



Department of Local Government Finance

Microsoft Teams for Ratio Studies

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Overview

- What is a Ratio Study?
 - Statute
 - Components
 - Formatting
 - Sales and the Reconciliation
- Working in Teams
 - Reacquainting
 - Ratio Study Submission
 - Communication
 - Editing Files
 - Tips and Tricks



What is a Ratio Study?



What is a Ratio Study?

- Definition:
 - “Ratio study” means the sales-based studies designed to evaluate assessment performance. It is a study of the relationship between appraised or assessed values and market value-in-use as reflected by sales or other information.
 - 50 IAC 27-2-10



What is a Ratio Study?

- The Ratio Study is used as a “measurement and evaluation of the level and uniformity of mass appraisal models” and as a “determination of whether administrative or statutory standards have been met.” – IAAO, Standard on Ratio Studies 2013



What is a Ratio Study?

- Ratio Study compares assessment to sale prices of similar properties.
- Properties are grouped and the ratios are analyzed to see if assessments reflect market value-in-use.
- Ratio shows how close the assessment of a sold property is to its sale price.

$$\frac{\textit{Assessed Value}}{\textit{Sales Price}}$$



What is a Ratio Study?

Sales

- 50 IAC 27-4-7(f) All sales are candidates for the ratio study unless sufficient and compelling information can be documented to show otherwise.



Statistical Measures

- Level (ratio): 0.90-1.10
- Coefficient of Dispersion (COD):
 - <15% for residential improved
 - <20% for other real property
- Price-Related Differential (PRD): 0.98-1.03
- *Note: Spearman Rank rather than PRD is used for groupings with fewer than 20 sales.



Components of the Ratio Study Submission

- Ratio Study
- Workbook
- Sales Reconciliation
- Narrative (use of Narrative template is required)
- Supplemental information may be submitted with Narrative, but all Narrative questions must be answered.
- All must all be separate files. Spreadsheets should be in xlsx format.



Formatting

- Must be properly formatted before Ratio Study will be reviewed.
- Ratio Study Guidance includes sample spreadsheets with examples of correct and incorrect formatting.
- Sample spreadsheets will also be provided in the Teams channel.



Components and Formatting

- Formatted tab must be named “Formatted”
- Workbook tab must be named “Workbook”
- FOUR cyclical columns: 2018 Cyclical Reassessment, 2019 Cyclical Reassessment, 2020 Cyclical Reassessment, and 2021 Cyclical Reassessment.
- Column names must be same as example (exact spelling).



Components and Formatting

Workbook Column Names	Example
Parcel Number	12-34-56-789-123.456-789
Township Number	three-digit number
Township Name	Jackson Township
Neighborhoods Code	12345
Prior Year Property Class	500
Current Year Property lass	510
Taxing District	three-digit number
Prior Year Lane AV	2000
Prior Year Improvement AV	0
Prior year total AV	2000
Current Year Land AV	2500
Curent year Improvement AV	95000
Curent year Total AV	97500
2018 Cyclical Reassessment	Y/N
2019 Cyclicacal Reassessment	Y/N
2020 Cyclical Reassessment	Y/N
2021 Cyclical Reassessment	Y/N

Ratio Study Column Names	Example
SDFID	C01-2019-9876543
Parcel Number	12-34-56-789-123.456-789
MultiParcel	Y/N
Primary	Y/N
Study Section	ResImp
Grouping	must be unique for each study section; use "None" when township/study section does not have different groupings
Township Name	Jackson Township
Neighborhood	12345
Property Class	510
Taxing District	three-digit number
Sale Date	MM/DD/YY
Study Sale Price	100000
Current Land AV	2500
Current Improvement AV	95000
Current Total AV	97500

Y if parent or single parcel



Components and Formatting

- All sales must be listed individually with its respective AV.
- Files must be named “County Name Ratio Study” and “County Name Workbook”. (eg “Adams County Ratio Study”)
- Grouping must be unique for each study section. Grouping “Res” cannot contain both ResImp and ResVac.
- Use “None” if there are no special groupings by township.
- Use recognizable grouping names. (e.g. ResImpCenter rather than “A” or “2”)



Sales and the Reconciliation

- Sales files must be compliant before list of potentially valid sales can be generated.
- File will be generated a few days after you receive your compliance notification from the Data Division.
- File contains sales we would expect to see in the Ratio Study based on the sales files.
- You may include more sales if deemed valid.
- You are not required to include all sales if deemed invalid.



Sales and the Reconciliation

- Sales not included in this file must be included in the county's Sales Reconciliation with an explanation. Explanations that are not acceptable: Outlier, obscure notes from office staff, MPS, vacant, not typical sale, not indicative of market.
- File generated by DLGF will be uploaded to the Teams channel and you will be notified.
- Upload completed Reconciliation with Ratio Study files.
- **Note: Groupings with insufficient sales should be included on the Reconciliation with an explanation rather than in the Ratio Study.**



Sales and the Reconciliation

- Note about outliers: a sale cannot be automatically excluded as an “outlier” because it falls outside a desired range.
- Outlier ratios are very low or high ratios as compared with other ratios *in the sample*. IAAO, Standard on Ratio Studies 2013, emphasis mine.
- This means it is an outlier ACCORDING TO THE SAMPLE, not a ratio that falls outside 0.90-1.10. If a significant portion of the ratios in the sample are centered around 1.25, then these are not outliers, this is a trend.

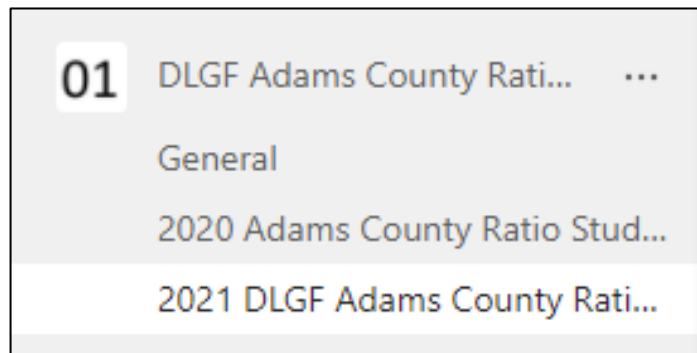


Working in Teams



Reacquainting

- Before the new Ratio Study season begins, take the time to review previous channels for corrections that were needed to avoid delays.
- There will be 2022 DLGF County Name Ratio Study channel.
- All 2022 Ratio Study activity will occur in this channel.
- The new channel will contain a folder of Ratio Study Resource files, similar to 2021.
- Do not submit the Ratio Study files in this folder.
- **Note: Notify DLGF of changes to your Ratio Study team early so they can be added to Teams.**





Reacquainting

01 2021 DLGF Adams Coun... Posts **Files** Wiki +

+ New ▾ ↑ Upload ▾ 🔗 Copy link ↓ Download 🔗 Open in SharePoint

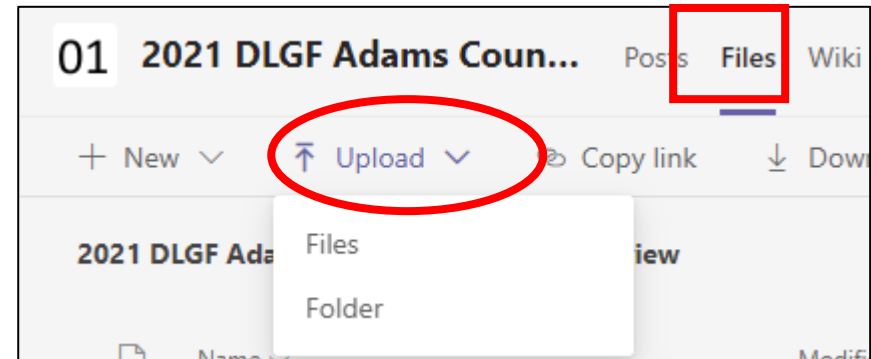
2021 DLGF Adams County Ratio Study Review > **2021 Ratio Study Resources**

📄	Name ▾	Modified ▾	Modified By ▾
📄	210111 - Wood Memo - 2021 Ratio Study ...	January 14	Bougie, Deliverance
📄	FAQ - Microsoft Teams.pdf	January 14	Bougie, Deliverance
📄	Login and Navigating MS Teams User Guid...	January 14	Bougie, Deliverance
📄	Narrative Template.docx	January 14	Bougie, Deliverance
📄	Sample_Ratio_Study_2021.xlsx	January 14	Bougie, Deliverance
📄	Sample_Workbook_2021.xlsx	January 14	Bougie, Deliverance



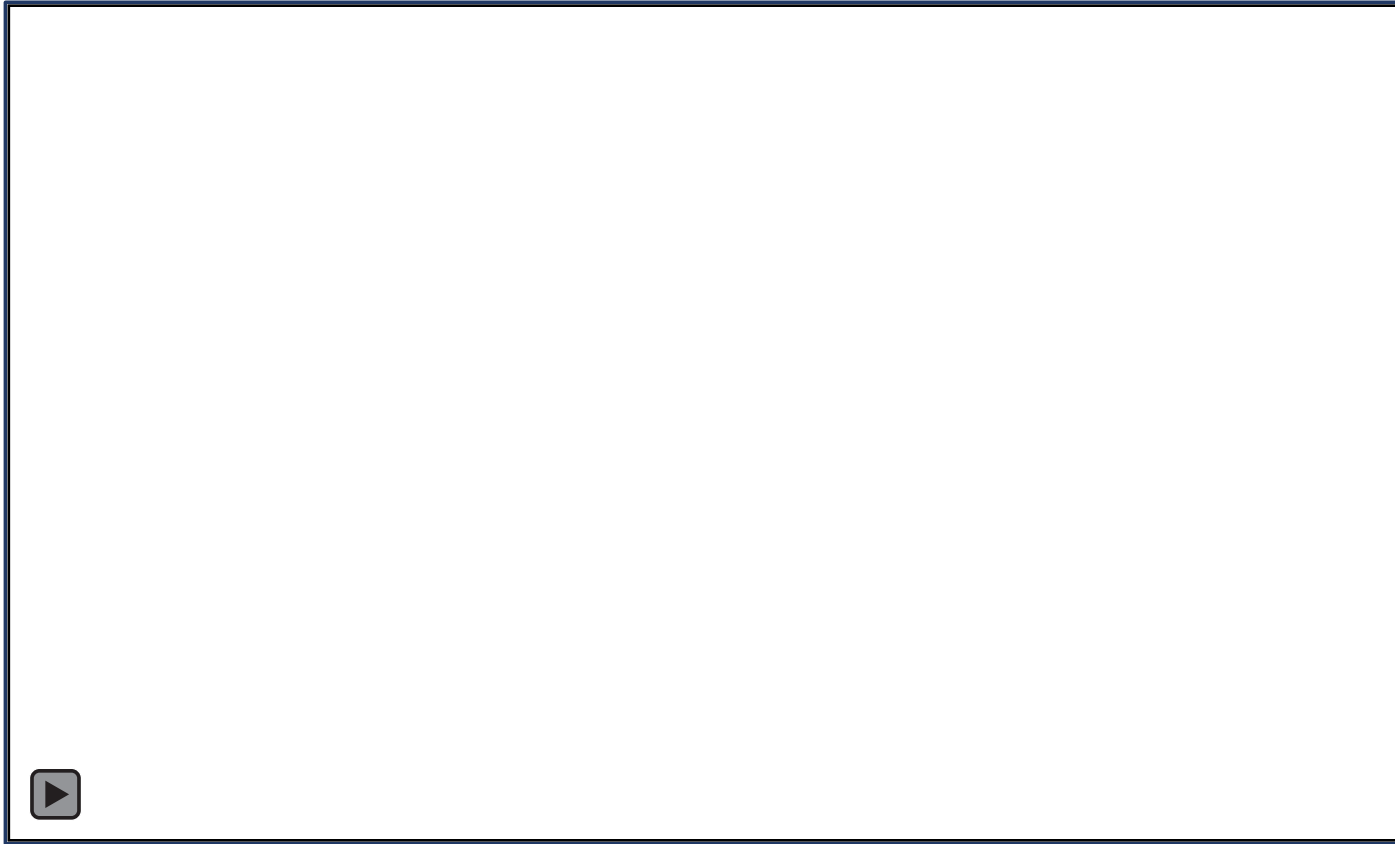
Ratio Study Submission

- All files must be uploaded to the 2022 channel in your Team.
- Files can be uploaded by selecting the Upload button in the Files tab of appropriate channel, select Files, and navigate to the appropriate files on your computer.
- Another way to upload files is “drag and drop”.





Ratio Study Submission

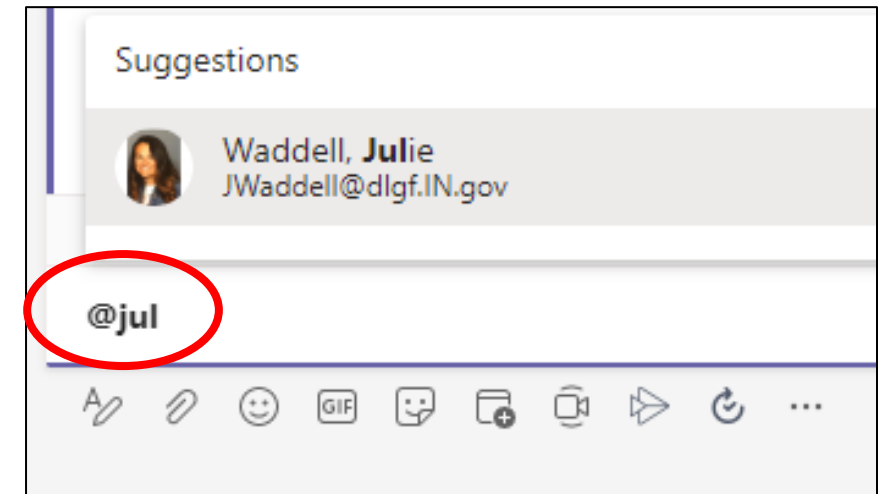


- Open File Explorer over Teams.
- Navigate to the appropriate folder where your files were saved.
- Select the files you wish to upload.
- Drag files into the open area of the Files tab.



Communication

- When ALL required files are correctly formatted, named, and uploaded, post a message that you have done so in the Posts tab. @mention Deliverance Bougie, Julie Waddell, and Barry Wood.
- We are not otherwise notified of the file submission.
- Your Ratio Study will not be considered submitted until you notify us in this manner.
- We will acknowledge receipt of the Ratio Study when we are notified.








Communication

 **New conversation**

Start a new conversation. Type @ to mention someone.



 New conversation ▾ Everyone can reply ▾  Post in multiple channels 

B *I* U ~~ABC~~ [A](#) [A](#) Paragraph ▾  |  |  |  | 99   ...

Subject for my new thread

By selecting the formatting option, you can type multiple lines without the message being sent until you are ready to sent it.

You can make lists:

1. Item one
2. Item two
3. Item three

And format with different colors and fonts *text formatting*.

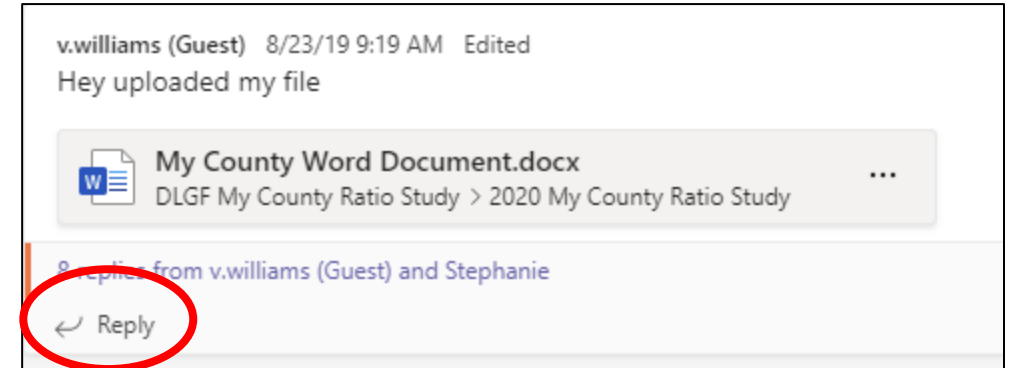
REMEMBER to click on the paper airplane, or the message will not be sent!





Communication

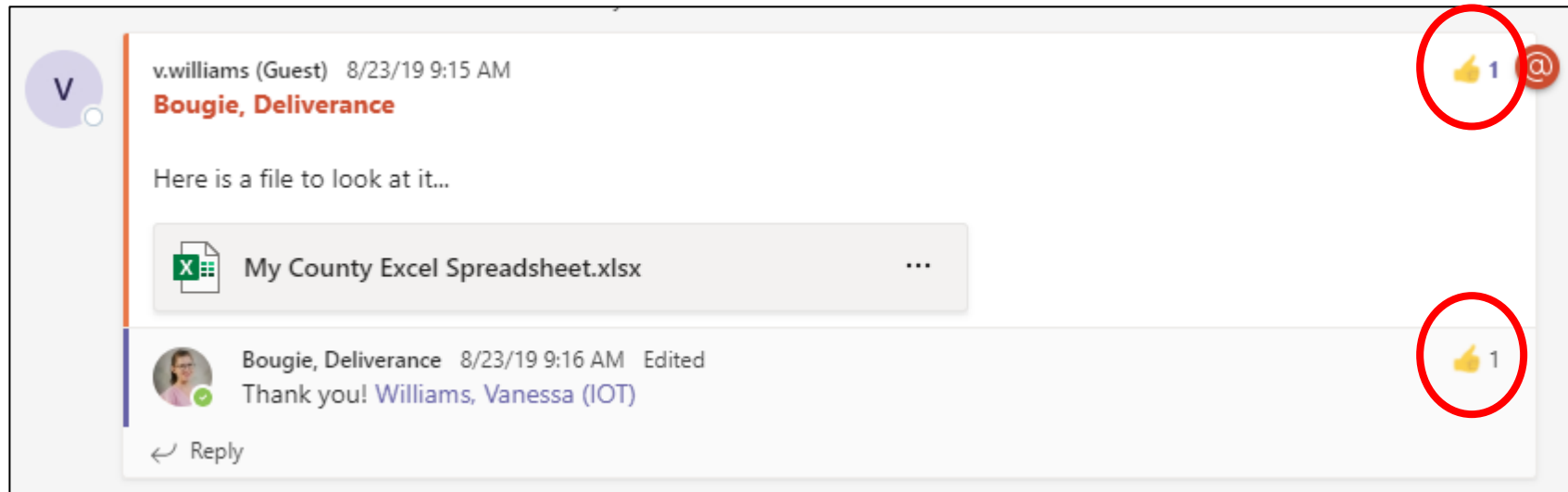
- Only “start a new conversation” when you are not responding to a current topic.
- Select “reply” if you are responding to a current conversation. This will keep the entire conversation together.





Communication

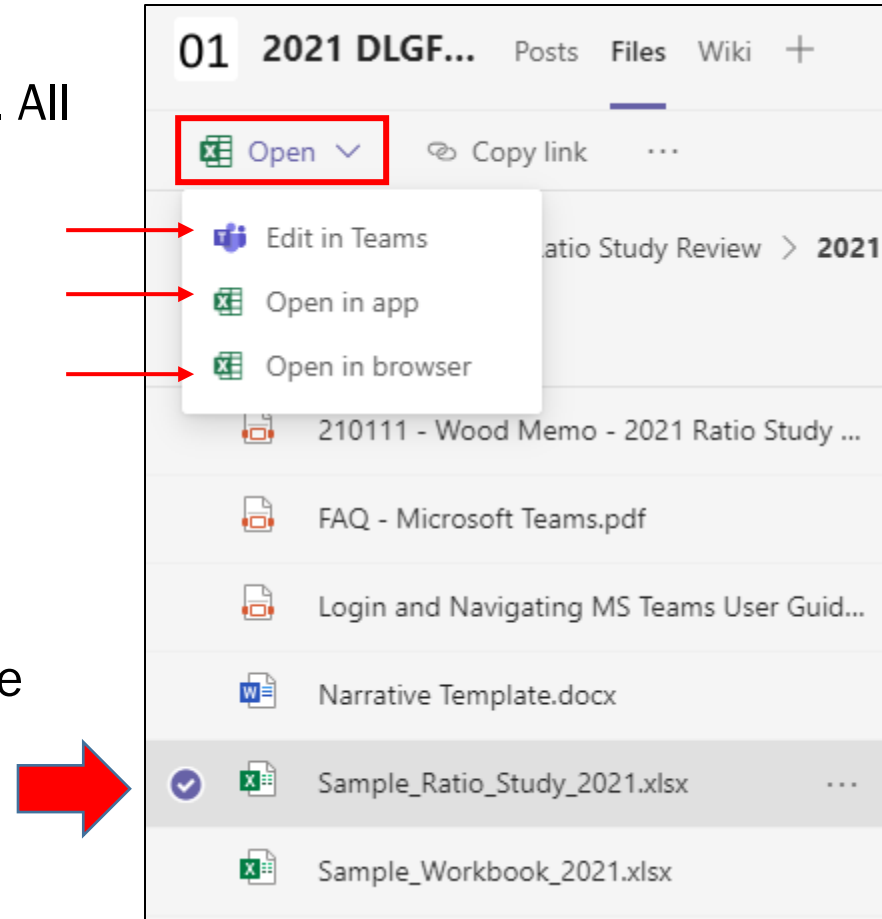
- When a message has been posted, “like” the message to notify us that you have seen it. We will follow up with you if there is no indication that you have seen the post.





Updating Files

- Often changes to the Ratio Study will be required. All changes must be made to the files uploaded to Teams. There are multiple ways to do this:
- Edit in Teams
- Open in app
- Open in browser
- Minor changes can be done easily in Teams, but I recommend opening in the app for more extensive changes. This gives you all of the capabilities you are used to in Excel.





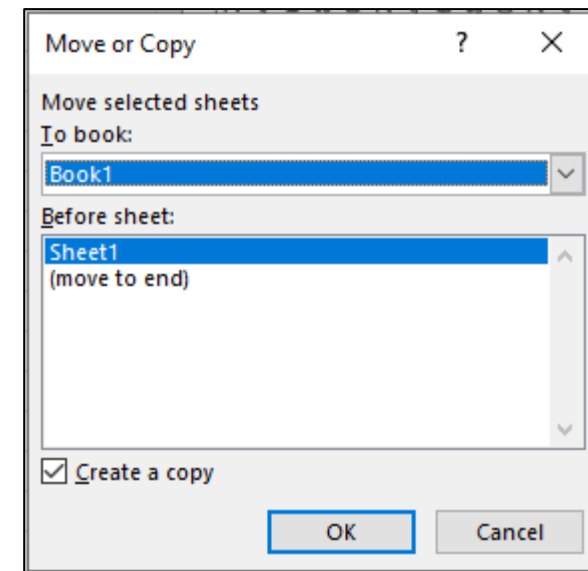
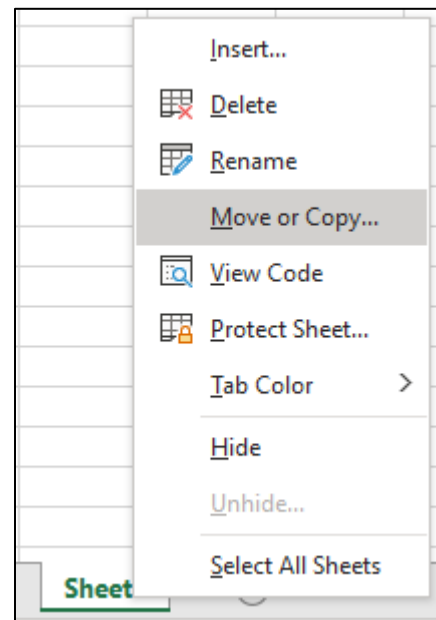
Updating Files

- Changes are saved in real time.
- To make minor changes in Teams, you can simply open the document and make your changes.
- Do not upload duplicates of files already uploaded. They will be removed and you will be asked to make the changes to the appropriate files for version control.



Updating Files

- If a new Workbook is needed, follow these steps:
 1. Open the original WB in the app
 2. Rename the tab in the original WB to WKB1
 3. Move the tab from the new WB to the original spreadsheet
 4. The tab on the most current WB must always be named Workbook.



How to move a tab:

Right click on tab

Select "Move or Copy"

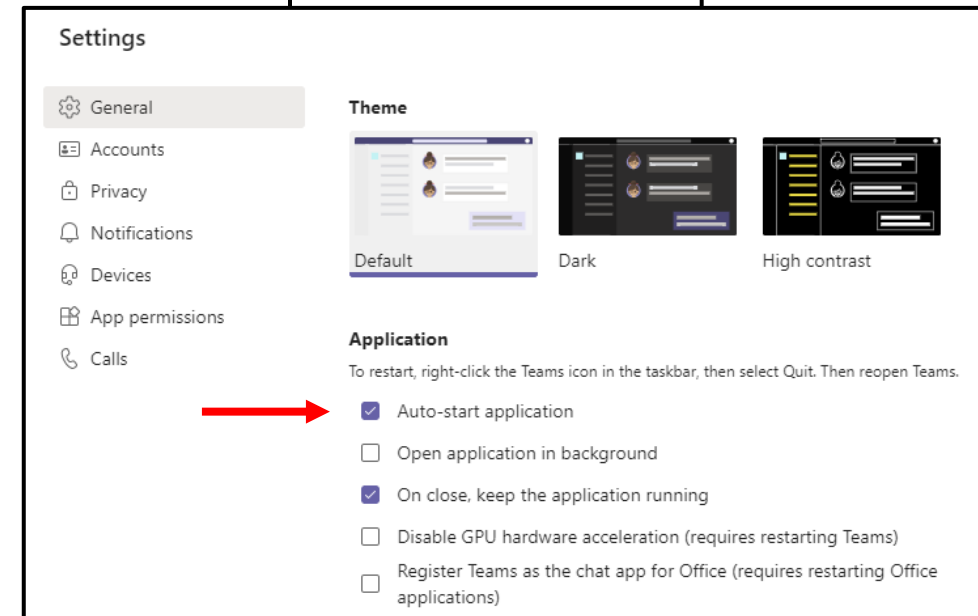
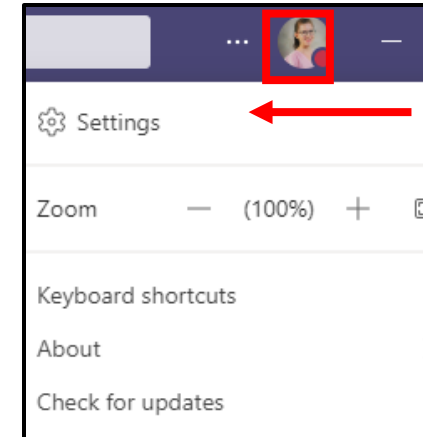
Select the Worksheet the tab will be moved to

Select "Create a copy" if you need to retain the sheet in your Workbook.



Tips and Tricks

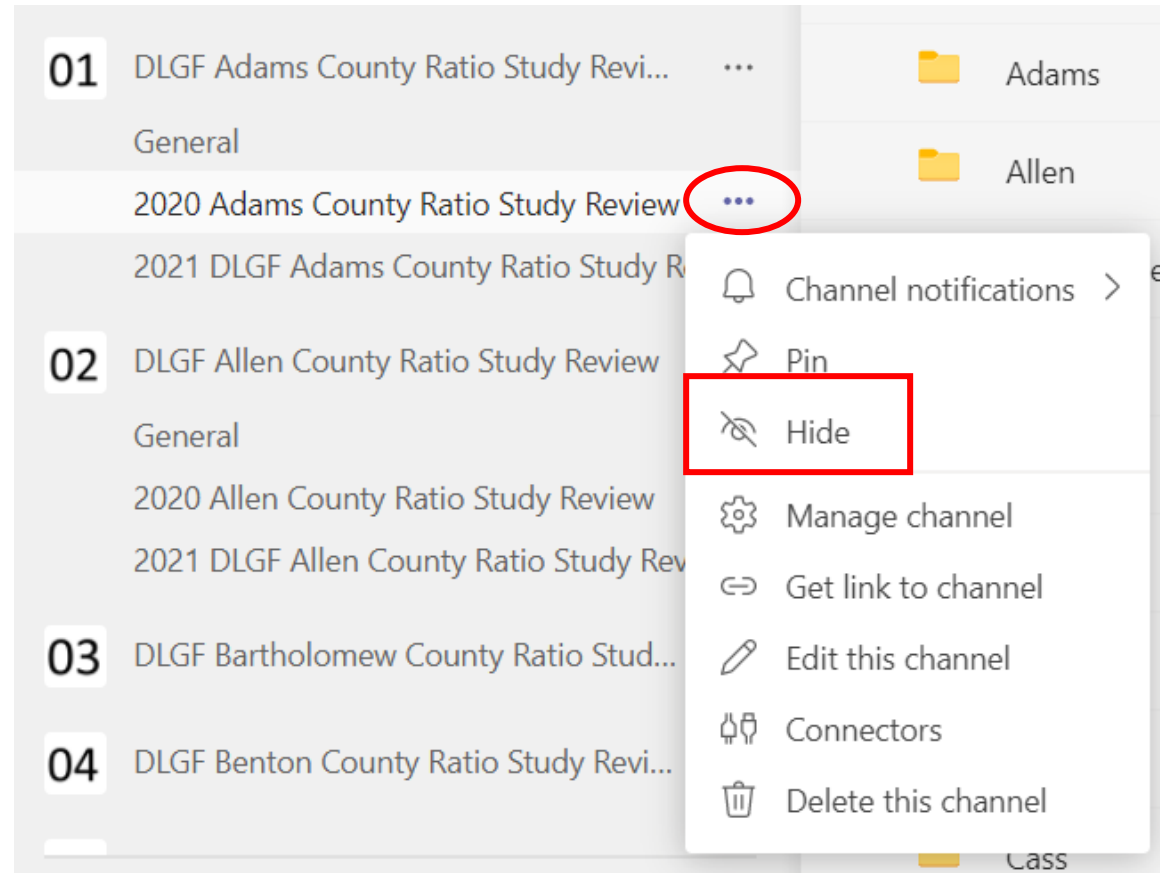
- During Ratio Study season, update your settings to allow Teams to open automatically when you start your computer.
- In the desktop app, click on the ellipses next to your image/initials.
- Select Settings.
- Tick the box that says, “Auto-start application.”





Tips and Tricks

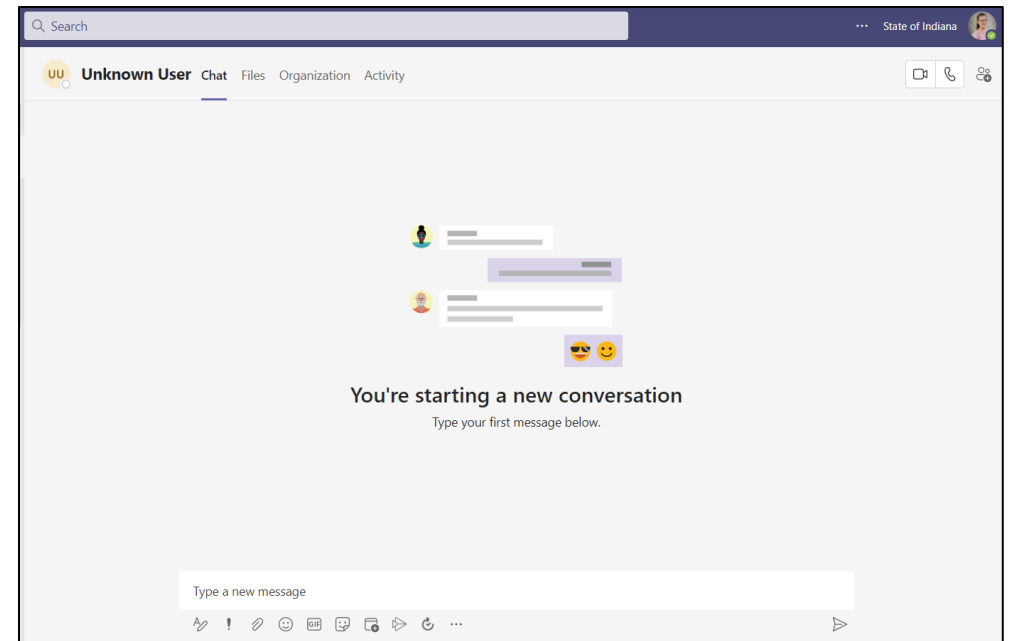
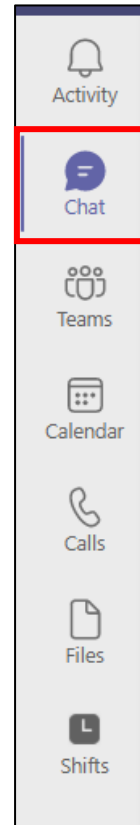
- Too many channels?
- Hide them!





Tips and Tricks

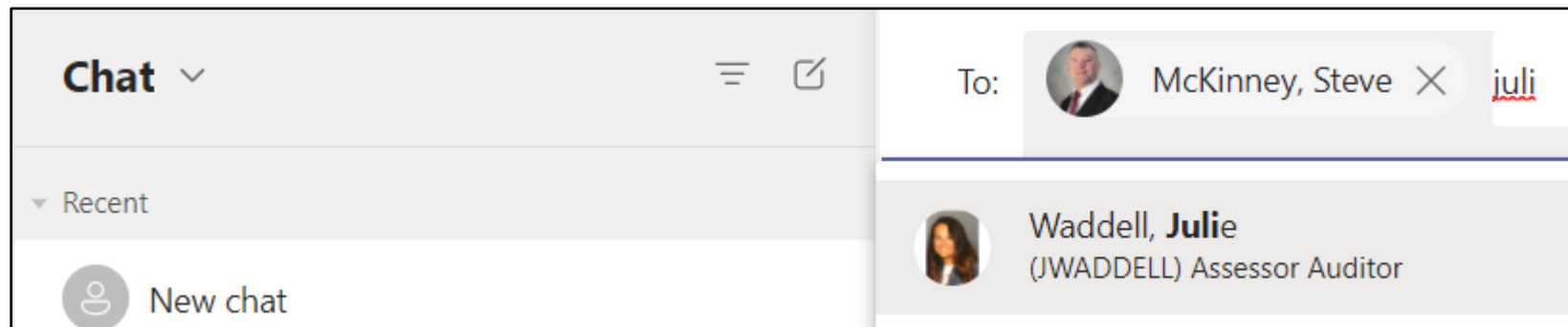
- Use Chat to send a quick message. Remember: pertinent questions related to the Ratio Study should be entered in conversations for record.
- Click on the chat tab to bring you to your chats.
- To start a new chat, click on the box and pen.





Tips and Tricks

- Chat with multiple people:
- In the “To:” box, start typing a name. You will see names auto populate. Select the name you are looking for. Type another name. Keep going until you have the group you need for your chat.





Tips and Tricks

- You can even give this group a name!

Group name:

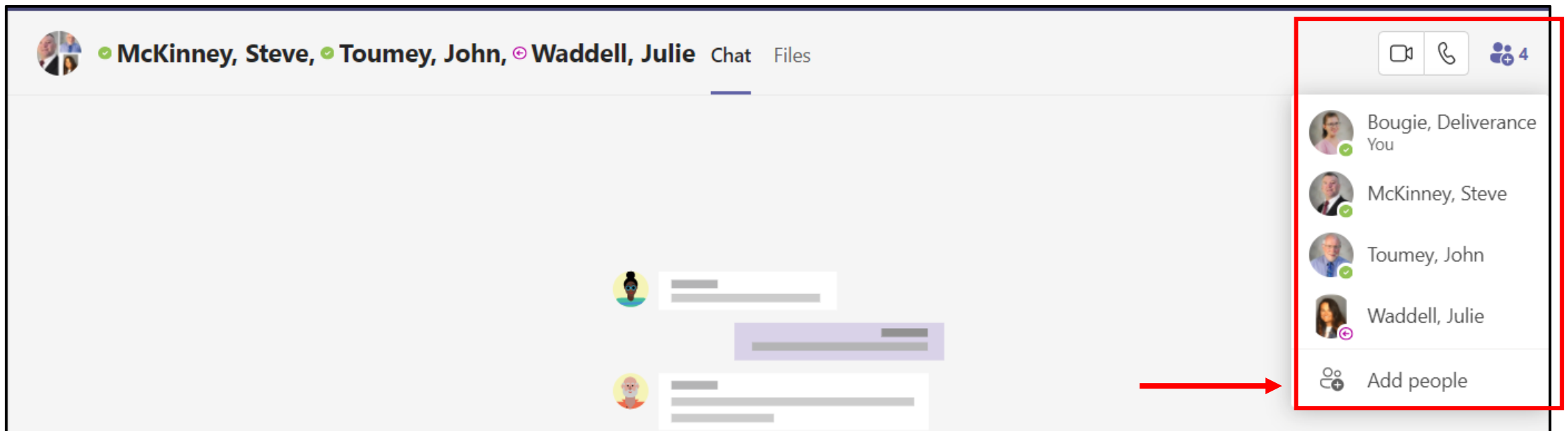
To:  McKinney, Steve ✕  Waddell, Julie ✕

^



Tips and Tricks

- Add people to the conversation. If this is an existing chat, you will be asked how much (if any) history you want the new person to see.





Tips and Tricks

- Use Teams to make calls.
- When you are in a chat, click on the phone or video camera to make a call.
- For best practices, you may want to send a chat to see if the person is available so you don't interrupt a presentation.





Contact Info

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