Creating 2020 Census Block Group Parcel Values With ArcMap 10.x For Tax Roll Submissions

The following step-by-step process is an aid to produce 2020 Census Block Group values corresponding to all parcels in a county parcel shapefile. This is for the purpose of populating data field 78 (Census Block Group) in a county's DOR roll submissions. While this step-by-step explanation may appear lengthy, the entire process should take less than 15 minutes to complete. The end result is a .txt report that contains a comma delimited parcel number field and a **GEOID20** field. Please note that the 2020 Census Block Group **GEOID20** field is 12 characters in length.

Download the Census Block Group shapefile for your county from the Secure File Transfer Protocol (SFTP) server. Each county's Census Block Group shapefile has been placed in their respective Misc-To-PA folder. A password is required to access the SFTP server.

Right click the downloaded .zip Census file and choose "Extract all" saving the uncompressed file in a location of your choosing. Add the Census Block Group shapefile to a new ArcMap session.
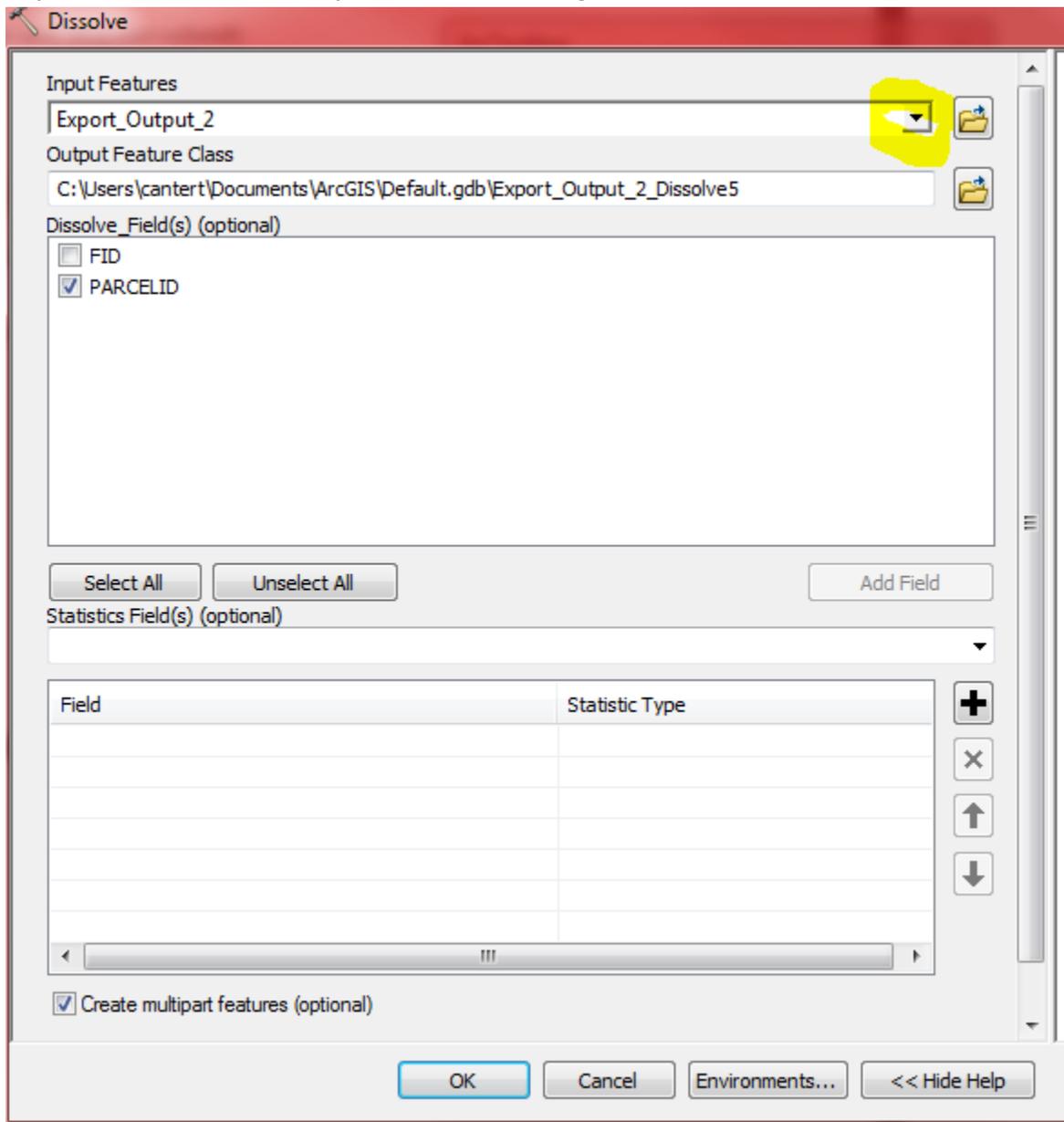
Add a copy of your current parcel shapefile to the new ArcMap session. Performance tip: In addition to shapefile default fields FID and Shape, limit the remaining fields to only your parcel identification field.

Select Geoprocessing tools and navigate to the Dissolve tool.
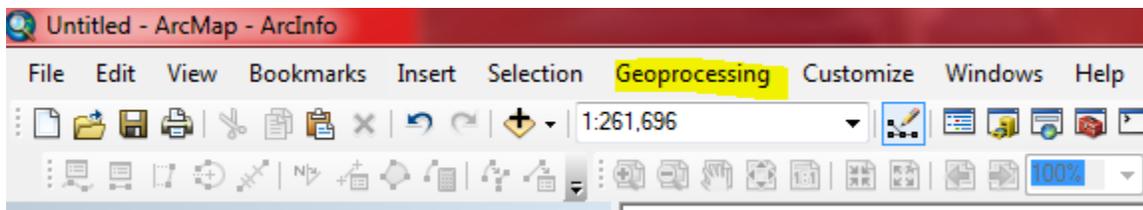
Creating 2020 Census Block Group Parcel Values With ArcMap 10.x For Tax Roll Submissions

Depress the Dissolve tool to open the dissolve dialog box that will look like this:


Input Features will be your current parcel shapefile so using the dropdown button, navigate to it. Dissolve_Fields will be performed on your parcel identification field, so check that. Depress OK. A status scroll will appear below the bottom of your ArcMap window. A new shapefile will be added to your Table of Contents and will have an extension of _Dissolve.

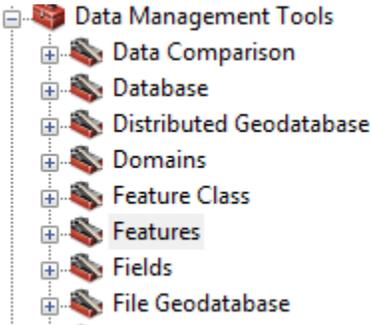# Creating 2020 Census Block Group Parcel Values With ArcMap 10.x For Tax Roll Submissions

Open Arc Toolbox as shown:

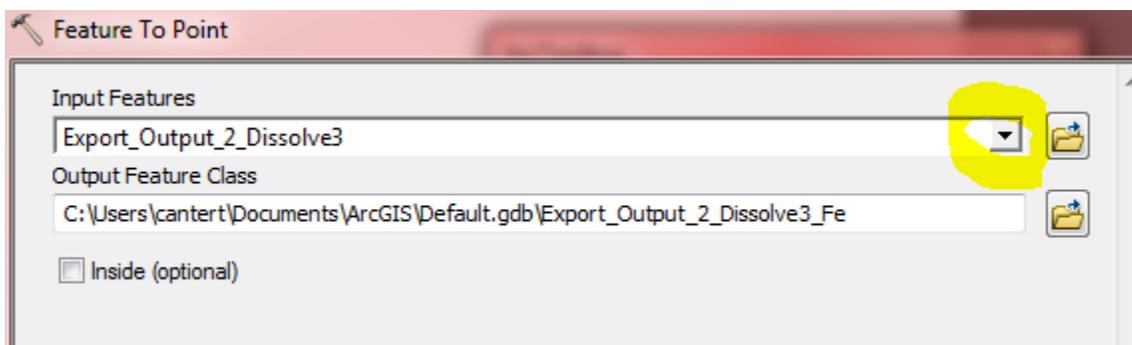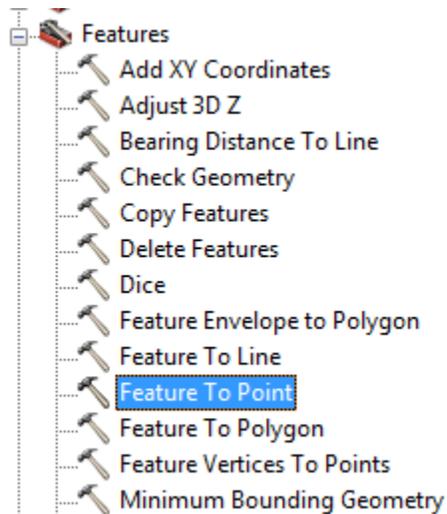**Open the Data Management tools:**
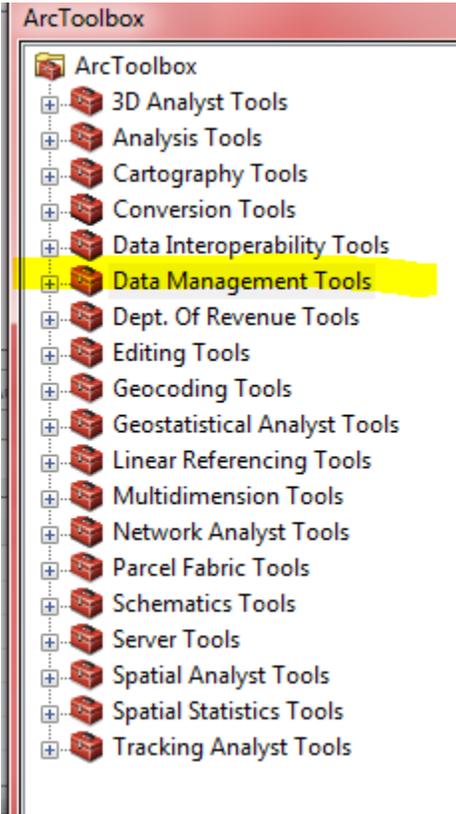
Navigate to Features and double-click:

Creating 2020 Census Block Group Parcel Values With ArcMap 10.x For Tax Roll Submissions

**Now navigate to Feature to Point and double-click to access the dialog box:**

Input Features will be the Dissolve shapefile you created, so using the dropdown select it.

Click OK.

Another new shapefile will be added to your Table of Contents. It will have an extension of _FeatureToPoint. The file name may be shortened so don't be alarmed.

Activate the _FeatureToPoint shapefile. Right-click it and select Join and Relates and then choose Join.
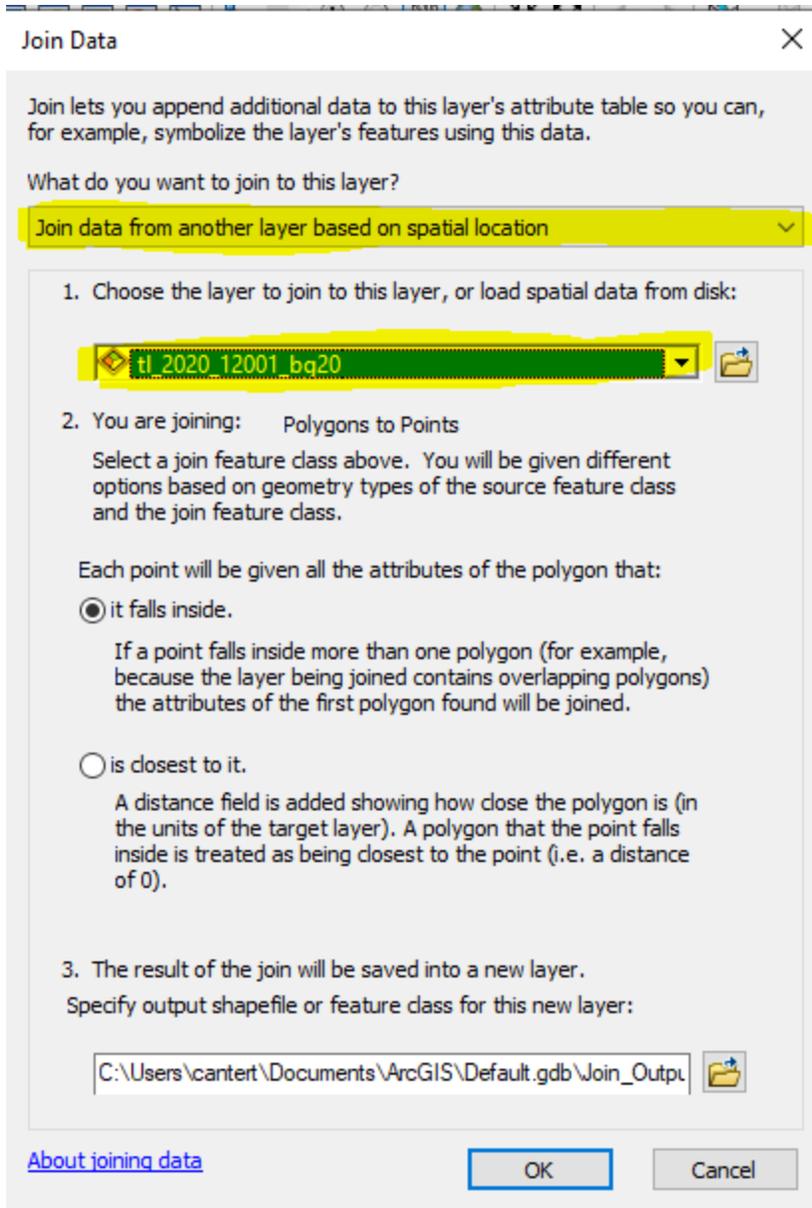
As shown, using the dropdown select "Join data from another layer based on spatial location". At 1., using the dropdown, select the Census Block Group shapefile. Notice at 2. that "it falls inside" is selected. Depress OK.

Creating 2020 Census Block Group Parcel Values With ArcMap 10.x For Tax Roll Submissions

"Join_Output" will be a point file. Open the attribute table. See that GEOID20 field (highlighted) is populated. Depress the dropdown button and navigate to Reports and then to Create Report.

	OBJECTID_1 *	FID	Shape *	PARCELNO	ORIG_FID	FID_1	STATEFP20	COUNTYFP20	TRACTCE20	BLKGRPCE20	GEOID20	
▶	1	1	Point ZM		1	90	12	001	001803	4	120010018034	
	2	3	Point ZM	00002-000-000	3	95	12	001	001815	1	120010018151	
	3	4	Point ZM	00003-000-000	4	95	12	001	001815	1	120010018151	
	4	5	Point ZM	00004-000-000	5	95	12	001	001815	1	120010018151	

In the Report Wizard dialog box, double-click parcel ID and also GEOID20 so they move over to Report Fields.

Click Next.

Click finish at this step and let the report generate.

It will look something like this. Notice in this example the parcel ID is on two lines. Click Edit.
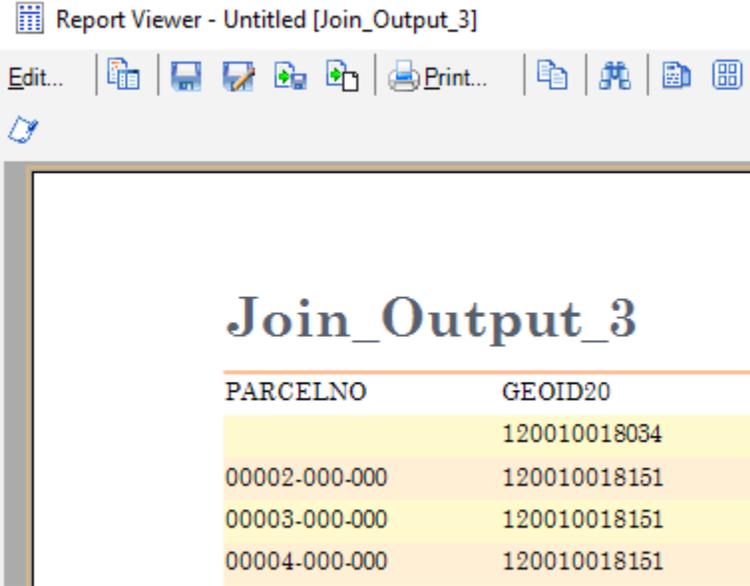
Finally, we are going to modify the report to eliminate page breaks, headers and footers before choosing the final output format.

Creating 2020 Census Block Group Parcel Values With ArcMap 10.x For Tax Roll Submissions

Left click on "Page (Page Number) of (Page Count)" and delete. Also delete PARCELID, GEOID10 in the page header as well as the "Join_Output" title in the report header, as shown.
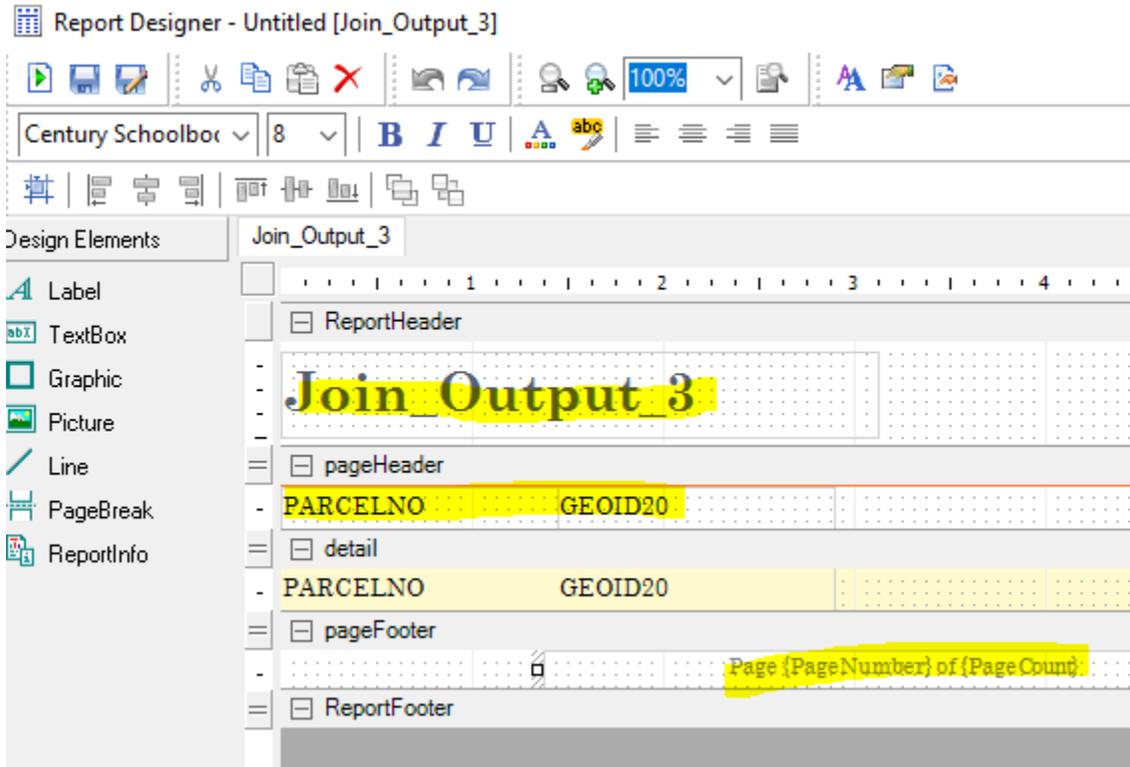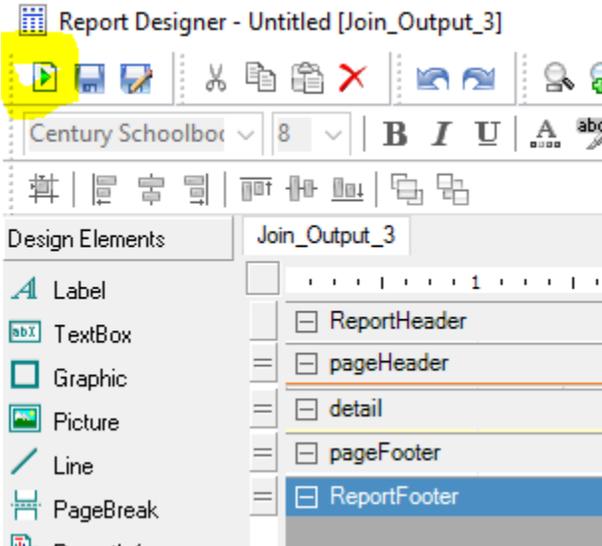

Hover the cursor at the bottom of the report header, the page header and the page footer areas to collapse those fields by dragging the separators up.
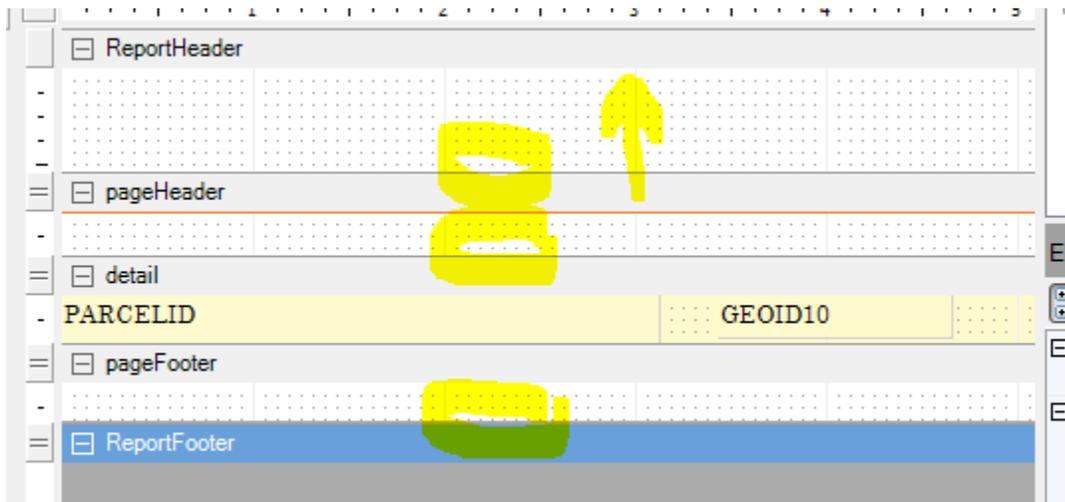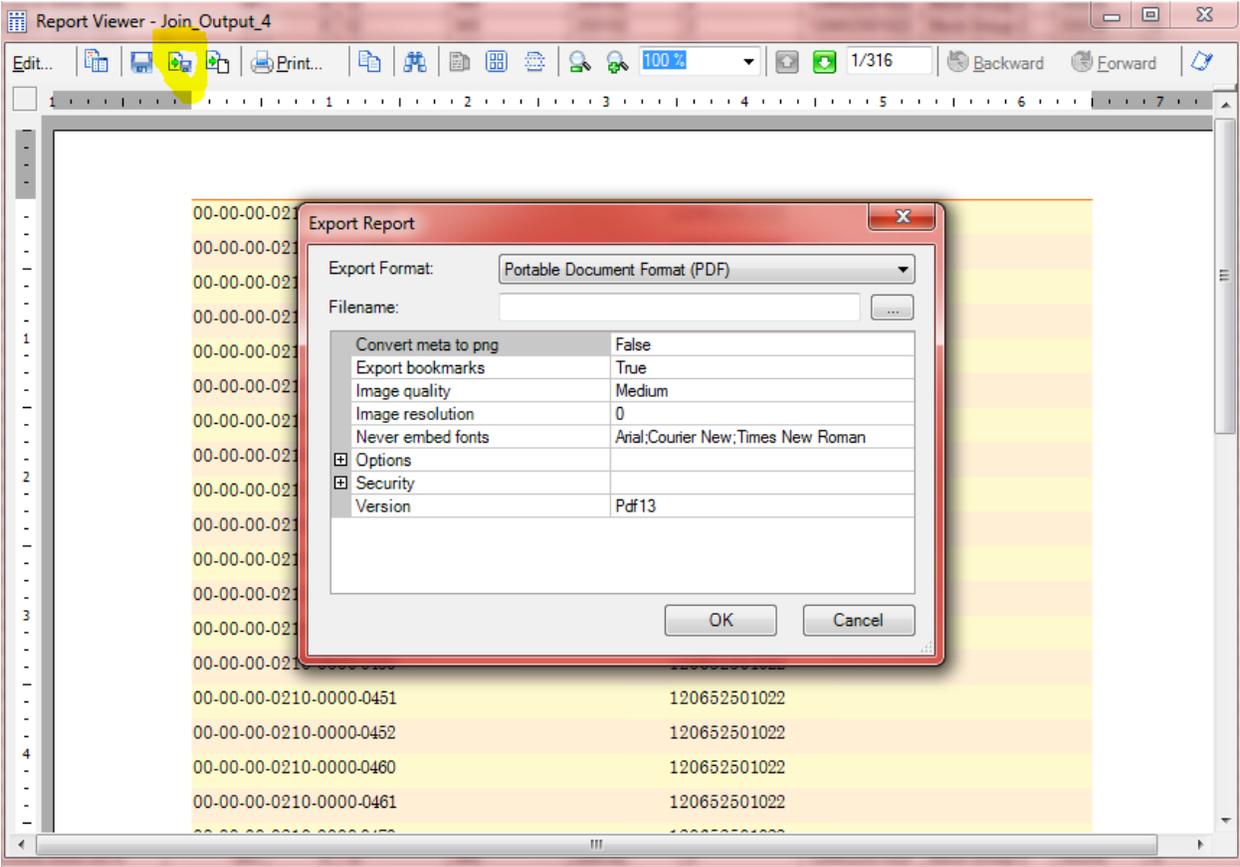
When the fields are adjusted, click Run Report as shown circled:

Next click Export report to file as shown. This will open the Export Report dialog box. Typically, choose Text Format from the dropdown.

Creating 2020 Census Block Group Parcel Values With ArcMap 10.x For Tax Roll Submissions

In this example, Text delimiter is comma. Where highlighted, navigate to the desired folder, name the file and click OK. YOU ARE DONE!