

Rental Market Excel Task 1

Course: MTH 101

Topic: Rental Market Comparison Project

Instructions:

STEP 1:

Download the file for the task at :

https://www.huduser.gov/portal/datasets/fmr/smallarea/index.html#data_2024

→ **Click** on Small Area FMRs under the year 2024

Step 2:

→ **Upload** this file to your spartan365.msu.edu ONE Drive account.

→ **Rename** the file as "LASTNAME_FIRSTNAME_SEC#_ET4". Do NOT include the # sign. For example, mine would be "LUND_RACHAEL_SEC003_ET4"

→ **Open** the file in spartan365.msu.edu Microsoft online suite.

Step 3:

In this excel task you will use Microsoft excel to organize rental data as following:

- i. Identify unnecessary columns:

Remove the following columns by selecting the columns that are listed below and delete them:

"ZIP Code", "HUD Area Code", "SAFMR 0BR -90% Payment Standard", "SAFMR 0BR - 110% Payment Standard", "SAFMR 1BR -90% Payment Standard", "SAFMR 1BR - 110% Payment Standard", "SAFMR 2BR -90% Payment Standard", "SAFMR 2BR - 110% Payment Standard", "SAFMR 3BR -90% Payment Standard", "SAFMR 3BR - 110% Payment Standard", "SAFMR 4BR -90% Payment Standard", and "SAFMR 4BR - 110% Payment Standard",

- ii. Compute the cost per bedroom:

- ☐ Columns "SAFMR0BR", "SAFMR1BR", "SAFMR2BR", "SAFMR3BR" and "SAFMR4BR" represent the total monthly rent price. Now you will compute the cost per each room for the prices given.
- ☐ **Create** one empty column next to the column "SAFMR2BR". You can right click on the column named "SAFMR2BR" and you will see 'Insert Columns to Left' option. Click on that and you will have a new empty column on the right of "SAFMR2BR". Name this new column as "SAFMR2BR-per room"
- ☐ Now **click** on the first entry of your new column which is names "SAFMR2BR-per room". **Type** '=' and click on the first entry of "SAFMR2BR" which just next to the entry you are writing.

Now you should see “= (E2” and keep typing “/2)”. So overall you need to see “=(E2/2)”. You can **click** on enter. Now this formula will divide the number in E2 by 2.

- ☐ Next, extend this scaling to every entry of "SAFMR2BR-per room". When you **double click** on the right corner of the expression, this formula will extend to every entry on column.
- ☐ **Repeat** the previous step to create the columns "SAFMR3BR-per room" and "SAFMR4BR-per room". While we are computing the per room prices we need to divide them by the number of rooms. So, for "SAFMR3BR-per room" we should use “=(G2/3)” and for "SAFMR3BR-per room" we should use “=(I2/4)”.

iii. Cleaning data

- ☐ In the previous step, you calculated the price for each room in the given housing option. When you **click** on the number in any of the new columns created, you will see the descriptions are formulas, not numbers. Now we will address that issue.
- ☐ **Copy** column D which is "SAFMR2BR-per room".
- ☐ **Right click** on column D and **select** Paste Special>Values Only.
- ☐ Repeat this process for “SAFMR3BR-per room” and "SAFMR4BR-per room".
- ☐ **Delete** the following columns "SAFMR2BR", "SAFMR3BR" and "SAFMR4BR".
- ☐ The result form should include the columns: “HUD Metro Fair Market Rent Area Name”, "SAFMR0BR", "SAFMR1BR", "SAFMR2BR-per room”, “SAFMR3BR-per room" and "SAFMR4BR-per room".

Step 4:

- ☐ **Save** your excel file with name "LASTNAME_FIRSTNAME_SEC#_EXCEL_TASK2"
- ☐ Do NOT include the # sign. For example, mine would be "LUND_RACHAEL_SEC003_EXCEL_TASK2"
- ☐ **Upload** it to the Excel Task Submission Box. This will involve downloading the file onto your computer.

Rental Market Excel Task 2

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Topic: Rental Market Comparison Project

We have created a data file in the previous assignment that will help us to prepare our project. Now you need to choose 'Lansing-East Lansing' location that is listed under 'HUD Metro Fair Market Rent Area Name'.

- Click on column A and choose a filter option on Home page.
- Find Lansing-East Lansing in the filter.

Measures of center:

- Create a new page in excel sheet by clicking '+' button next to 'SAFMRs' on the bottom.
This will create new empty file where we can carry insert the necessary information only.
- Rename this new page to 'Measures of Center'.
- Create column names as

Center of measures	SAFMR 0BR	SAFMR 1BR	SAFMR2BR-per room	SAFMR 3BR - per room	SAFMR 4BR - per room
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- Create row names as Mean, Median and Mode

Center of measures	SAFMR 0BR	SAFMR 1BR	SAFMR2BR-per room	SAFMR 3BR - per room	SAFMR 4BR - per room
Mean					
Median					
Mode					

- Click on B2 and click on functions choose AVERAGE function from the list. Click next. Now while you kept the small screen open go back to SAFMRs and choose the values on the "SAFMR0BR" Column. We found the average/mean value of studio apartments in Lansing/East Lansing Area.

- Now on second page you have average/mean value of studio apartments in Lansing/East Lansing Area on B2. You can click on the right bottom corner and drag it to right. You can fill the values for every house type.

- Click on B3 and click on functions choose MEDIAN function from the list. Click next. Now while you kept the small screen open go back to SAFMRs and choose the values on the "SAFMR0BR" Column. We found the median value of studio apartments in Lansing/East Lansing Area.

- Now on second page you have median value of studio apartments in Lansing/East Lansing Area on B3. You can click on the right bottom corner and drag it to right. You can fill the values for every house type.

- Click on B4 and click on functions choose MODE function from the list. Click next. Now while you kept the small screen open go back to SAFMRs and choose the values on the "SAFMR0BR" Column. We found the mode value of studio apartments in Lansing/East Lansing Area.

→ Now on second page you have mode value of studio apartments in Lansing/East Lansing Area on B4. You can click on the right bottom corner and drag it to right. You can fill the values for every house type.

→ Select the table you prepared, and go to insert section and create Clustered Column Chart.

→ Name the chart as 'Lansing/East Lansing Rental Data'

Now you are ready to use the data set in your analysis in the Budget Project .