PHAS Indicator Calculations Worksheet for FASS and MASS Indicators:

Instructions and Guidelines

General Description

Purpose of the Worksheet
The Public Housing Assessment System (PHAS) Indicator Calculations Worksheet has been developed to aid public housing agencies (PHAs) in projecting and managing the Financial Assessment Sub-system (FASS) and Management Assessment Sub-system indicators (MASS) for PHAS. It is designed to be a proactive tool that PHAs can measure performance monthly or quarterly on the Asset Management Projects (AMPs) instead of waiting for the final scores to be published by the Real Estate Assessment Center (REAC). The provided format and tool are not a mandatory requirement, but is offered as general guidance to improve the performance of an agency. The worksheet is an Excel spreadsheet template that creates an estimate of both individual project performance results and a summary of the scores based on the weighted average of the AMP.

The spreadsheet uses a series of macros to allow the PHA to analyze the developments' performance and can further be used as a tool for applying the concept of fungibility to increase the performance of the PHA. It is recommended to download the Worksheet into a dedicated file folder for the initial preparation. Once you have inserted the PHA's specific information, it is recommended to save it in another file that can be periodically updated on a monthly or quarterly basis to measure the PHA's performance.

Caution is urged on changing the formulas or appearance of the worksheet. Additions or deletions of columns or rows may cause the combination of the amounts as listed on the summary reports to produce an error. The worksheet is intended for use with Excel 2003 and later.

Purpose of PHAS

The purpose of the PHAS is to improve the delivery of services in public housing and enhance trust in the public housing system among PHAs, public housing residents, and the general public, by providing a management tool for effectively and fairly measuring the performance of a PHA in essential housing operations of projects, on a program-wide basis and individual project basis, and providing rewards for high performers and remedial requirements for poor performers.

REAC is responsible for assessing and scoring the performance of PHAs. REAC makes use of uniform and objective protocols for the physical inspection of properties and the financial assessment of the PHA, and will gather relevant data from the PHA to assess management operations. On the basis of this data, REAC will assess and score the results, advise PHAs of their scores and identify low scoring and failing PHAs so that these PHAs will receive the appropriate attention and assistance.

PHAS Scoring

HUD assesses and scores the performance of projects and PHAs based on the indicators, which are more fully addressed in § 902.9: physical condition, financial condition, management operations, and the Capital Fund program.

PHAS Scoring- Indicators and Sub-indicators

Each PHA will receive an overall PHAS score, rounded to the nearest whole number, based on the four indicators: physical condition, financial condition, management operations, and the Capital Fund program. Each of these indicators contains sub-indicators, and the scores for the sub-indicators are used to determine a single score for each of these PHAS indicators. Individual project scores are used to determine a single score for the physical condition, financial condition, and management operations indicators. The Capital Fund program indicator score is entity-wide.

Overall PHAS Score and Indicators

The overall PHAS score is derived from a weighted average of score values for the four indicators, as follows:

- **PASS -** The physical condition indicator is weighted 40 percent (40 points) of the overall PHAS score. The score for this indicator is obtained as indicated in the subpart B of the regulations and scoring system.

- **FASS -** The financial condition indicator is weighted 25 percent (25 points) of the overall PHAS score. The score for this indicator is obtained as indicated in subpart C of the regulations and scoring system.

- **MASS -** The management operations indicator is weighted 25 percent (25 points) of the overall PHAS score. The score for this indicator is obtained as indicated in subpart D of the regulations and scoring system.

- **CFP -** The Capital Fund program indicator is weighted 10 percent (10 points) of the overall PHAS score for all Capital Fund program grants for which fund balances remain during the assessed fiscal year. The score for this indicator is obtained as indicated in subpart E of the regulations and scoring system.

FINANCIAL CONDITION ASSESSMENT (FASS)

Overview

The financial assessment system includes an assessment of the financial condition of each project. A PHA will continue to submit an annual Financial Data Schedule (FDS) to HUD that contains financial information on all major programs and business activities. However, for purposes of PHAS, the PHA will be scored on the financial condition of each project, and these scores will be the basis for a program-wide score.

The objective of the financial condition indicator is to measure the financial condition of each public housing project within a PHA's public housing portfolio for the purpose of evaluating whether there are sufficient financial resources to support the provision of housing that is decent, safe, sanitary in good repair. Individual project scores for financial condition, as well as overall financial condition scores, will be issued.

Scoring

Under the financial condition indicator, a score will be calculated for each project based on the values of financial condition sub-indicators and an overall financial condition score, as well as audit and internal control flags. Each financial condition sub-indicator has several levels of performance, with different point values for each level.

The financial condition score for projects will be based on the annual financial condition information submitted to HUD for each project. The financial condition score for PHAs will be based on a unit-weighted average of project scores.

Sub-indicators of the Financial Condition Indicator

The sub-indicators of financial condition indicator are:

1. **Quick Ratio (QR)**
   The QR compares quick assets to current liabilities. Quick assets are cash and assets that are easily convertible to cash and do not include inventory. Current liabilities are those liabilities that are due within the next 12 months. A QR of less than one indicates that the project's ability to make payments on a timely basis may be at risk.

2. **Months Expendable Net Assets Ratio (MENAR).**
   The MENAR measures a project's ability to operate using its net available, unrestricted resources without relying on additional funding. This ratio compares the adjusted net available unrestricted resources to the average monthly operating expenses. The result of this calculation shows how many months of operating expenses can be covered with currently available, unrestricted resources.

3. **Debt Service Coverage Ratio (DSCR)**
   The DSCR is the ratio of net operating income available to make debt payments, to the amount of the debt payments. This sub-indicator is used if the PHA has taken on long-term obligations. A DSCR of less than one would indicate that the project would have difficulty generating sufficient cash flow to cover both its expenses and its debt obligations.

Description of the Financial Condition Sub-indicators

The sub-indicators are described as follows:

Sub-indicator #1, QR
This sub-indicator is a liquidity measure of the project's ability to cover current liabilities. It is measured by dividing adjusted unrestricted current assets by current liabilities. The purpose of this ratio is to indicate whether a project could meet all current liabilities if they became immediately due and payable. A project should have available current resources equal to or greater than its current liabilities in order to be considered financially liquid. The QR is a commonly used liquidity measure across the industry. Maintaining sufficient liquidity is essential for the financial health of an individual project.

Sub-indicator #2, MENAR
This sub-indicator measures a project's ability to operate using its net available, unrestricted resources without relying on additional funding. It is computed as the ratio of adjusted net available unrestricted resources to average monthly operating expenses. The result of this calculation shows how many months of operating expenses can be covered with currently available, unrestricted resources.

Sub-indicator #3, DSCR
This sub-indicator is a measure of a project's ability to meet regular debt obligations. This sub-indicator is calculated by dividing adjusted operating income by a project's annual debt service payments. It indicates whether the project has generated enough income from operations to meet annual interest and principal payment on long-term debt service obligations.

Point Breakdown by Sub-indicator

Sub-indicators	Measurement of	Points
QR	Liquidity	12.0
MENAR	Adequacy of Reserves	11.0
DSCR	Capacity to Cover Debt	2.0
Total FASS	**----------**	**25.0**

QUICK RATIO
A project will receive zero points when its QR is less than 1.0. If its QR equals 1.0, it will receive 7.2 points. If its QR is greater than 1.0 and less than 2.0, it will receive greater than 7.2 points but less than 12.0 points, on a proportional basis. A project will receive the maximum of 12.0 points when its QR is equal to or greater than 2.0.

How QR is Scored

Results	Points Awarded Under FASS
< 1.0	0 points
= 1.0	7.2 points
≥1.0 to ≤ 2.0	≥7.2 to ≤12 points
≥2.0	12 points

MENAR
A project will receive zero points when its MENAR is less than 1.0. If its MENAR equals 1.0, it will receive 6.6 points. If the MENAR is greater than 1.0 and less than 4.0, the project will receive greater than 6.6 points but less than 11.0 points, on a proportional basis. A project will receive the maximum of 11 points when its MENAR is equal to or greater than 4.0.

How MENAR is Scored

Results	Points Awarded under FASS
< 1.0	0 points
= 1.0	6.6 points
≥1.0 to ≤ 4.0	≥6.6 to ≤11 points
≥4.0	11 points

DCSR
A project will receive zero points when its DSCR ratio is less than 1.0. If its DSCR equals at least 1.0 but less than 1.25, it will receive 1 point. A project will receive the maximum of 2.0 points if its DSCR is equal to or greater than 1.25 or if it has no debt at all.

How DCSR is Scored

Results	Points Awarded under FASS
< 1.0	0 points
≥1.0 to ≤ 1.25	1 point
≥1.25	2 points
No Debt at All	2 points

Entering information into the Worksheet

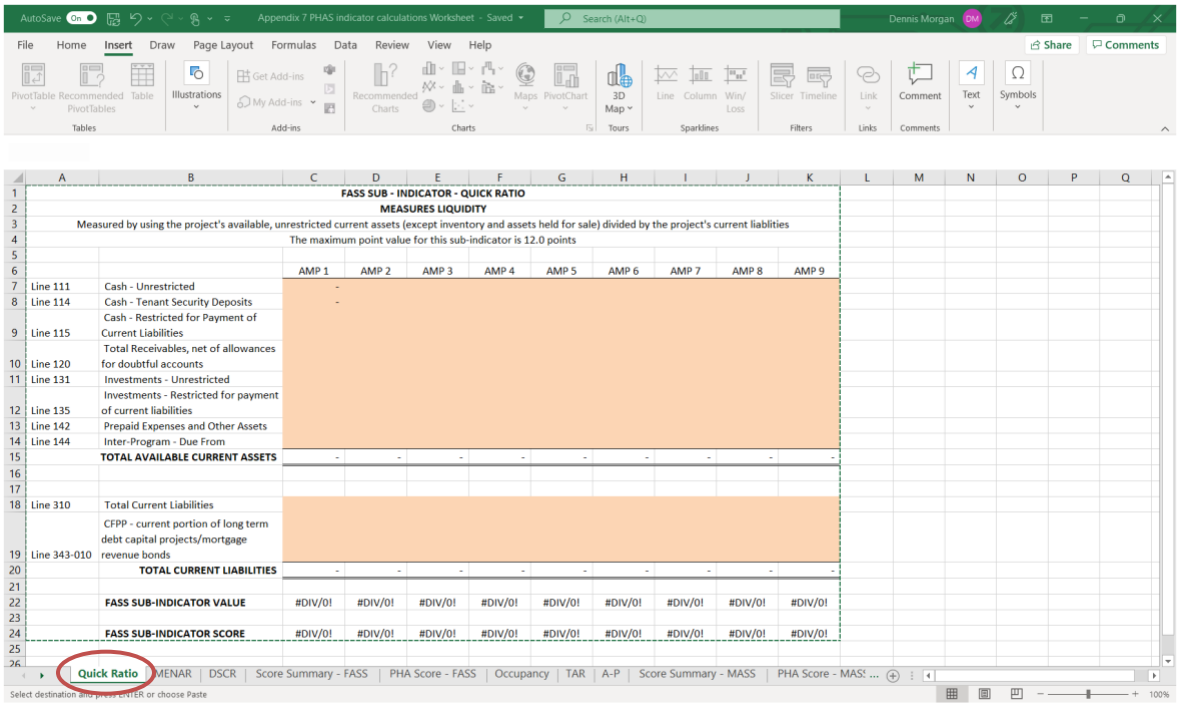
Currently, PHAs submit year-end financial data to HUD's REAC utilizing the prescribed FDS. The PHA will use the same accounts on FDS into this worksheet. It is important to enter the data that comes from the PHAs accounts into the worksheet. However, remember that year end statements are based on accrued accounting. Therefore, when projecting and using the worksheet during the year, minor adjustments may be made to use accrued data. **Care should also be taken to not rewrite over the formula fields.** In other words, just enter the data in the lightly pink fields for each AMP.

Quick Ratio (Worksheet Number 1)

From the FDS schedules for AMP 1:

- Enter FDS Account 111: Cash- Unrestricted
- Enter FDS Account 114: Cash- Tenant Security Deposit
- Enter FDS Account 115: Cash- Restricted for Payment of Current Liabilities
- Enter FDS Account 120: Total Receivables, net of allowances for doubtful accounts
- Enter FDS Account 131: Investments Unrestricted
- Enter FDS Account 135: Investments Restricted for Payment of Current Liability
- Enter FDS Account 142 Prepaid expenses and other assets
- Enter FDS Account 144 Inter-program due-from
- Enter FDS Account 310 Total Current Liabilities
- Enter FDS Account 343-010 CFFP Current Portion of Long-term debt capital projects/mortgage revenue bonds

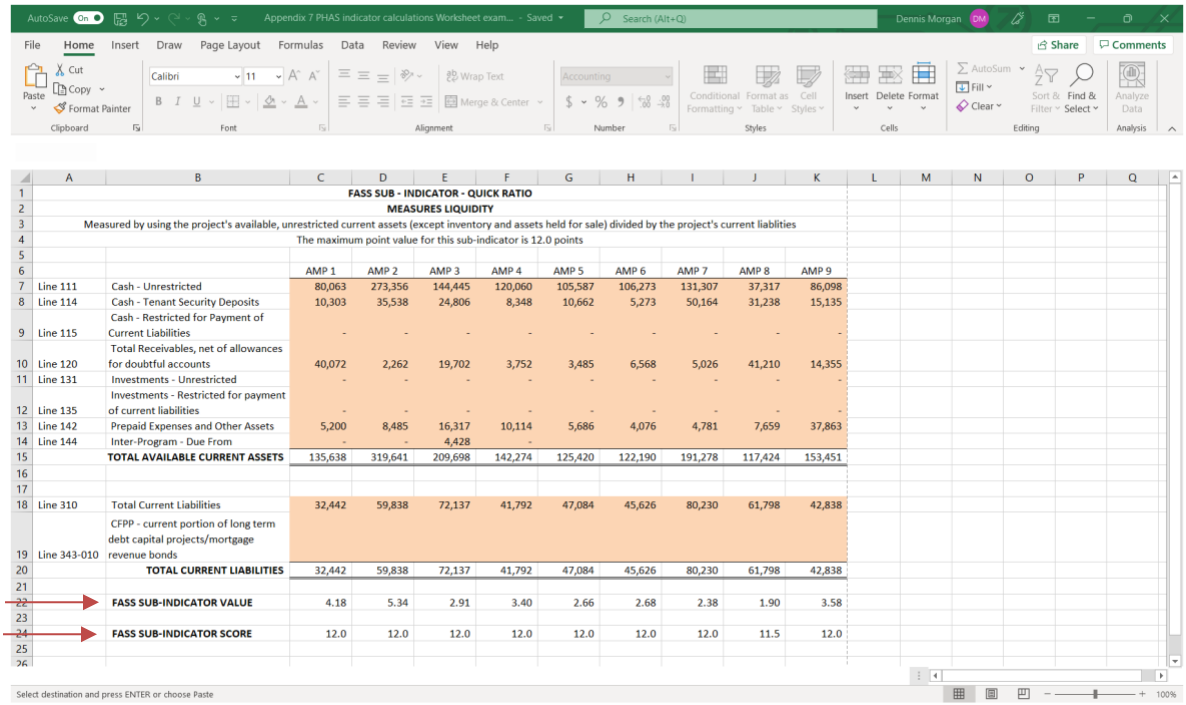
Repeat process for each AMP in the PHA's portfolio



FASS SUB - INDICATOR - QUICK RATIO
MEASURES LIQUIDITY
Measured by using the project's available, unrestricted current assets (except inventory and assets held for sale) divided by the project's current liablities
The maximum point value for this sub-indicator is 12.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 111	Cash - Unrestricted	-								
Line 114	Cash - Tenant Security Deposits	-								
Line 115	Cash - Restricted for Payment of Current Liabilities									
Line 120	Total Receivables, net of allowances for doubtful accounts									
Line 131	Investments - Unrestricted									
Line 135	Investments - Restricted for payment of current liabilities									
Line 142	Prepaid Expenses and Other Assets									
Line 144	Inter-Program - Due From									
	TOTAL AVAILABLE CURRENT ASSETS	-	-	-	-	-	-	-	-	-
Line 310	Total Current Liabilities									
Line 343-010	CFPP - current portion of long term debt capital projects/mortgage revenue bonds									
	TOTAL CURRENT LIABILITIES	-	-	-	-	-	-	-	-	-
	FASS SUB-INDICATOR VALUE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	FASS SUB-INDICATOR SCORE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Once all the data is entered, at the bottom of the spreadsheet a FASS Sub-indicator Value will appear along with the FASS Sub-Indicator Score. The PHA is striving for a ratio of 2 or higher, which will generate a score of 12 points for the AMP. These scores will then be applied to the weighted average of the AMPs for a final score for the PHA that can be found on Worksheet Number 5.



FASS SUB - INDICATOR - QUICK RATIO

MEASURES LIQUIDITY

Measured by using the project's available, unrestricted current assets (except inventory and assets held for sale) divided by the project's current liablities

The maximum point value for this sub-indicator is 12.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 111	Cash - Unrestricted	80,063	273,356	144,445	120,060	105,587	106,273	131,307	37,317	86,098
Line 114	Cash - Tenant Security Deposits	10,303	35,538	24,806	8,348	10,662	5,273	50,164	31,238	15,135
Line 115	Cash - Restricted for Payment of Current Liabilities	-	-	-	-	-	-	-	-	-
Line 120	Total Receivables, net of allowances for doubtful accounts	40,072	2,262	19,702	3,752	3,485	6,568	5,026	41,210	14,355
Line 131	Investments - Unrestricted	-	-	-	-	-	-	-	-	-
Line 135	Investments - Restricted for payment of current liabilities	-	-	-	-	-	-	-	-	-
Line 142	Prepaid Expenses and Other Assets	5,200	8,485	16,317	10,114	5,686	4,076	4,781	7,659	37,863
Line 144	Inter-Program - Due From	-	-	4,428	-					
	TOTAL AVAILABLE CURRENT ASSETS	135,638	319,641	209,698	142,274	125,420	122,190	191,278	117,424	153,451
Line 310	Total Current Liabilities	32,442	59,838	72,137	41,792	47,084	45,626	80,230	61,798	42,838
Line 343-010	CFPP - current portion of long term debt capital projects/mortgage revenue bonds									
	TOTAL CURRENT LIABILITIES	32,442	59,838	72,137	41,792	47,084	45,626	80,230	61,798	42,838
	FASS SUB-INDICATOR VALUE	4.18	5.34	2.91	3.40	2.66	2.68	2.38	1.90	3.58
	FASS SUB-INDICATOR SCORE	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	12.0

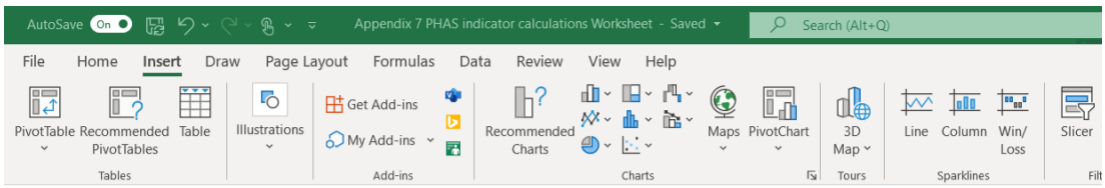
MENAR (Worksheet Number 2)

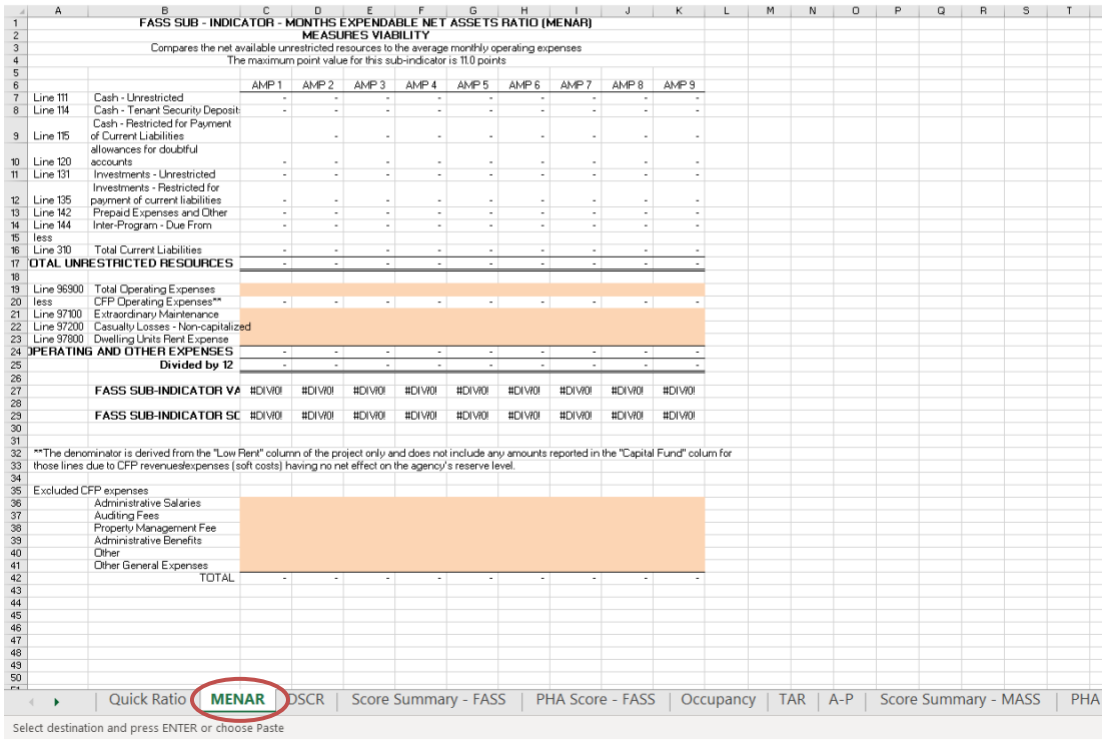
Many of the same accounts will be used for the MENAR worksheet. The data entered on the QR worksheet number 1 will be automatically brought over to MENAR worksheet number 2. However, the PHA will need to insert some additional FDS data for each AMP.

From the FDS schedules for AMP 1:

- Enter FDS Account 96900: Total Operating Expenses
- Enter FDS Account 97100: Extraordinary Maintenance
- Enter FDS Account 97200: Casualty Loss Non-capitalized
- Enter FDS Account 97800: Dwelling Units Rent Expense

Repeat process for each AMP in the PHA's portfolio.





FASS SUB - INDICATOR - MONTHS EXPENDABLE NET ASSETS RATIO (MENAR)
MEASURES VIABILITY
Compares the net available unrestricted resources to the average monthly operating expenses
The maximum point value for this sub-indicator is 11.0 points

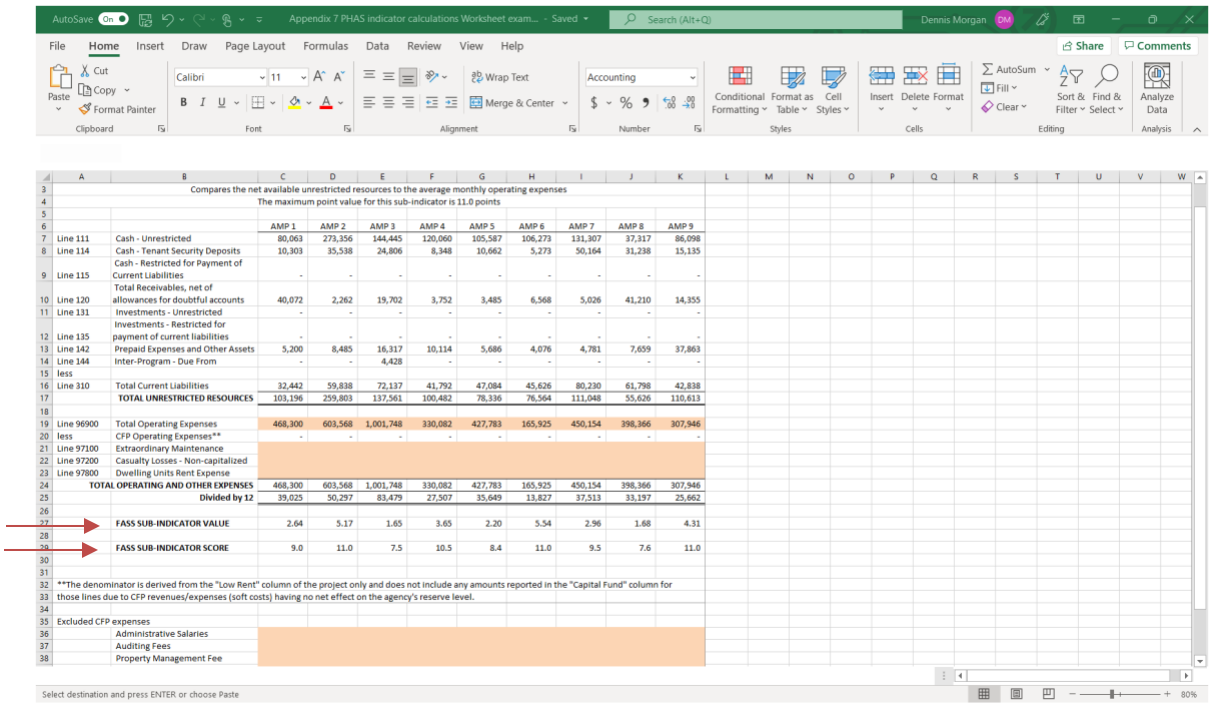
		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 111	Cash - Unrestricted	-	-	-	-	-	-	-	-	-
Line 114	Cash - Tenant Security Deposit	-	-	-	-	-	-	-	-	-
Line 115	Cash - Restricted for Payment of Current Liabilities		-	-	-	-	-	-	-	-
Line 120	allowances for doubtful accounts	-	-	-	-	-	-	-	-	-
Line 131	Investments - Unrestricted	-	-	-	-	-	-	-	-	-
Line 135	Investments - Restricted for payment of current liabilities	-	-	-	-	-	-	-	-	-
Line 142	Prepaid Expenses and Other	-	-	-	-	-	-	-	-	-
Line 144	Inter-Program - Due From	-	-	-	-	-	-	-	-	-
less										
Line 310	Total Current Liabilities	-	-	-	-	-	-	-	-	-
OTAL UNRESTRICTED RESOURCES		-	-	-	-	-	-	-	-	-
Line 96900	Total Operating Expenses									
less	CFP Operating Expenses**	-	-	-	-	-	-	-	-	-
Line 97100	Extraordinary Maintenance									
Line 97200	Casualty Losses - Non-capitalized									
Line 97800	Dwelling Units Rent Expense									
PERATING AND OTHER EXPENSES		-	-	-	-	-	-	-	-	-
	Divided by 12	-	-	-	-	-	-	-	-	-
	FASS SUB-INDICATOR VA	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	FASS SUB-INDICATOR SC	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

**The denominator is derived from the "Low Rent" column of the project only and does not include any amounts reported in the "Capital Fund" colum for those lines due to CFP revenues/expenses (soft costs) having no net effect on the agency's reserve level.

Excluded CFP expenses

	Administrative Salaries
	Auditing Fees
	Property Management Fee
	Administrative Benefits
	Other
	Other General Expenses
	TOTAL - - - - - - - - -

Once all the data is entered, at the bottom of the spreadsheet a FASS Sub-indicator Value will appear along with the FASS Sub-Indicator Score. The PHA is striving for a ratio of 4 or higher, which will generate a score of 11 points for the AMP. These will then be applied to the weighted average of the AMPs for a final score for the PHA that can be found on Worksheet Number 5.



Compares the net available unrestricted resources to the average monthly operating expenses

The maximum point value for this sub-indicator is 11.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 111	Cash - Unrestricted	80,063	273,356	144,445	120,060	105,587	106,273	131,307	37,317	86,098
Line 114	Cash - Tenant Security Deposits	10,303	35,538	24,806	8,348	10,662	5,273	50,164	31,238	15,135
Line 115	Cash - Restricted for Payment of Current Liabilities	-	-	-	-	-	-	-	-	-
Line 120	Total Receivables, net of allowances for doubtful accounts	40,072	2,262	19,702	3,752	3,485	6,568	5,026	41,210	14,355
Line 131	Investments - Unrestricted	-	-	-	-	-	-	-	-	-
Line 135	Investments - Restricted for payment of current liabilities	-	-	-	-	-	-	-	-	-
Line 142	Prepaid Expenses and Other Assets	5,200	8,485	16,317	10,114	5,686	4,076	4,781	7,659	37,863
Line 144	Inter-Program - Due From	-	-	4,428	-	-	-	-	-	-
less										
Line 310	Total Current Liabilities	32,442	59,838	72,137	41,792	47,084	45,626	80,230	61,798	42,838
	TOTAL UNRESTRICTED RESOURCES	103,196	259,803	137,561	100,482	78,336	76,564	111,048	55,626	110,613
Line 96900	Total Operating Expenses	468,300	603,568	1,001,748	330,082	427,783	165,925	450,154	398,366	307,946
less	CFP Operating Expenses**	-	-	-	-	-	-	-	-	-
Line 97100	Extraordinary Maintenance									
Line 97200	Casualty Losses - Non-capitalized									
Line 97800	Dwelling Units Rent Expense									
	TOTAL OPERATING AND OTHER EXPENSES	468,300	603,568	1,001,748	330,082	427,783	165,925	450,154	398,366	307,946
	Divided by 12	39,025	50,297	83,479	27,507	35,649	13,827	37,513	33,197	25,662
	FASS SUB-INDICATOR VALUE	2.64	5.17	1.65	3.65	2.20	5.54	2.96	1.68	4.31
	FASS SUB-INDICATOR SCORE	9.0	11.0	7.5	10.5	8.4	11.0	9.5	7.6	11.0

**The denominator is derived from the "Low Rent" column of the project only and does not include any amounts reported in the "Capital Fund" column for those lines due to CFP revenues/expenses (soft costs) having no net effect on the agency's reserve level.

Excluded CFP expenses

Administrative Salaries

Auditing Fees

Property Management Fee

Debt Service Coverage Ratio (Worksheet Number 3)

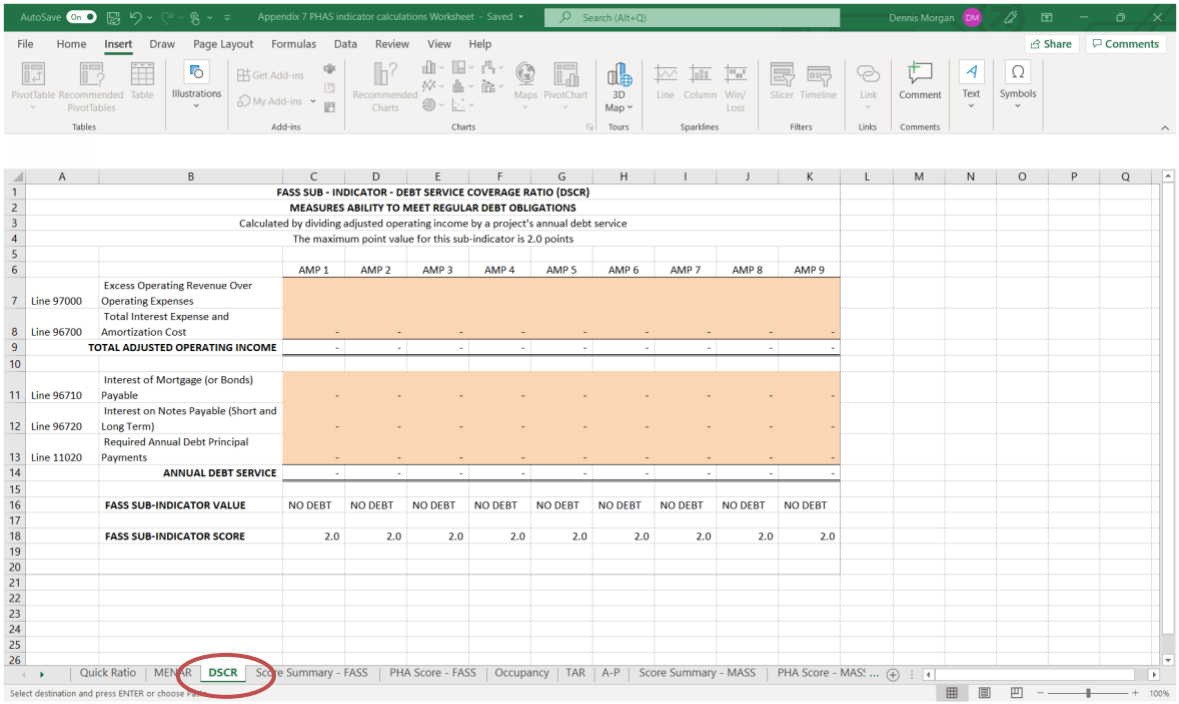
If the property does not carry debt and the FDS accounts are -0-, then do not enter anything on the worksheet and “No Debt” will appear at the bottom of the worksheet. (This is most common for Public Housing.)

If the property carries debt, then enter the following accounts into the spreadsheet for the AMP.

From the FDS schedules for AMP 1:

- Enter FDS Account 97000: Excess Operating over Operating Expenses
- Enter FDS Account 96700: Interest Expense and Amortization Cost
- Enter FDS Account 96710: Interest on Mortgage or Bonds Payable
- Enter FDS Account 96720: Interest on Notes Payable (Short and Long Term)
- Enter FDS Account 11020: Required Annual Debt Payments

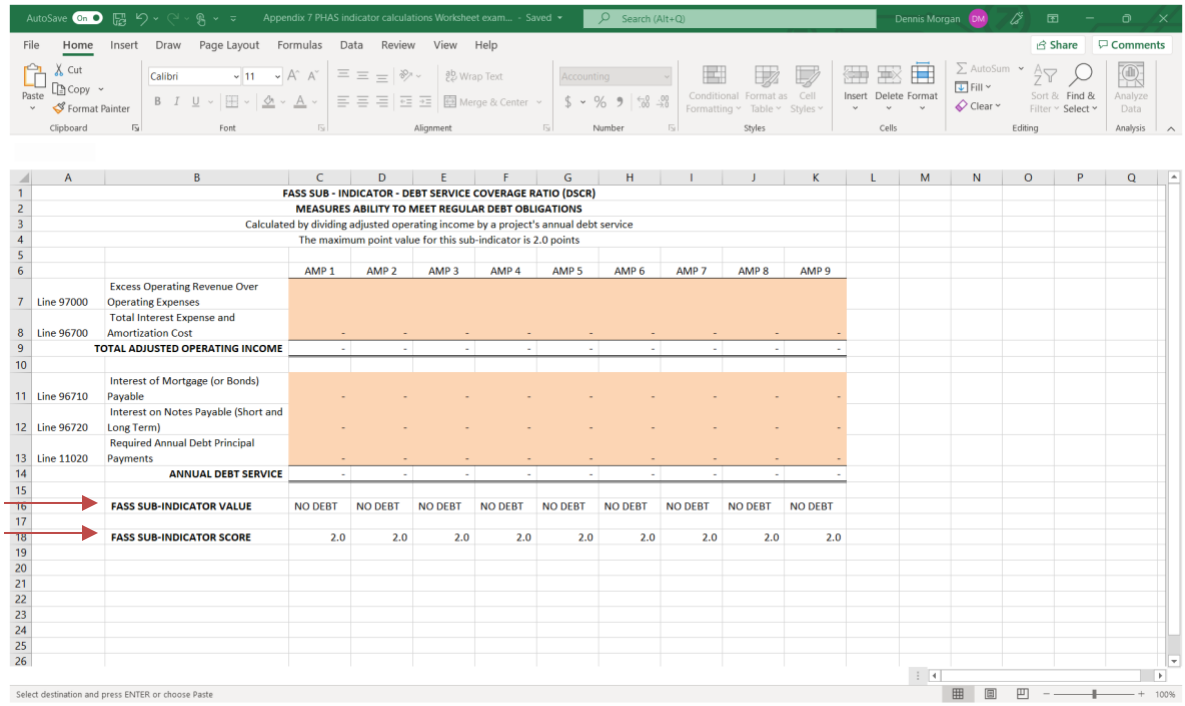
Repeat process for each AMP in the PHA’s portfolio



FASS SUB - INDICATOR - DEBT SERVICE COVERAGE RATIO (DSCR)
MEASURES ABILITY TO MEET REGULAR DEBT OBLIGATIONS
Calculated by dividing adjusted operating income by a project's annual debt service
The maximum point value for this sub-indicator is 2.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 97000	Excess Operating Revenue Over Operating Expenses									
Line 96700	Total Interest Expense and Amortization Cost	-	-	-	-	-	-	-	-	-
	TOTAL ADJUSTED OPERATING INCOME	-	-	-	-	-	-	-	-	-
Line 96710	Interest of Mortgage (or Bonds) Payable	-	-	-	-	-	-	-	-	-
Line 96720	Interest on Notes Payable (Short and Long Term)	-	-	-	-	-	-	-	-	-
Line 11020	Required Annual Debt Principal Payments	-	-	-	-	-	-	-	-	-
	ANNUAL DEBT SERVICE	-	-	-	-	-	-	-	-	-
	FASS SUB-INDICATOR VALUE	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT
	FASS SUB-INDICATOR SCORE	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Once all the data is entered or left blank if "no debt," at the bottom of the spreadsheet a FASS Sub-indicator Value will appear along with the FASS Sub-Indicator Score. The PHA is striving for "no debt" or a ratio of 1.25 or higher, which will generate a score of 2 points for the AMP. These will then be applied to the weighted average of the AMPs for a final score for the PHA that can be found on Worksheet Number 5.

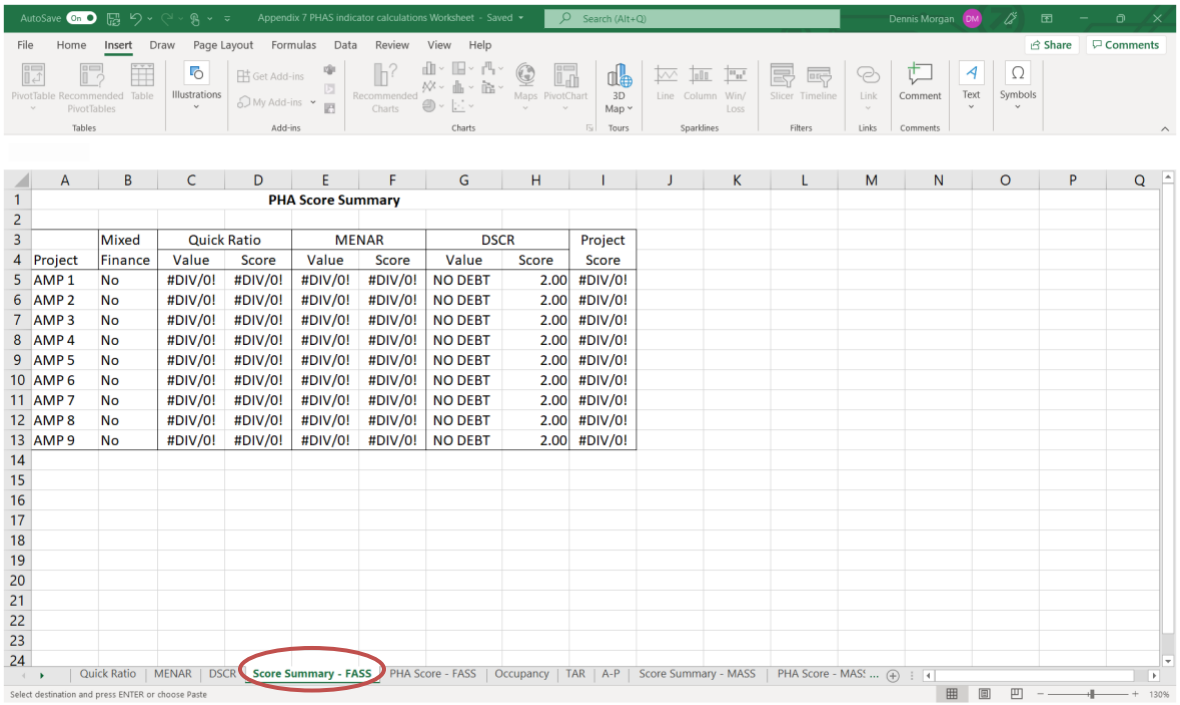


FASS SUB - INDICATOR - DEBT SERVICE COVERAGE RATIO (DSCR)
MEASURES ABILITY TO MEET REGULAR DEBT OBLIGATIONS
Calculated by dividing adjusted operating income by a project's annual debt service
The maximum point value for this sub-indicator is 2.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 97000	Excess Operating Revenue Over Operating Expenses									
Line 96700	Total Interest Expense and Amortization Cost	-	-	-	-	-	-	-	-	-
	TOTAL ADJUSTED OPERATING INCOME	-	-	-	-	-	-	-	-	-
Line 96710	Interest of Mortgage (or Bonds) Payable	-	-	-	-	-	-	-	-	-
Line 96720	Interest on Notes Payable (Short and Long Term)	-	-	-	-	-	-	-	-	-
Line 11020	Required Annual Debt Principal Payments	-	-	-	-	-	-	-	-	-
	ANNUAL DEBT SERVICE	-	-	-	-	-	-	-	-	-
	FASS SUB-INDICATOR VALUE	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT	NO DEBT
	FASS SUB-INDICATOR SCORE	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

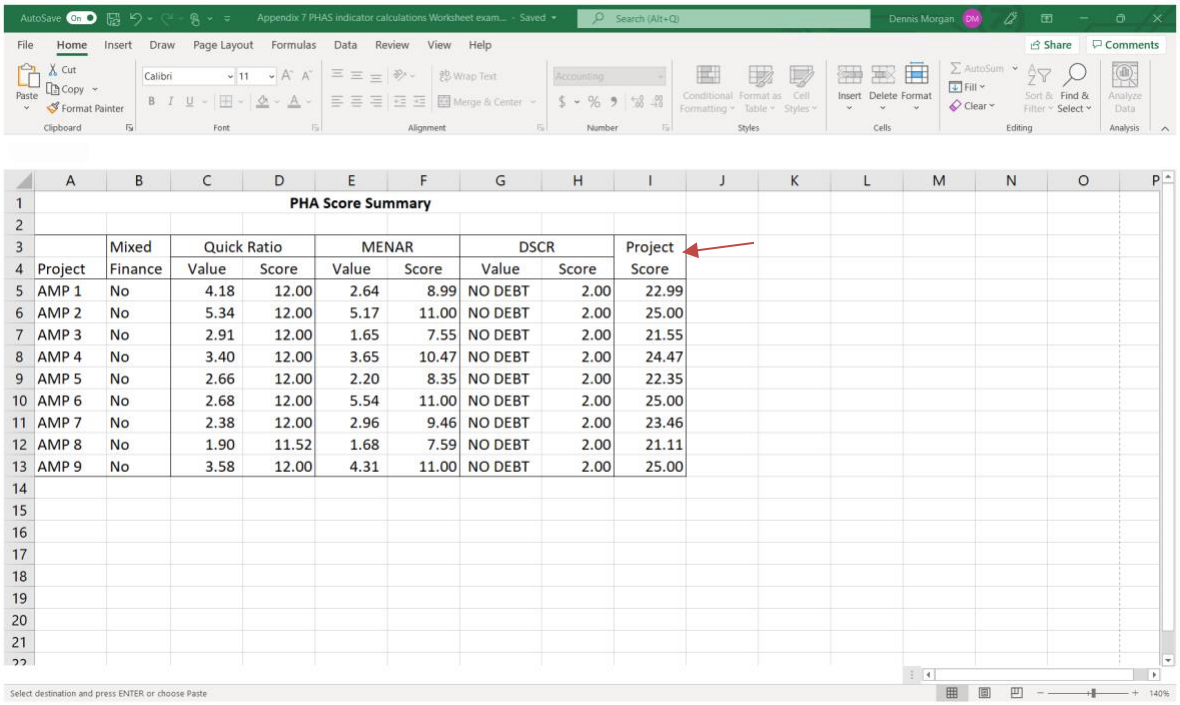
Score Summary PHAS FASS (Worksheet Number 4)

This worksheet will provide a summary of each AMP's value and score for the Quick Ratio, MENAR, and DSCR. It will further provide the cumulative project score for the AMP. If an AMP is scoring 25 points as a Project Score, then it would be performing well per the financial indicator for that AMP. If less than 25 points, then further analysis can be done on which sub-indicator needs improvement



PHA Score Summary

	Mixed	Quick Ratio		MENAR		DSCR		Project
Project	Finance	Value	Score	Value	Score	Value	Score	Score
AMP 1	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!
AMP 2	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!
AMP 3	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!
AMP 4	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!
AMP 5	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!
AMP 6	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!
AMP 7	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!
AMP 8	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!
AMP 9	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	NO DEBT	2.00	#DIV/0!



PHA Score Summary

	Mixed	Quick Ratio		MENAR		DSCR		Project
Project	Finance	Value	Score	Value	Score	Value	Score	Score
AMP 1	No	4.18	12.00	2.64	8.99	NO DEBT	2.00	22.99
AMP 2	No	5.34	12.00	5.17	11.00	NO DEBT	2.00	25.00
AMP 3	No	2.91	12.00	1.65	7.55	NO DEBT	2.00	21.55
AMP 4	No	3.40	12.00	3.65	10.47	NO DEBT	2.00	24.47
AMP 5	No	2.66	12.00	2.20	8.35	NO DEBT	2.00	22.35
AMP 6	No	2.68	12.00	5.54	11.00	NO DEBT	2.00	25.00
AMP 7	No	2.38	12.00	2.96	9.46	NO DEBT	2.00	23.46
AMP 8	No	1.90	11.52	1.68	7.59	NO DEBT	2.00	21.11
AMP 9	No	3.58	12.00	4.31	11.00	NO DEBT	2.00	25.00

PHA Score FASS Calculations (Worksheet Number 5)

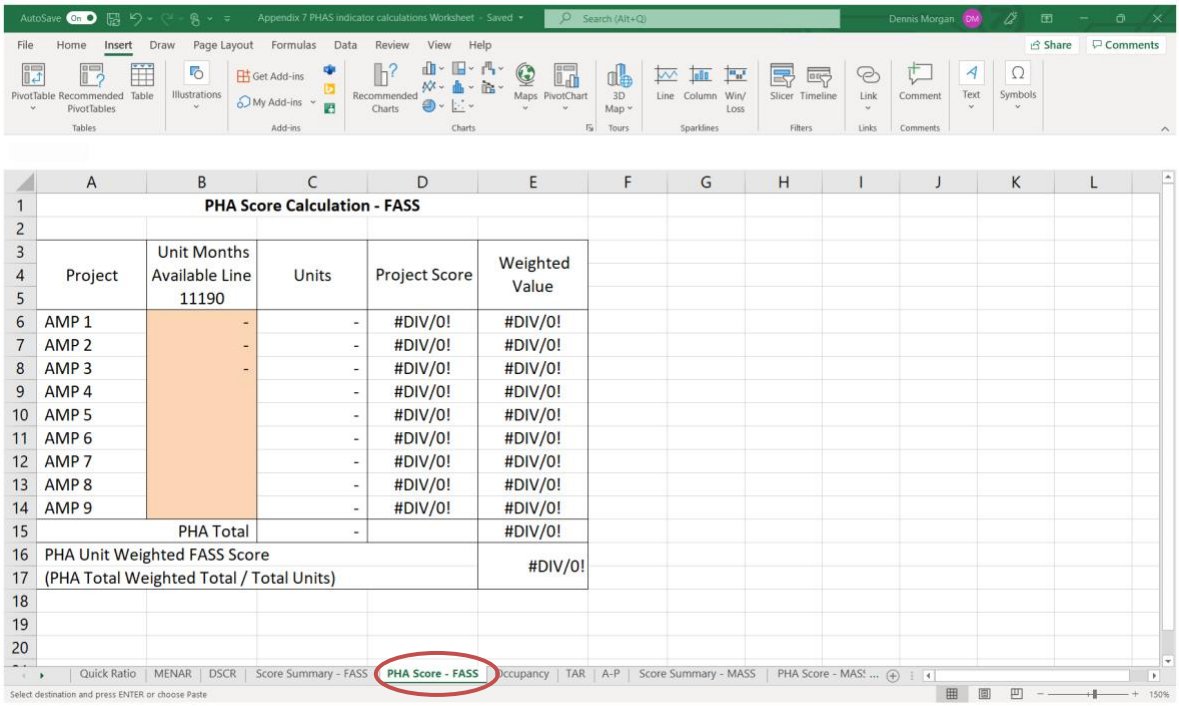
In order to obtain the weighted average score, the PHAs must enter information into the unit months available column.

From the FDS schedules for AMP 1:

- Enter FDS Account 11190: Unit Months Available

The spreadsheet will automatically display the number of units for the development.

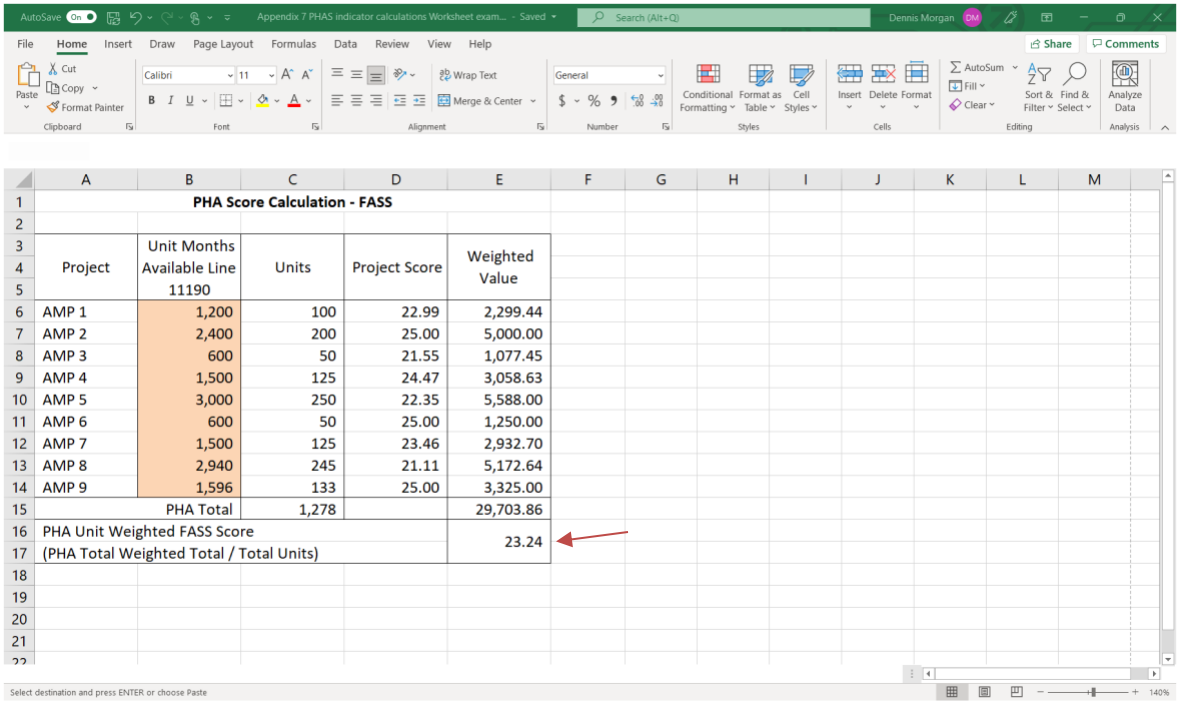
Repeat process for each AMP in the PHA's portfolio.



PHA Score Calculation - FASS

Project	Unit Months Available Line 11190	Units	Project Score	Weighted Value
AMP 1	-	-	#DIV/0!	#DIV/0!
AMP 2	-	-	#DIV/0!	#DIV/0!
AMP 3	-	-	#DIV/0!	#DIV/0!
AMP 4		-	#DIV/0!	#DIV/0!
AMP 5		-	#DIV/0!	#DIV/0!
AMP 6		-	#DIV/0!	#DIV/0!
AMP 7		-	#DIV/0!	#DIV/0!
AMP 8		-	#DIV/0!	#DIV/0!
AMP 9		-	#DIV/0!	#DIV/0!
	PHA Total	-		#DIV/0!
PHA Unit Weighted FASS Score (PHA Total Weighted Total / Total Units)				#DIV/0!

The weighted average score will be automatically calculated by multiplying the units by the project score. The worksheet will the automatically calculate the weighted average, provide a PHA total for the AMPs and provide the final score for the PHA total score under this FASS indicator. A score of 25 points would be the maximum score under this indicator and further indicate that each AMP is performing at a high level under FASS.



PHA Score Calculation - FASS

Project	Unit Months Available Line 11190	Units	Project Score	Weighted Value
AMP 1	1,200	100	22.99	2,299.44
AMP 2	2,400	200	25.00	5,000.00
AMP 3	600	50	21.55	1,077.45
AMP 4	1,500	125	24.47	3,058.63
AMP 5	3,000	250	22.35	5,588.00
AMP 6	600	50	25.00	1,250.00
AMP 7	1,500	125	23.46	2,932.70
AMP 8	2,940	245	21.11	5,172.64
AMP 9	1,596	133	25.00	3,325.00
	PHA Total	1,278		29,703.86
PHA Unit Weighted FASS Score (PHA Total Weighted Total / Total Units)				23.24

MANAGEMENT OPERATIONS INDICATOR (MASS)

Management Operations Assessment

The objective of the management operations indicator is to measure the PHA's performance of management operations through the management performance of each AMP.

Exclusions

Mixed-finance projects are excluded from the management operations indicator.

Purpose

HUD updated the MASS and published the updates in the interim rule February 23, 2011. The purpose of the management operations indicator is to assess the project's and PHA's management operations capabilities. All projects will be assessed under the management operations indicator, even if a PHA has not converted to asset management.

This PHAS Management Operations Scoring Notice was revised to reflect research HUD conducted through informal meetings with representatives of PHAs, residents, projects, and public housing industry groups, and to provide the basis for scoring projects on the management operations.

Management Operations Performance Standards

The following sub-indicators will be used to assess the management operations of projects and PHAs, consistent with the regulations. Individual project scores for management operations, as well as overall PHA management operations scores, are issued.

1. **Occupancy**
   This sub-indicator measures the occupancy for the project's fiscal year, adjusted for allowable vacancies.

2. **Tenant accounts receivable**
   This sub-indicator measures the tenant accounts receivable of a project against the tenant charges for the project's fiscal year.

3. **Accounts payable**
   This sub-indicator measures the money that a project owes to vendors at the end of the project's fiscal year for products and services purchased on credit against total operating expenses.

Assessment under the Management Operations Indicator

Projects will be assessed under this indicator through information that is electronically submitted to HUD through the FDS.

Adjustment for Physical Condition and Neighborhood Environment

In accordance with the regulations, the overall management operations score for a project will be adjusted upward to the extent that negative conditions are caused by situations outside the control of the project. These situations are related to the poor physical condition of the project or the overall depressed condition of the major census tract in which a project is located. The intent of this adjustment is to avoid penalizing such projects, through appropriate application of the adjustment.

Management Operations Scoring and Thresholds

Scoring under the management operations indicator will be used and HUD will calculate a score for each project, as well as for the overall management operations of a PHA, that reflects weights based on the relative importance of the individual management sub-indicators.

Overall PHA Management Operations Indicator Score

The overall management operations indicator score is a unit-weighted average of project scores. The sum of the weighted values is divided by the total number of units in the PHA's portfolio to derive the overall management operations indicator score.

Thresholds

1. The PHA's management operations score is based on a maximum of 25 points.

2. In order to receive a passing score under the management operations indicator, a PHA must achieve a score of at least 15 points or 60 percent.

3. A PHA that receives fewer than 15 points will be categorized as a substandard management operations agency.

Sub-indicators

Sub-indicators of the Management Operations Indicator

The three sub-indicators of the management operations indicator are:

- Occupancy;
- Tenant accounts receivable; and
- Accounts payable.

Mass Scores	
• Occupancy Rate	16 points
• Tenants Accounts Receivable	5 points
• Accounts Payable	4 points
• **Total MASS**	**25 points**

Scoring Elements

The management operations indicator score provides an assessment of a project's management effectiveness. Under the PHAS management operations indicator, HUD will calculate a score for each project, as well as for the overall management operations of a PHA that reflects weights based on the relative importance of the individual management sub-indicators. The overall management operations indicator score for a PHA is a unit-weighted average of the PHA's individual project management operations scores. In order to compute the score, an individual project management operations score is multiplied by the number of units in each project to determine a ''weighted value.'' The sum of the weighted values is then divided by the total number of units in a PHA's portfolio to derive the overall PHAS management operations indicator score.

The computation of the score under this PHAS indicator utilizes data obtained from the Financial Data Schedule and requires three main calculations for the sub-indicators, which are:

- Scores are calculated for each sub-indicator;
- A management operations score is calculated for each project; and
- A score is calculated for the overall indicator score, which is a unit-weighted average of the individual project management operations scores.

Sub-indicator #1, Occupancy

This sub-indicator measures the occupancy for the project's fiscal year, adjusted for allowable vacancies pursuant to 24 CFR 990.145.

A PHA will achieve 16 points if it has an adjusted occupancy rate equal to or greater than 98 percent. It will receive 12 points if it has an adjusted occupancy rate of less than 98 percent but equal to or greater than 96 percent. It will receive 8 points if it has an adjusted occupancy rate of less than 96 percent but equal to or greater than 94 percent. It will receive 4 points if it has an adjusted occupancy rate of less than 94 percent but equal to or greater than 92 percent. It will receive 1 point if it has an adjusted occupancy rate of less than 92 percent but equal to or greater than 90 percent. It will receive 0 points if it has an adjusted occupancy rate of less than 90 percent.

Occupancy Percentage	Points
≥98%	16 points
<98% to ≥96%	12 points
<96% to ≥94%	8 points
<94% to ≥92%	4 points
<92% to ≥90%	1 points
<90%	0 points

Sub-indicator #2, Tenant accounts receivable

This sub-indicator measures the tenant accounts receivable of a project against the tenant charges for the project's fiscal year. Charges include rents and other charges to tenants, such as court costs, maintenance costs, etc.

A PHA will receive 5 points if it has a tenant accounts receivable ratio of less than 1.5. It will receive 2 points if it has a tenant accounts receivable ratio of equal to or greater than 1.5 and less than 2.5. It will receive zero points if it has a tenant accounts receivable ratio of equal to or greater than 2.5.

Ratio	Points
< 1.5	5 points
≥.1.5 to <2.5	2 points
≥2.5	0 points

Sub-indicator #3, Accounts payable

This sub-indicator measures the money that a project owes to vendors at the end of the project's fiscal year for products and services purchased on credit against total operating expenses.

A PHA will receive 4 points if it has an accounts payable ratio of less than 0.75. It will receive 2 points if it has an accounts payable ratio of equal to or greater than 0.75 but less than 1.5.

It will receive zero points if it has an accounts payable ratio of equal to or greater than 1.5.

Ratio	Points
<.75	4 points
≥.75 to <1.5	2 points
≥1.5	0 points

Entering information into the Worksheet

Currently, PHAs submit year-end financial data to HUD's REAC utilizing the prescribed FDS. The PHA will use the same accounts on FDS into this worksheet. It is important to enter the data that comes from the PHAs accounts into the worksheet. However, remember that year end statements are based on accrued accounting. Therefore, when projecting and using the worksheet during the year, minor adjustments may be made to use accrued data. **Care should also be taken to not rewrite over the formula fields.** In other words, just enter the data in the lightly pink fields for each AMP.

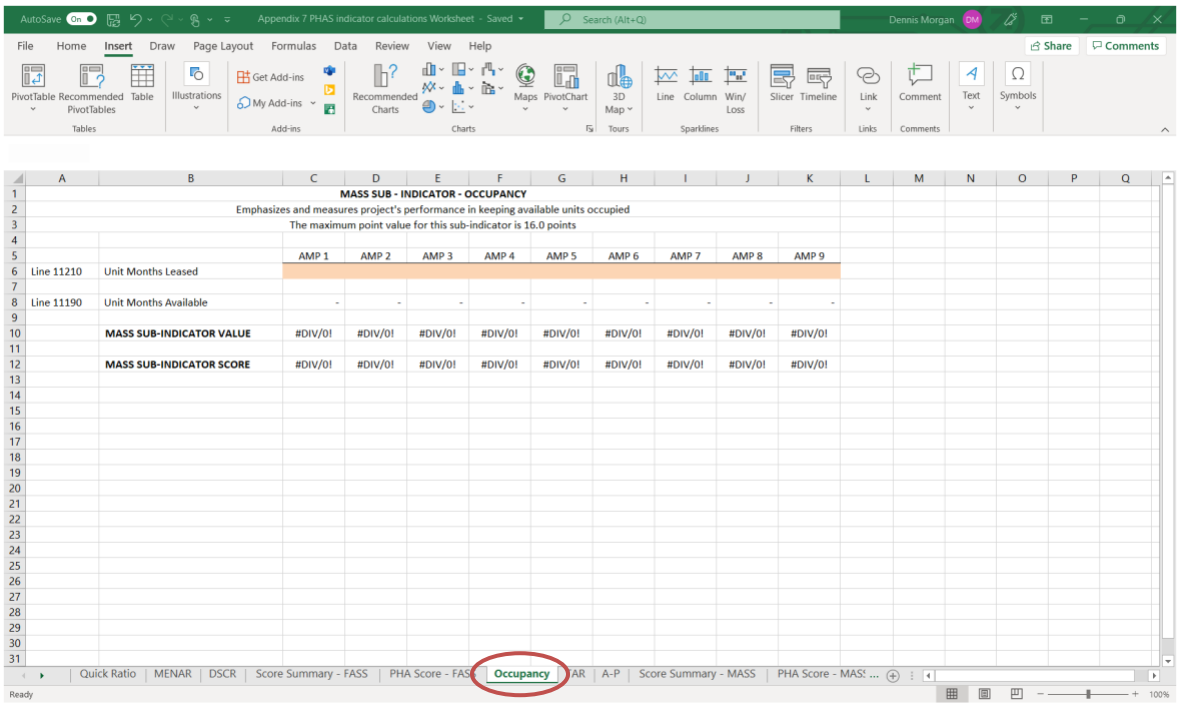
Occupancy (Worksheet Number 6)

From the FDS schedules for AMP 1:

- Enter FDS Account 11210: Units Month Leased

The spreadsheet will automatically bring over the Units Months Available from the information previously inserted in worksheet number 5.

Repeat process for each AMP in the PHA's portfolio.



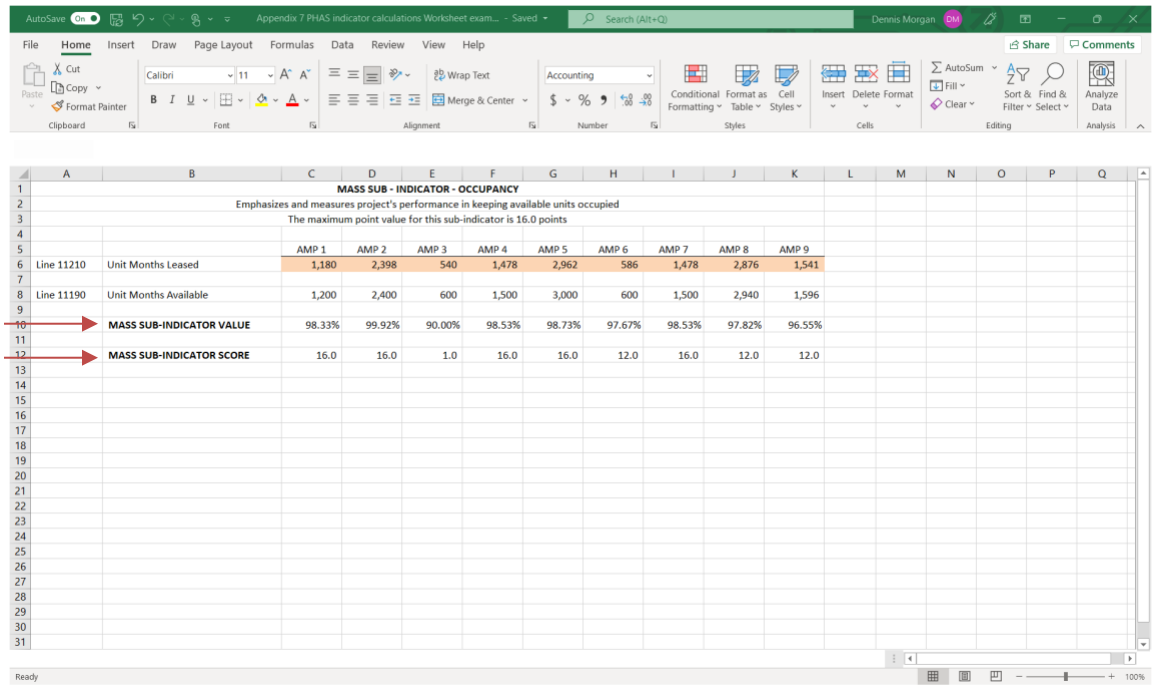
MASS SUB - INDICATOR - OCCUPANCY

Emphasizes and measures project's performance in keeping available units occupied

The maximum point value for this sub-indicator is 16.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 11210	Unit Months Leased									
Line 11190	Unit Months Available	-	-	-	-	-	-	-	-	-
	MASS SUB-INDICATOR VALUE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	MASS SUB-INDICATOR SCORE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Once all the data is entered, at the bottom of the spreadsheet a MASS Sub-indicator Value will appear along with the MASS Sub-Indicator Score. The PHA is striving for an occupancy rate of 98% or higher, which will generate a score of 16 points for the AMP. These will then be applied to the weighted average of the AMPs for a final score for the PHA MASS indicator that can be found on Worksheet Number 10.



MASS SUB - INDICATOR - OCCUPANCY

Emphasizes and measures project's performance in keeping available units occupied

The maximum point value for this sub-indicator is 16.0 points

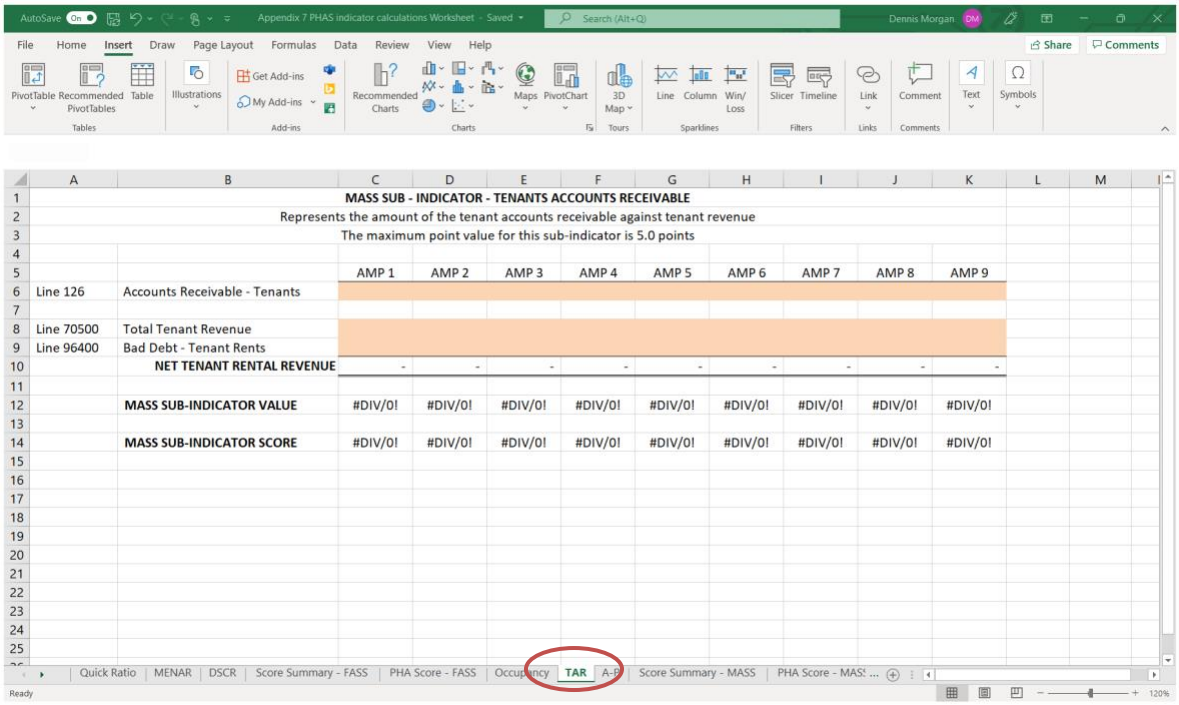
		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 11210	Unit Months Leased	1,180	2,398	540	1,478	2,962	586	1,478	2,876	1,541
Line 11190	Unit Months Available	1,200	2,400	600	1,500	3,000	600	1,500	2,940	1,596
	MASS SUB-INDICATOR VALUE	98.33%	99.92%	90.00%	98.53%	98.73%	97.67%	98.53%	97.82%	96.55%
	MASS SUB-INDICATOR SCORE	16.0	16.0	1.0	16.0	16.0	12.0	16.0	12.0	12.0

Tenant Accounts Receivable (Worksheet Number 7)

From the FDS schedules for AMP 1:

- Enter FDS Account 126: Accounts Receivable- Tenants
- Enter FDS Account 70500: Total Tenant Revenue
- Enter FDS Account 96400; Bad Debt- Tenant Rents

Repeat process for each AMP in the PHA's portfolio.



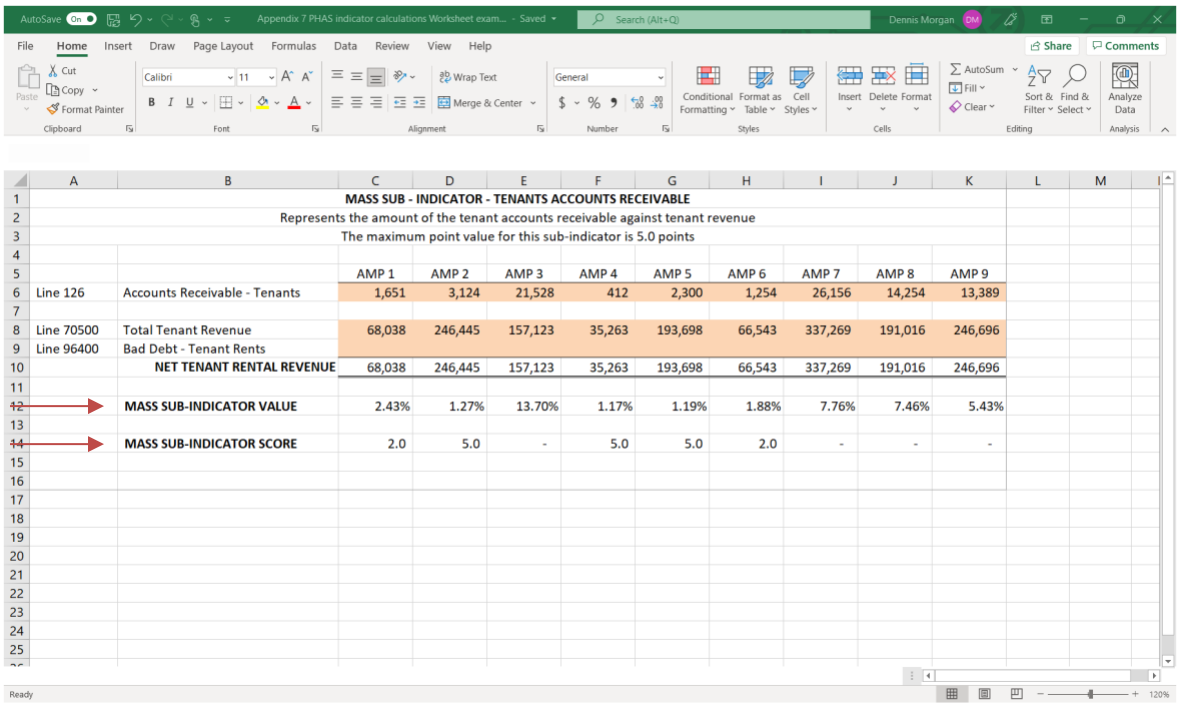
MASS SUB - INDICATOR - TENANTS ACCOUNTS RECEIVABLE

Represents the amount of the tenant accounts receivable against tenant revenue

The maximum point value for this sub-indicator is 5.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 126	Accounts Receivable - Tenants									
Line 70500	Total Tenant Revenue									
Line 96400	Bad Debt - Tenant Rents									
	NET TENANT RENTAL REVENUE	-	-	-	-	-	-	-	-	-
	MASS SUB-INDICATOR VALUE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	MASS SUB-INDICATOR SCORE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Once all the data is entered, at the bottom of the spreadsheet a MASS Sub-indicator Value will appear along with the MASS Sub-Indicator Score. The PHA is striving for a Tenant Account Receivable Rate of less than 1.5, which will generate a score of 5 points for the AMP. These will then be applied to the weighted average of the AMPs for a final score for the PHA MASS indicator that can be found on Worksheet Number 10.



1			MASS SUB - INDICATOR - TENANTS ACCOUNTS RECEIVABLE								
2			Represents the amount of the tenant accounts receivable against tenant revenue								
3			The maximum point value for this sub-indicator is 5.0 points								
4											
5			AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
6	Line 126	Accounts Receivable - Tenants	1,651	3,124	21,528	412	2,300	1,254	26,156	14,254	13,389
7											
8	Line 70500	Total Tenant Revenue	68,038	246,445	157,123	35,263	193,698	66,543	337,269	191,016	246,696
9	Line 96400	Bad Debt - Tenant Rents									
10		NET TENANT RENTAL REVENUE	68,038	246,445	157,123	35,263	193,698	66,543	337,269	191,016	246,696
11											
12		MASS SUB-INDICATOR VALUE	2.43%	1.27%	13.70%	1.17%	1.19%	1.88%	7.76%	7.46%	5.43%
13											
14		MASS SUB-INDICATOR SCORE	2.0	5.0	-	5.0	5.0	2.0	-	-	-

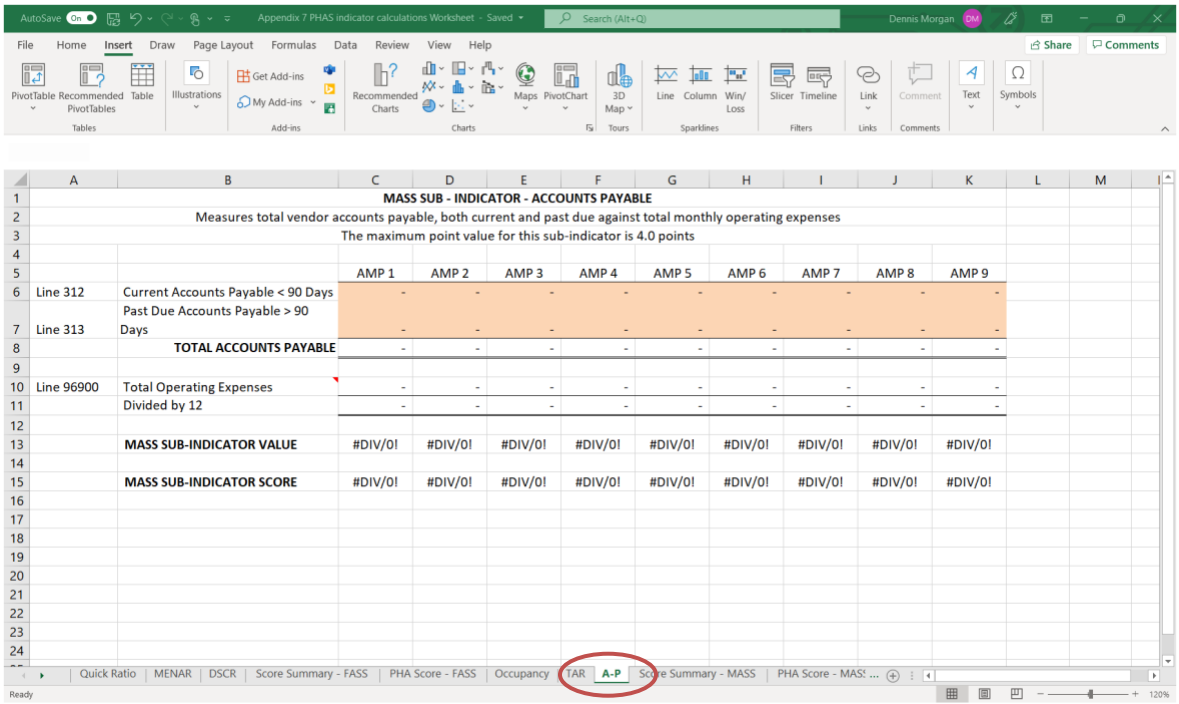
Accounts Payable (Worksheet Number 8)

From the FDS schedules for AMP 1:

- Enter FDS Account 312: Current Accounts Payable < 90 days
- Enter FDS Account 313: Past Due Accounts Payable > 90 days

The total operating expenses will be brought over from previous information entered into on worksheet Number 2.

Repeat process for each AMP in the PHA's portfolio.



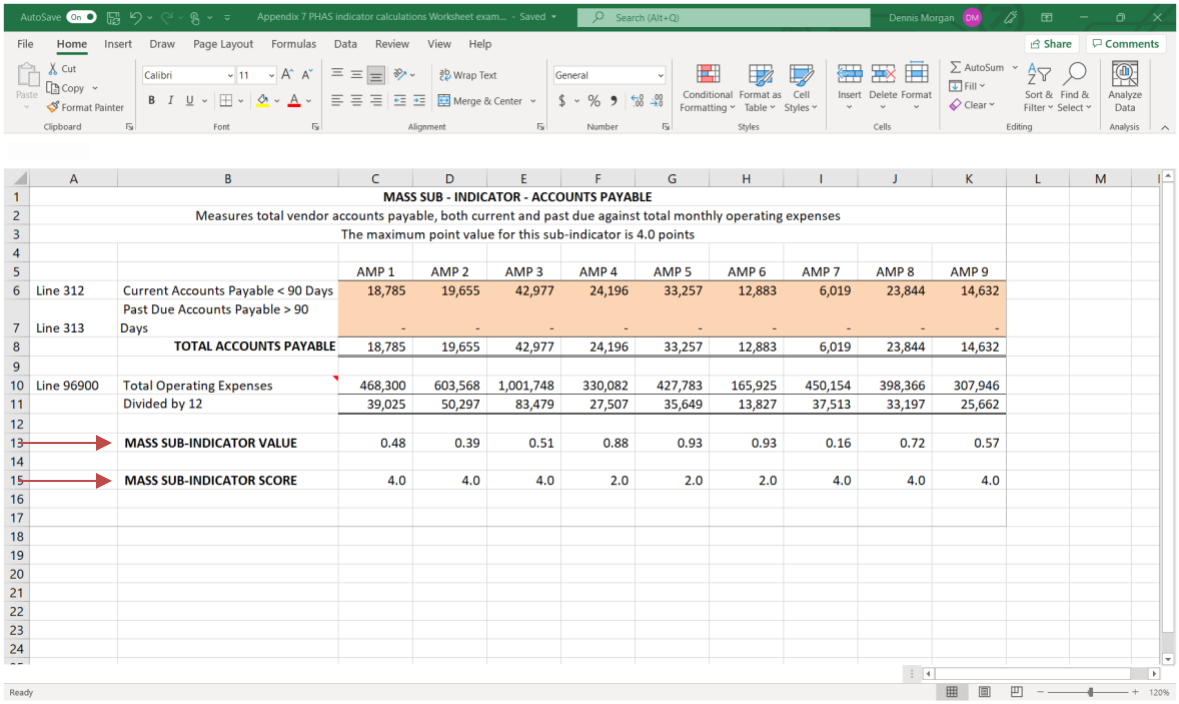
MASS SUB - INDICATOR - ACCOUNTS PAYABLE

Measures total vendor accounts payable, both current and past due against total monthly operating expenses

The maximum point value for this sub-indicator is 4.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 312	Current Accounts Payable < 90 Days	-	-	-	-	-	-	-	-	-
Line 313	Past Due Accounts Payable > 90 Days	-	-	-	-	-	-	-	-	-
	TOTAL ACCOUNTS PAYABLE	-	-	-	-	-	-	-	-	-
Line 96900	Total Operating Expenses	-	-	-	-	-	-	-	-	-
	Divided by 12	-	-	-	-	-	-	-	-	-
	MASS SUB-INDICATOR VALUE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	MASS SUB-INDICATOR SCORE	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Once all the data is entered, at the bottom of the spreadsheet a MASS Sub-indicator Value will appear along with the MASS Sub-Indicator Score. The PHA is striving for an Accounts Payable of less than .75, which will generate a score of 4 points for the AMP. These will then be applied to the weighted average of the AMPs for a final score for the PHA MASS indicator that can be found on Worksheet Number 10.



MASS SUB - INDICATOR - ACCOUNTS PAYABLE

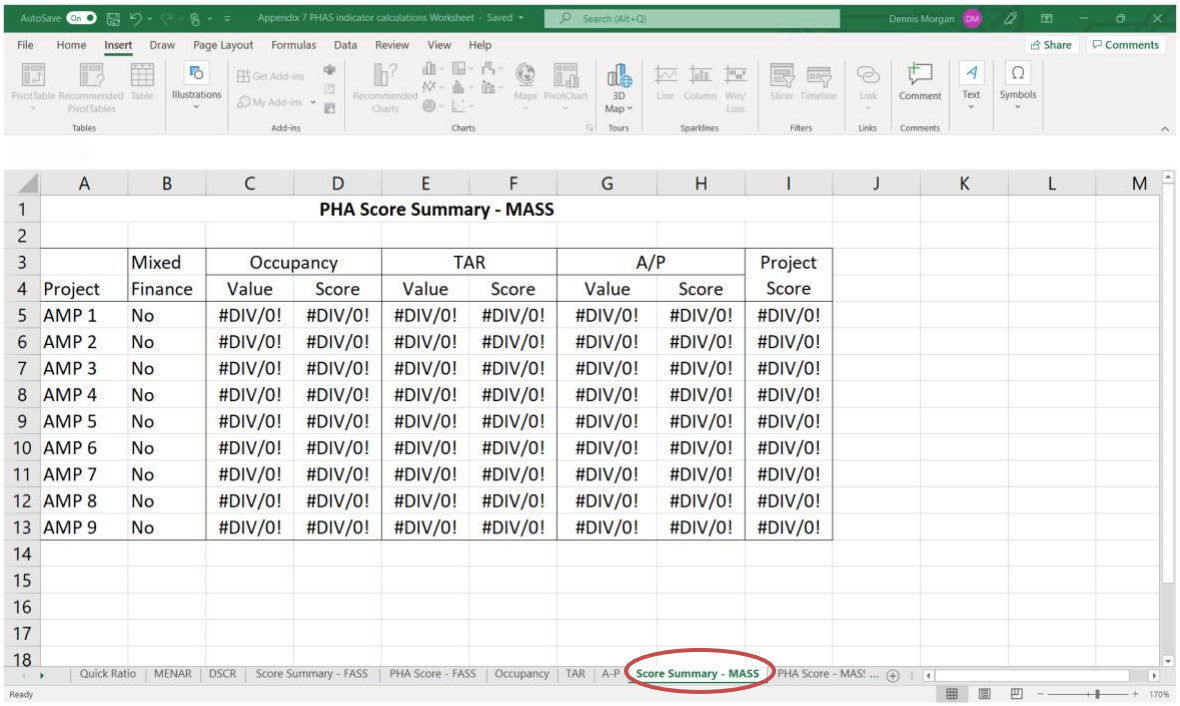
Measures total vendor accounts payable, both current and past due against total monthly operating expenses

The maximum point value for this sub-indicator is 4.0 points

		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	AMP 9
Line 312	Current Accounts Payable < 90 Days	18,785	19,655	42,977	24,196	33,257	12,883	6,019	23,844	14,632
Line 313	Past Due Accounts Payable > 90 Days	-	-	-	-	-	-	-	-	-
	TOTAL ACCOUNTS PAYABLE	18,785	19,655	42,977	24,196	33,257	12,883	6,019	23,844	14,632
Line 96900	Total Operating Expenses	468,300	603,568	1,001,748	330,082	427,783	165,925	450,154	398,366	307,946
	Divided by 12	39,025	50,297	83,479	27,507	35,649	13,827	37,513	33,197	25,662
	MASS SUB-INDICATOR VALUE	0.48	0.39	0.51	0.88	0.93	0.93	0.16	0.72	0.57
	MASS SUB-INDICATOR SCORE	4.0	4.0	4.0	2.0	2.0	2.0	4.0	4.0	4.0

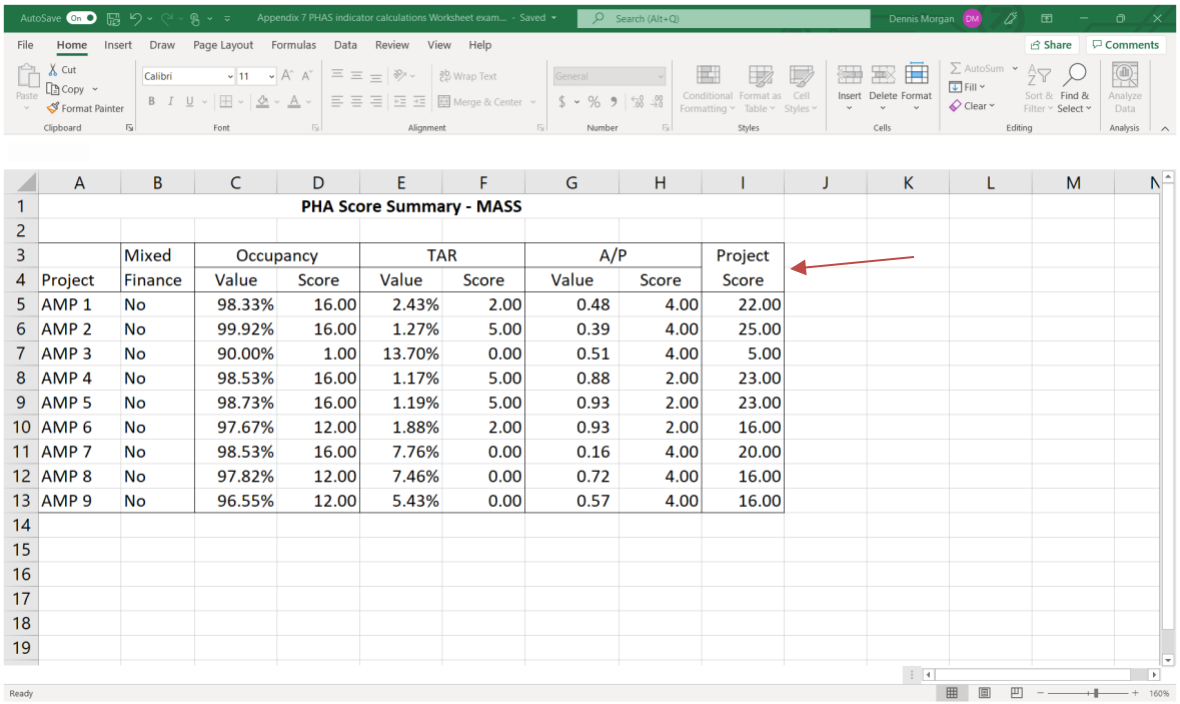
Score Summary PHAS MASS (Worksheet Number 9)

This worksheet will provide a summary of each AMP's value and score for the Occupancy, TARs, and Accounts Payable. It will further provide the cumulative project score for the AMP. If an AMP is scoring 25 points as a Project Score, then it would be performing well under the management indicator for that AMP. If less than 25 points, then further analysis can be done on which sub-indicator needs improvement



PHA Score Summary - MASS

Project	Mixed Finance	Occupancy Value	Occupancy Score	TAR Value	TAR Score	A/P Value	A/P Score	Project Score
AMP 1	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AMP 2	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AMP 3	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AMP 4	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AMP 5	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AMP 6	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AMP 7	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AMP 8	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AMP 9	No	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

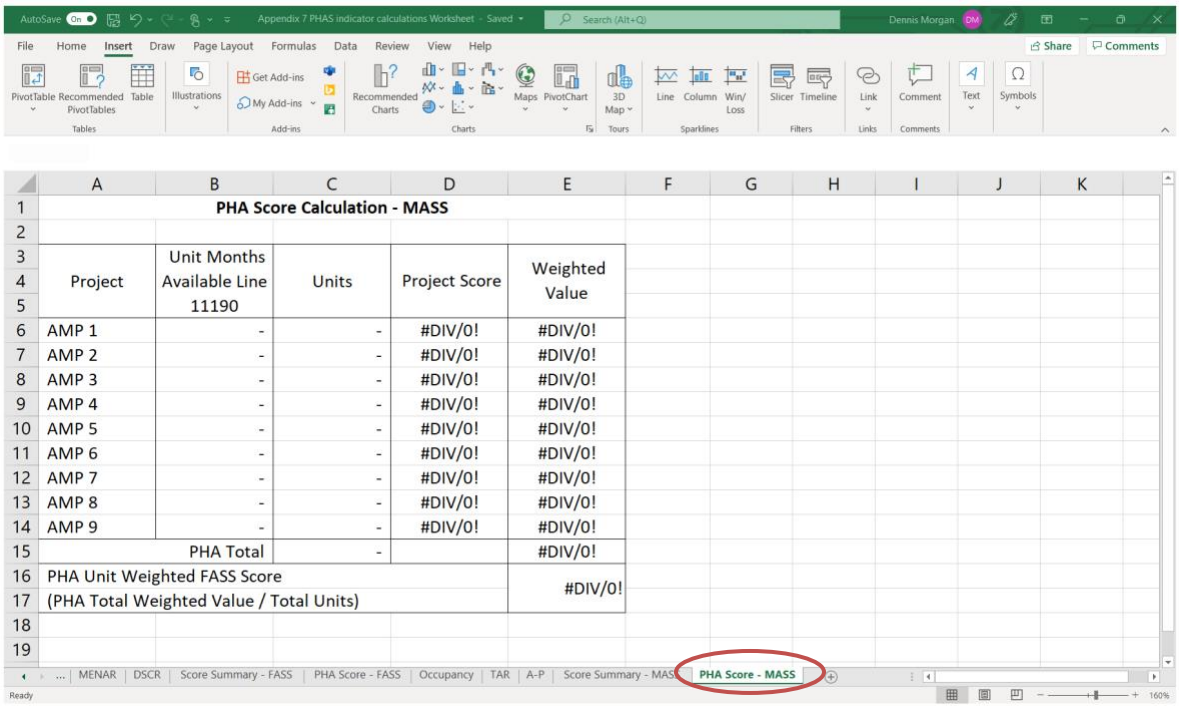


PHA Score Summary - MASS

Project	Mixed Finance	Occupancy Value	Occupancy Score	TAR Value	TAR Score	A/P Value	A/P Score	Project Score
AMP 1	No	98.33%	16.00	2.43%	2.00	0.48	4.00	22.00
AMP 2	No	99.92%	16.00	1.27%	5.00	0.39	4.00	25.00
AMP 3	No	90.00%	1.00	13.70%	0.00	0.51	4.00	5.00
AMP 4	No	98.53%	16.00	1.17%	5.00	0.88	2.00	23.00
AMP 5	No	98.73%	16.00	1.19%	5.00	0.93	2.00	23.00
AMP 6	No	97.67%	12.00	1.88%	2.00	0.93	2.00	16.00
AMP 7	No	98.53%	16.00	7.76%	0.00	0.16	4.00	20.00
AMP 8	No	97.82%	12.00	7.46%	0.00	0.72	4.00	16.00
AMP 9	No	96.55%	12.00	5.43%	0.00	0.57	4.00	16.00

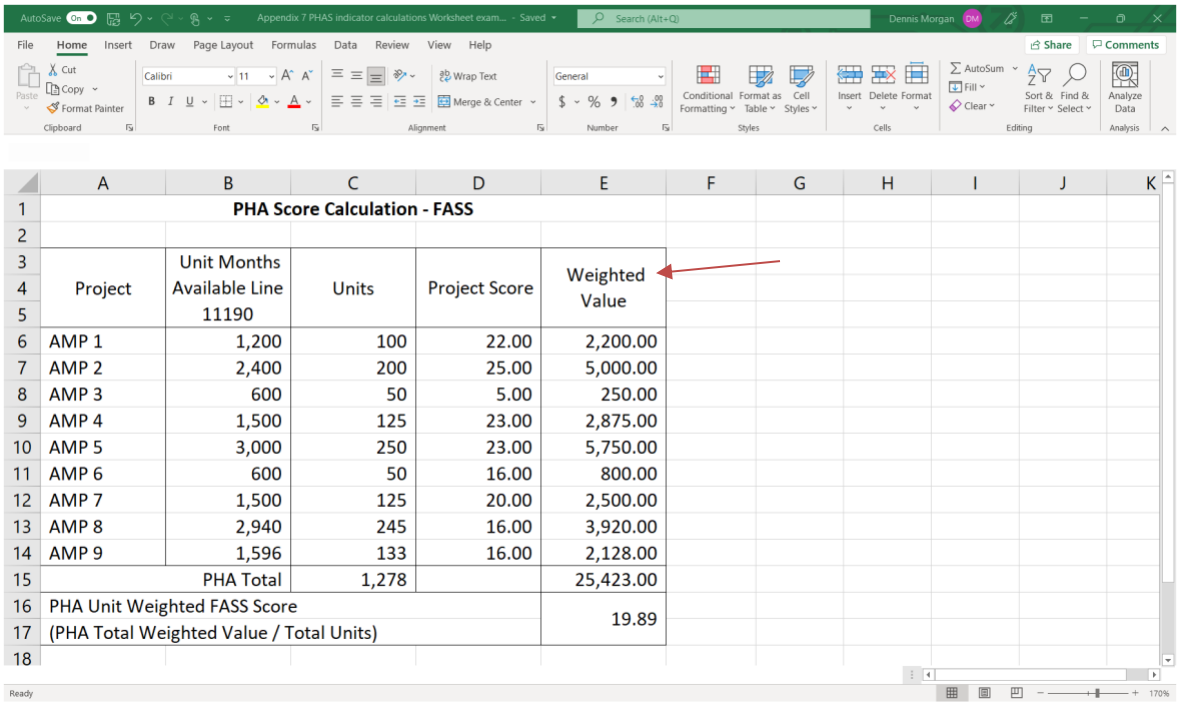
PHA Score MASS Calculations (Worksheet Number 10)

The weighted Average Score will be automatically calculated by multiplying the units by the project score. The worksheet will the automatically calculate the weighted average, provide a PHA total for the AMPS and provide the final score for the PHA total score under this MASS indicator. A score of 25 points would be the maximum score under this indicator and further indicate that each AMP is performing at a high level under MASS.



PHA Score Calculation - MASS

Project	Unit Months Available Line 11190	Units	Project Score	Weighted Value
AMP 1	-	-	#DIV/0!	#DIV/0!
AMP 2	-	-	#DIV/0!	#DIV/0!
AMP 3	-	-	#DIV/0!	#DIV/0!
AMP 4	-	-	#DIV/0!	#DIV/0!
AMP 5	-	-	#DIV/0!	#DIV/0!
AMP 6	-	-	#DIV/0!	#DIV/0!
AMP 7	-	-	#DIV/0!	#DIV/0!
AMP 8	-	-	#DIV/0!	#DIV/0!
AMP 9	-	-	#DIV/0!	#DIV/0!
	PHA Total	-		#DIV/0!
PHA Unit Weighted FASS Score (PHA Total Weighted Value / Total Units)				#DIV/0!



PHA Score Calculation - FASS

Project	Unit Months Available Line 11190	Units	Project Score	Weighted Value
AMP 1	1,200	100	22.00	2,200.00
AMP 2	2,400	200	25.00	5,000.00
AMP 3	600	50	5.00	250.00
AMP 4	1,500	125	23.00	2,875.00
AMP 5	3,000	250	23.00	5,750.00
AMP 6	600	50	16.00	800.00
AMP 7	1,500	125	20.00	2,500.00
AMP 8	2,940	245	16.00	3,920.00
AMP 9	1,596	133	16.00	2,128.00
	PHA Total	1,278		25,423.00
PHA Unit Weighted FASS Score (PHA Total Weighted Value / Total Units)				19.89