, see <a href="#">Figure 5</a>	Add alt text including title, see <a href="#">Figure 3</a> (right)



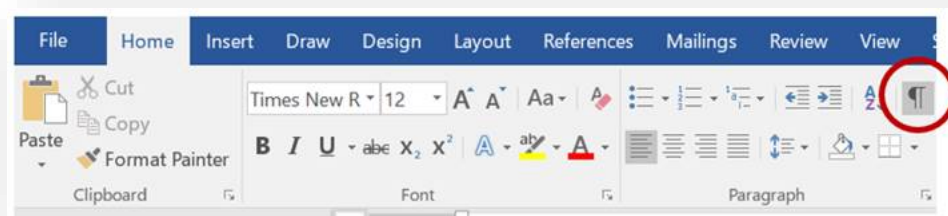
**Figure 3. Selecting Repeat Headers (Left) and Adding Alt Text (Right)**





**Figure 4. Another Way to Add Repeating Headers**

Additionally, tables should not have blank rows or columns as shown in [Figure 5\(b\)](#). If you are unable to see them, turn on your paragraph symbol, i.e., ¶, in the **Home** → *Paragraph* ribbon, see [Figure 5\(a\)](#). Highlight the row or column, right click, and select delete row or column if there is an unnecessary blank row. Note that the Technical Editors are aware that some tables are structured a certain way where a blank cell is necessary, but in [Figure 5\(b\)](#), it was not.



(a)

**Table 34. Monte Carlo Simulation Results for 6.3.11.5.ENG2  
 Emergency Brake Backup Enabled¶**

Train Type	Probability of Stopping short of Target (%)	Probability of Stopping Short of Performance Limit <30 mph (%)	Probability of Stopping Short of Performance Limit >=30 mph (%)
Unit	99.66	14.75	18.39
Manifest	99.90	17.87	19.51
Intermodal	99.95	18.15	14.94

Blank rows

(b)

**Figure 5. To See Blank Rows in Tables, Turn on Paragraph Symbols**



Equations are not read by the Adobe Reader, as shown [HERE](#), then the equations should be captured in tables with designated headers and alt text must be added to the table in Table Properties with the most accurate description of the equation (see [Figure 3](#) through [Figure 4](#), and [Figure 5](#)); or the equations can be captured as figures.

$a_m(t) = (U_r(x_m, t) - U_t(x_m, t))K_p(m) + (\dot{U}_r(x_m, t) - \dot{U}_t(x_m, t))D_p(m)$	(1)
$b_m(t) = (U_b(x_m, t) - U_a(x_m, t))K_b(m)$ $+ (\dot{U}_b(x_m, t) - \dot{U}_a(x_m, t))D_b(m)$	(2)
$(U_r(x_m, t) - U_t(x_m, t))K_p(m) + (\dot{U}_r(x_m, t) - \dot{U}_t(x_m, t))D_p(m)$ $- [(U_t(x_m, t) - U_b(x_m, t))K_b(m) + (\dot{U}_t(x_m, t) - \dot{U}_b(x_m, t))D_b(m)]$ $= M_t(m)\ddot{U}_t(x_m, t)$	(3)
$(U_t(x_m, t) - U_b(x_m, t))K_b(m) + (\dot{U}_t(x_m, t) - \dot{U}_b(x_m, t))D_b(m)$ $- [(U_b(x_m, t) - U_a(x_m, t))K_b(m) + (\dot{U}_b(x_m, t) - \dot{U}_a(x_m, t))D_b(m)]$ $= M_b(m)\ddot{U}_b(x_m, t)$	(4)

**Figure 6. Workaround for Equations if Not Read by Adobe Reader**

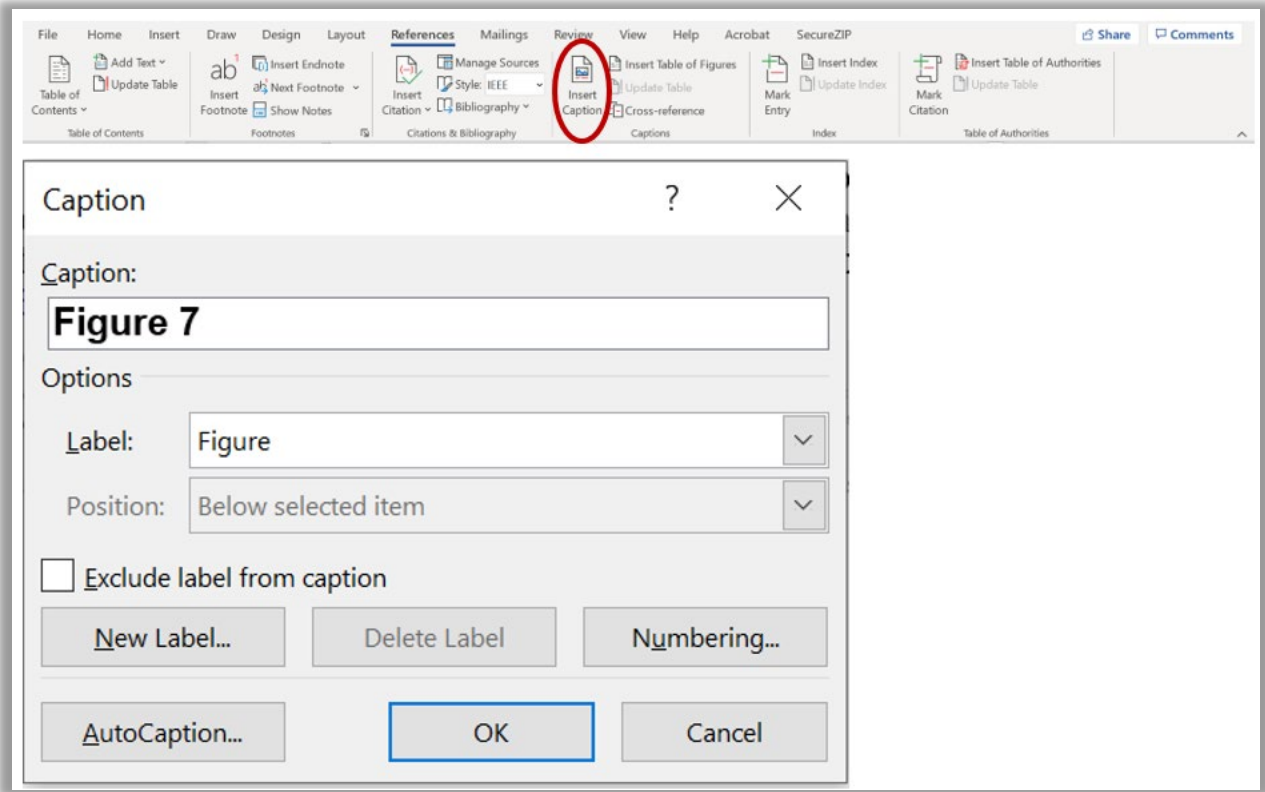
This method will be accepted by the Technical Editors for the reasons stated above, no other means of using tables for formatting purposes can take place.

### How to Properly Caption Tables, Figures, and Equations

A proper caption is not a complete sentence, short, and simple. Use the automatic captioning tool in MS Word, by going to the **Home** → *References* ribbon and choosing the 'Insert Caption' option. The default is set to 'Figure' and the numbering is defaulted to start with a single digit shown in [Figure 7\(a\)](#). This is the method used for captioning tables as well, however, the label will need to be manually chosen as 'Table' within the drop-down. Another way to caption an image is to right click within the image and choose Insert Caption as shown in [Figure 7\(b\)](#). Refer to captions provided in [Figure 1](#) through [Figure 6](#) for examples of length, description, and conciseness.



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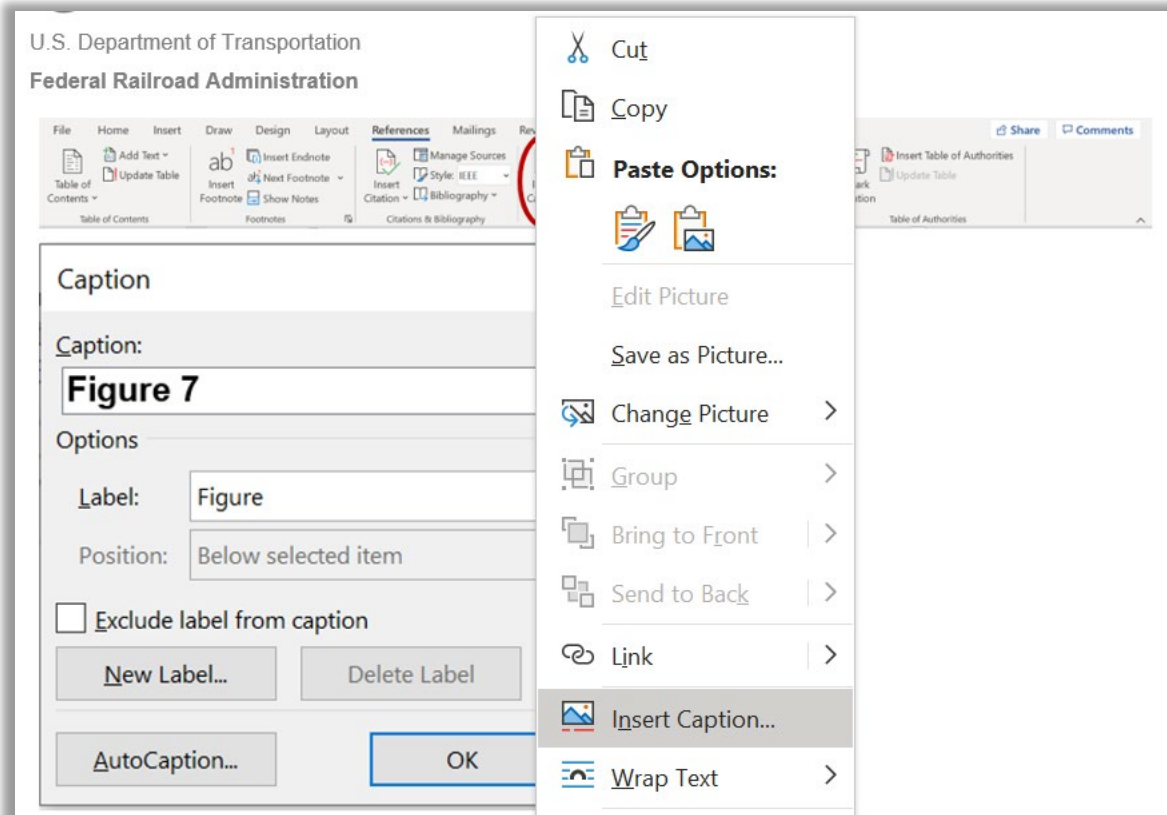


(a)





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(b)

**Figure 7. (a) How to Insert Caption for Figure via References ribbon; (b) Right Click on the Image**