



Real Estate Assessment Center
PHA- Finance

FINANCIAL INDICATOR METHODOLOGY & ANALYSIS GUIDE

**(For FYE 9/30/03 through
6/30/06)**

September 12, 2003



TABLE OF CONTENTS

SUMMARY OF CHANGES	1
I. EFFECTIVE PERIOD.....	2
II. EXECUTIVE SUMMARY	2
III. BACKGROUND.....	3
IV. CURRENT PUBLIC HOUSING ASSESSMENT SYSTEM.....	5
V. ADVISORY VS. ENFORCEABLE SCORES	6
VI. SCORING METHODOLOGY	7
1) <i>CURRENT RATIO</i>	7
2) <i>MONTHS EXPENDABLE FUND BALANCE</i>	10
3) <i>TENANT RECEIVABLE OUTSTANDING</i>	12
4) <i>OCCUPANCY LOSS.....</i>	14
5) <i>EXPENSE MANAGEMENT/UTILITY CONSUMPTION</i>	15
6) <i>NET INCOME OR LOSS</i>	19
VII. SUMMARY FASS COMPONENT FORMULA AND CALCULATIONS	21



SUMMARY OF CHANGES

Changes to the Financial Indicator Methodology and Analysis Guide are a result of the expiration of the Public Housing Assessment System (PHAS) Interim Assessment Methodology and the reinstatement of the original PHAS Assessment Methodology for Public Housing Authorities (PHAs) with Fiscal Years Ending on or after September 30, 2003.

The following represents changes made to this document due to the expiration of the interim and reinstatement of the original assessment methodology for PHAs.

- The “Effective Period” section was updated to reflect the September 30, 2003 effective date of the PHAS assessment methodology as originally issued by HUD.
- The scoring methodology for the Current Ratio and the Month Expendable Fund Balance components was updated to reflect the original assessment scoring methodology being reinstated by HUD.



I. EFFECTIVE PERIOD

This document describes the original assessment and scoring methodology that is being reinstated upon the expiration of the Interim Assessment Methodology on September 30, 2003, for the financial assessment of Public Housing Agencies (PHAs) evaluated by the U.S. Department of Housing and Urban Development (HUD) Real Estate Assessment Center's Public Housing Assessment System (PHAS, 24 CFR Part 902). Under the reinstated, original financial assessment methodology, the Current Ratio and the Months Expendable Fund Balance components will be scored using the originally published scoring methodology as contained in the Public Housing Assessment System, Financial Condition Scoring Process Notice dated December 21, 2000. The expiration of interim assessment and scoring methods and the reinstatement of the original PHAS methodology is effective for PHAs with fiscal year ends (FYE) September 30, 2003 and forward.

II. EXECUTIVE SUMMARY

This Financial Indicators Methodology & Analysis Guide (the Guide) was prepared by the HUD Real Estate Assessment Center (REAC). This guide is intended to assist its users in understanding and calculating the financial indicator components used to assess the financial condition of Public Housing Authorities (PHAs) under the Public Housing Assessment System (PHAS) and to provide guidance on calculating the respective score associated with the financial indicator component. All PHAs that administer programs under the terms of an annual contributions contract (ACC) with HUD are subject to the assessment, including:

- Public housing,
- PHAs administering Section 8 Housing Assistance Payment Programs, and
- Owners of housing receiving Section 8 Project-Based Housing Assistance.

The financial condition of each PHA will be assessed annually by REAC to determine whether the PHA:

- Has sufficient financial resources, and
- Is managing those resources effectively to support the provision of housing that is decent, safe, sanitary, and in good repair.

REAC's assessment and analysis will be based upon the financial data schedule (FDS) submitted electronically by the PHA using the Financial Assessment Subsystem – Public Housing (FASS-PH). This financial data is required to be reported in accordance with the generally accepted accounting principles (GAAP), as mandated by the Uniform Financial Reporting Standards Rule (UFRS, 24 CFR Part 5). The established financial indicator components will be automatically calculated and scored using FASS-PH, as described in the PHAS Rule.

The following financial indicator components (as published in the Federal Register [FR-4313-P-01]) and [FR-4509-N-17]), have been established to assess a PHA's financial condition:

1. ***Current Ratio: a measure of liquidity***; measures the PHA's ability to cover its current obligations
2. ***Months Expendable Fund Balance: a measure of viability***; measures the PHA's ability to operate using its fund balance without relying on additional funding



3. ***Tenant Receivable Outstanding***: a measure of rent collectibility; measures the PHA’s ability to collect its tenant receivables in a timely fashion
4. ***Occupancy Loss***: a measure of the PHA’s ability to maximize revenue; measures the extent to which the PHA is maximizing its rental revenue
5. ***Expense Management/Utility Consumption***: a measure of the operating cost per unit; measures the PHA’s ability to maintain its expense ratios at a reasonable level relative to its peers (adjusted for size and region)
6. ***Net Income or Loss***: a measure of the net income (loss) impact against viability; measures how the year’s operations have affected the PHA’s viability

The table below shows the six components that constitute the financial indicator and their assigned points:

Scoring Components	Total Assigned Points
Current Ratio	9.0
Months Expendable Fund Balance	9.0
Tenant Receivable Outstanding	4.5
Occupancy Loss	4.5
Expense Management/Utility Consumption	1.5
Net Income or Loss	1.5
Total Maximum Possible Points	30.0

This Guide:

- Provides background on the historical assessment of PHAs;
- Summarizes the current assessment system;
- Provides detailed description of the calculation of the financial indicator components; and
- Provides detailed description and explanation of FASS scoring methodology.

III. BACKGROUND

HUD has historically evaluated the management of PHAs using indicators and scoring. The Public Housing Management Assessment Program (PHMAP) was the historical analytical tool and consisted of eight (8) indicators. Each indicator had components that were calculated separately, but analyzed as a group. The indicators/components were:

- Vacancy Rate and Unit Turnaround Time
 - Vacancy percentage and progress in reducing vacancies over the last three years
 - Unit turnaround time
- Modernization
 - Unexpended funds over three years old
 - Timeliness of fund obligation
 - Contract administration



- Quality of the physical work
- Budget controls

- Rents Uncollected

- Work Orders
 - Emergency work orders
 - Non-emergency work orders and progress during the last three years

- Annual Inspection of Units and Systems
 - Annual inspection of units
 - Annual inspection of systems

- Financial Management
 - Cash reserves
 - Energy consumption

- Resident Services and Community Building
 - Economic lift (HUD funded programs)
 - Resident organization
 - Resident involvement
 - Resident programs management (HUD funded programs)

- Security
 - Tracking and reporting crime
 - Screening of applicants
 - Lease enforcement
 - Grant program goals (HUD funded programs)

The points by indicator were calculated after calculating each component's score. The points were converted into a percentage through a series of calculations. The PHA was then rated based on the percentage. High performers were those PHAs receiving total PHMAP scores of 90 percent or better, standard performers were those PHAs with total PHMAP scores equal to or greater than 60 and less than 90 percent, and troubled performers were those PHAs with total PHMAP scores of less than 60 percent¹.

HUD, specifically REAC, developed and published a new methodology to assess the overall condition of each PHA. This methodology is the Public Housing Assessment System (PHAS) and is comprised of four indicators – physical, financial, management and resident service and satisfaction. For the financial condition assessment specifically, REAC requires the PHAs to electronically report financial data, prepared in accordance with GAAP, using a predetermined reporting format - the Financial Data Schedule (FDS). This data is submitted by the PHA by accessing the FASS-PH system and entering applicable data into the FDS format. REAC's objective is to access the data in order to analyze the operating results and financial condition of each PHA, using a consistent, objective methodology. This methodology was tested and verified as useful and applicable by REAC by:

¹ Source: PHMAP Training Coursebook, Adjustments and Scoring, 1997 U.S. Housing and Urban Development



- Meeting with industry leaders and discussing the composition and calculation of each indicator component;
- Meeting with fee accountants and auditors in the practice of consulting and auditing for public housing programs;
- Modeling financial data for PHAs, using both GAAP and non-GAAP data;
- Developing an assessment and scoring prototype for calculating advisory scores;
- Developing and testing scoring models; and
- Utilizing the financial data schedule and FASS system for scoring and assessment under the Advisory Period and Interim PHAS.

The results supported that the financial indicator components designed will provide the financial information necessary for assessing the financial condition of each PHA.

IV. CURRENT PUBLIC HOUSING ASSESSMENT SYSTEM

As mentioned at the end of the previous section, REAC developed an assessment system to evaluate the overall condition of each PHA in order to obtain results that are objective, uniform and verifiable. The methodology uses four evaluation tools referred to as PHAS indicators. These indicators are published in 24 CFR Part 901 and 902, Public Housing Assessment System (PHAS); Final Rule. The four indicators are:

1. Physical condition
2. Financial condition
3. Management operations
4. Resident service and satisfaction

Each indicator is separately evaluated and scored with physical condition, financial condition, and management operations each worth a maximum of 30 points respectively, and resident service and satisfaction worth a maximum of 10 points - for an overall available score of 100 points. Upon completion of the individual, independent analysis, a score is calculated for each indicator. The scores are then accumulated and the PHA is identified, based on their overall score, as a:

- High Performer
- Standard Performer
- Troubled Performer

To obtain a **High Performer** status, a PHA must score at least 60 percent of the points available in each of the four indicators and achieve an overall PHAS score of 90 percent or greater. High performers will be afforded incentives that include relief from specific HUD requirements, public recognition and bonus points in funding competitions.

A PHA that achieves a total PHAS score of less than 90 percent but not less than 60 percent and does not achieve less than 60 percent of the total points available under any of the PHAS Indicators 1, 2, or 3 shall be designated as a **Standard Performer**. All standard performers must correct reported deficiencies. All standard performers that receive a score of less than 70 percent but greater than 60 percent shall be subject to additional oversight. This oversight includes the submission of an Improvement Plan to eliminate deficiencies in the PHA's performance within 30 days after the issuance of the PHAS score.



The PHA must correct the deficiencies within 90 days or within the period provided by HUD in the Approved Improvement Plan.

A PHA can be designated as a ***Troubled Performer*** overall or in one area. A PHA that achieves a total PHAS score of less than 60 percent or achieves a score of less than 60 percent of the total points available under more than one of the PHAS Indicators 1, 2, or 3 shall be designated as *Troubled Overall* and shall be referred to the appropriate field office for follow-up. PHAs designated as Troubled Performers will be required to submit a Recovery Plan and a Memorandum of Agreement (MOA). The MOA will be a binding contractual agreement between HUD and the PHA and include annual and quarterly performance targets, strategies to achieve performance targets, incentives for meeting such targets and the consequences of failing to meet the targets. The maximum recovery period, unless extended by the field office, is the first full fiscal year following execution of the MOA.

A PHA that achieves less than 60 percent of the total points available under only one of the PHAS Indicators 1, 2, or 3 shall be considered *Troubled in One Area* and will be considered a substandard physical, substandard financial, or substandard management performer. The PHA will be referred to the field office, as described above.

Troubled PHAs that fail to show significant improvement the following year will automatically be referred to the HUD Enforcement Center, which shall initiate proceedings for judicial appointment of a receiver and other sanctions as may be appropriate.

In exceptional circumstances, HUD may withhold designation even though a PHA has satisfied all of the PHAS Indicators for high performer or standard performer designation. HUD may conduct any review, as it deems necessary and may deny or rescind incentives, high performer designation, or standard performer designation in special cases. Some examples are in the case of a PHA that:

- Is operating under a special agreement with HUD;
- Is involved with litigation that bears directly upon its physical, financial, or management performance;
- Is operating under a court order;
- Demonstrates substantial evidence of fraud or misconduct;
- Demonstrates substantial noncompliance in one or more areas of a PHA's required compliance with applicable laws and regulations.

V. ADVISORY VS. ENFORCEABLE SCORES

Currently, the financial indicator components are calculated and analyzed on an entity-wide basis to include the total financial position of each PHA. During the first year submissions, PHAs with fiscal years ending September 30, 1999, December 31, 1999, March 31, 2000, and June 30, 2000 received two advisory scores, one for their public housing operating subsidies program (low-rent) and one for their entity-wide operations. PHAs with fiscal years ending September 30, 2000, December 31, 2000, March 31, 2001, and June 2001 received one advisory score for their entity-wide operations. PHAs with fiscal years ending on and after September 30, 2001, scores are enforceable and PHAs will receive FASS scores that are based on the PHA's entity-wide operations only.

The following chart summarizes the financial scoring process:

**Financial Condition Scores Advisory vs. Enforceable**

Fiscal Year Ending	Low-Rent	Entity-Wide
9-30-99	Advisory	Advisory
12-31-99	Advisory	Advisory
3-31-00	Advisory	Advisory
6-30-00	Advisory	Advisory
9-30-00	N/A	Advisory
12-31-00	N/A	Advisory
3-31-01	N/A	Advisory
6-30-01	N/A	Advisory
9-30-01 and beyond	N/A	Enforceable

VI. SCORING METHODOLOGY

PHAs are evaluated and assigned scores based on their financial performance on an entity-wide basis relative to their peers. Entity-wide assessments are basically defined as assessing a PHA based on its overall consolidated financial operations. Consolidated operations include all programs and business activities of the PHA. The financial condition of each PHA is evaluated to determine whether the PHA has sufficient financial resources and is managing those resources effectively to support the provision of decent, safe, and sanitary housing.

There are six components currently used to assess the financial condition of PHAs. The six components are Current Ratio, Months Expendable Fund Balance, Tenant Receivable Outstanding, Occupancy Loss, Expense Management/Utility Consumption, and Net Income. After the financial indicator score is calculated, an audit adjustment may be applied to the overall FASS score to adjust the score for audit-related results that directly affect the financial assessment of the PHA. (See Public Housing Assessment System Financial Condition Scoring Process Notice published on the HUD website for detail.)

In this section the following information is provided:

- The area of measurement for each component;
- A general description of the accounts used to construct each component;
- A detailed Financial Data Schedule (FDS) line item computation for each component;
- The calculation methodology for translating the component values into scores; and
- A quick reference of the FDS line item descriptions under each component.

1) Current Ratio

Area of Measurement: The current ratio is a liquidity measure of the PHA's ability to cover its current obligations. It is measured by using the adjusted current ratio that is primarily designed to show available, unrestricted current assets divided by the current liabilities. It is designed to indicate if a PHA could meet all current obligations if they became immediately due and payable. A PHA should generally have available current resources equal to or greater than their current obligations in order to be considered financially liquid. The maximum point value for this component is **9.0** points. A PHA with a Current Ratio value of less than one will be considered financially unacceptable and will receive zero points for this component.



If the value for the Current Ratio is equal to, or greater than one, the PHA is evaluated and assigned a score up to a maximum of 9 points based on its financial performance relative to its peers. PHAs with current ratio values outside the upper threshold boundary will be considered to have too high liquidity or excess reserves and will receive incrementally fewer points up to a maximum deduction of up to 1.5 points. This reduction in points was established because HUD believes that PHAs with too high reserves and liquidity may be better utilizing their resources to improve the quality of housing to its residents.

Calculation: The calculation methodology and the detail FDS line items included in the calculation are as follows:

$$\text{Calculation Methodology} = \frac{\text{Cash} + \text{Cash Equivalents} + \text{Current Receivables}}{\text{Current Liabilities}}$$

$$\text{Detail Line Item Calculation} = \frac{(111+114+115+120+131+135+142)}{(310-347)}$$

Translating the Component Value into Scores: Under the Current Ratio (CR) component, the PHA is evaluated and assigned a score based on its financial performance on an entity-wide basis relative to its peers. In other words, all PHAs as a group determine the mean score and each PHA is then ranked accordingly. Scoring thresholds were previously developed to make the peer grouping assessment possible. The thresholds were calculated by examining the distribution of component values by peer groups. Peer groupings are established according to the size of the PHA based on the total number of units operated by the PHA for all programs and activities. The current size peer groupings are as follows:

Size Category	Unit Count
Extra Large	10,000 ≤ count
Large	1,250 ≤ count ≤ 9,999
High Medium	500 ≤ count ≤ 1,249
Low Medium	250 ≤ count ≤ 499
Small	50 ≤ count ≤ 249
Very Small	1 ≤ count ≤ 49

The following tables contain the CR component values and the corresponding score calculations derived from the thresholds. As indicated on the tables, an Extra Large size PHA with a CR of 1.73 will receive 9 points. If this Extra Large PHA has a component value of 2.4, the PHA will receive a score of 8.63 points (the formula is $9 - [((\text{Component value} - 2.3) / (2.7 - 2.3)) * (9 - 7.5)]$). If this Extra Large PHA has a component value of 1.2, the PHA will receive a score of 7.70 points (the formula is $6.4 - [((\text{Component value} - 1) / (1.4 - 1)) * (6.4 - 9)]$). If this Extra Large PHA has a component value of .94, the PHA will receive zero points. (The formulas represent the equation equivalent to the scoring model published in the scoring notices.)



Current Ratio (CR)					
Very Small	Formula	Score	Small	Formula	Score
CR < 1	N/A	0	CR < 1	N/A	0
CR=1	N/A	1.8	CR=1	N/A	3.2
1<CR<4.9	$1.8 - [((CR-1)/(4.9-1)) * (1.8-9)]$	1.8<Score<9	1<CR<2.8	$3.2 - [((CR-1)/(2.8-1)) * (3.2-9)]$	3.2<Score<9
4.9<CR<14.0	N/A	9	2.8<CR<8.0	N/A	9
14.0<CR<24	$9 - [((CR-14.0)/(24-14.0)) * (9-7.5)]$	9>Score>7.5	8.0<CR<14.9	$9 - [((CR-8.0)/(14.9-8.0)) * (9-7.5)]$	9>Score>7.5
CR>24	N/A	7.5	CR>14.9	N/A	7.5

Current Ratio (CR)					
Low Medium	Formula	Score	High Medium	Formula	Score
CR < 1	N/A	0	CR < 1	N/A	0
CR=1	N/A	3.6	CR=1	N/A	4.4
1<CR<2.5	$3.6 - [((CR-1)/(2.5-1)) * (3.6-9)]$	3.6<Score<9	1<CR<2.1	$4.4 - [((CR-1)/(2.1-1)) * (4.4-9)]$	4.4<Score<9
2.5<CR<5.9	N/A	9	2.1<CR<4.9	N/A	9
5.9<CR<10.3	$9 - [((CR-5.9)/(10.3-5.9)) * (9-7.5)]$	9>Score>7.5	4.9<CR<7.8	$9 - [((CR-4.9)/(7.8-4.9)) * (9-7.5)]$	9>Score>7.5
CR>10.3	N/A	7.5	CR>7.8	N/A	7.5

Current Ratio (CR)					
Large	Formula	Score	Extra Large	Formula	Score
CR < 1	N/A	0	CR < 1	N/A	0
CR=1	N/A	4.9	CR=1	N/A	6.4
1<CR<1.8	$4.9 - [((CR-1)/(1.8-1)) * (4.9-9)]$	4.9<Score<9	1<CR<1.4	$6.4 - [((CR-1)/(1.4-1)) * (6.4-9)]$	6.4<Score<9
1.8<CR<3.9	N/A	9	1.4<CR<2.3	N/A	9
3.9<CR<6.9	$9 - [((CR-3.9)/(6.9-3.9)) * (9-7.5)]$	9>Score>7.5	2.3<CR<2.7	$9 - [((CR-2.3)/(2.7-2.3)) * (9-7.5)]$	9>Score>7.5
CR>6.9	N/A	7.5	CR>2.7	N/A	7.5

A PHA with a Current Ratio value of less than one will receive zero points for this component. For a current ratio of 1 or greater, a PHA will receive points that are determined by the distribution of data by size category.

Quick References: FDS Line Item Description for Current Ratio Component

Line	Numerator - Available Current Resources
111	Cash -unrestricted
114	Cash - tenant security deposits
115	Cash - restricted for payment of current liability
120	Total receivables, net of allowances for doubtful accounts
131	Investments - unrestricted
135	Investments - restricted for payment of current liability
142	Prepaid expenses and other assets



Line	Denominator - Current Obligations
310	Total current liabilities
347	Interprogram due to

2) Months Expendable Fund Balance

Area of Measurement: This is a viability measure of the PHA’s ability to operate using primarily its net available, unrestricted resources without reliance on additional funding.

This component compares the net available unrestricted resources to the average monthly operating expenses. The result of this calculation shows how many months of operating expenses and the repayment of operating debt principal can be covered with currently available, unrestricted resources.

Net available, unrestricted resources, also defined as Expendable Fund Balance (EFB), includes all current resources available to the PHA after subtracting the amount needed by the PHA to pay current obligations and the long-term portion of operating debt. A PHA with a MEFB value of less than one will receive zero points and will be considered financially unacceptable.

If the MEFB value is equal to or greater than one, the PHA is evaluated and assigned a score up to a maximum of 9 points based on its financial performance relative to its peers. As with the Current Ratio, PHAs with MEFB ratio values outside the upper threshold boundary will be considered to have too high liquidity or excess reserves and will receive incrementally fewer points up to a maximum deduction of up to 1.5 points.

PHAs utilizing the governmental fund model may not record certain items as operating expenses (i.e., compensated absences, self-insurance liability, unrecognized transition liability, special term/severance benefits liability, and allowance for doubtful accounts liability). Therefore, the changes in the associated liability accounts must be considered when calculating total operating expenses for the purpose of calculating financial component ratios and comparing the results to PHAs utilizing the enterprise fund model. In addition, all liabilities associated with operating borrowings, whether current or long-term, are recognized as current liabilities and considered for the MEFB calculation.

Calculation: The calculation methodology and the detail FDS line items included in the calculation are as follows:

$$\text{Calculation Methodology} = \frac{\text{Expendable Fund Balance}}{\text{Average Monthly Operating and Other Expenses}}$$

$$\text{Detail Line Item Calculation} = \frac{(111+114+115+120+131+135+142)-(310-343-347)-352}{(969+971+972+977+978+1102+1105+1106+1107+1108+1109+1110)/\text{reporting period} - \text{months}}$$

Translating the Component Value into Scores: Under the MEFB component, the PHA is also evaluated and assigned a score based on its financial performance relative to its peers, hence the scoring thresholds are calculated by examining the distributions of component values by peer groups. The current size peer groupings are listed in Section VI. 1. Current Ratio Component.



The tables below contain the component values and the corresponding score calculations derived from the thresholds. For example, a Large size PHA with a MEFB of 6 will receive 9 points. If this Large PHA has a component value of 15.85, the PHA will receive a score of 7.98 points (the formula is $9 - \frac{15.85 - 10.3}{18.5 - 10.3} * (9 - 7.5)$). If this Large PHA has a component value of 3.2, the PHA will receive a score of 7.19 points (the formula is $2.2 - \frac{3.2 - 1}{4 - 1} * (2.2 - 9)$). If this Large PHA has a component value of .89, the PHA will receive zero points. (The formulas represent the equation equivalent to the scoring model published in the scoring notices.)

Months Expendable Fund Balance (MEFB)					
Very Small	Formula	Score	Small	Formula	Score
MEFB < 1	N/A	0	MEFB < 1	N/A	0
MEFB =1	N/A	1.5	MEFB=1	N/A	1.9
1<MEFB<6.0	$1.5 - \frac{MEFB - 1}{6.0 - 1} * (1.5 - 9)$	1.5 < Score < 9	1<MEFB<4.6	$1.9 - \frac{MEFB - 1}{4.6 - 1} * (1.9 - 9)$	1.9 < Score < 9
6.0<MEFB<16.3	N/A	9	4.6<MEFB<12.0	N/A	9
16.3<MEFB<28.8	$9 - \frac{MEFB - 16.3}{28.8 - 16.3} * (9 - 7.5)$	9 > Score > 7.5	12.0<MEFB<18.4	$9 - \frac{MEFB - 12.0}{18.4 - 12.0} * (9 - 7.5)$	9 > Score > 7.5
MEFB ≥ 28.8	N/A	7.5	MEFB ≥ 18.4	N/A	7.5

Months Expendable Fund Balance (MEFB)					
Low Medium	Formula	Score	High Medium	Formula	Score
MEFB < 1	N/A	0	MEFB < 1	N/A	0
MEFB =1	N/A	1.8	MEFB=1	N/A	1.9
1<MEFB<4.9	$1.8 - \frac{MEFB - 1}{4.9 - 1} * (1.8 - 9)$	1.8 < Score < 9	1<MEFB<4.7	$1.9 - \frac{MEFB - 1}{4.7 - 1} * (1.9 - 9)$	1.9 < Score < 9
4.9<MEFB<11.5	N/A	9	4.7<MEFB<12.6	N/A	9
11.5<MEFB<21.4	$9 - \frac{MEFB - 11.5}{21.4 - 11.5} * (9 - 7.5)$	9 > Score > 7.5	12.6<MEFB<21.2	$9 - \frac{MEFB - 12.6}{21.2 - 12.6} * (9 - 7.5)$	9 > Score > 7.5
MEFB ≥ 21.4	N/A	7.5	MEFB ≥ 21.2	N/A	7.5

Months Expendable Fund Balance (MEFB)					
Large	Formula	Score	Extra Large	Formula	Score
MEFB < 1	N/A	0	MEFB < 1	N/A	0
MEFB =1	N/A	2.2	MEFB=1	N/A	4.8
1<MEFB<4.0	$2.2 - \frac{MEFB - 1}{4.0 - 1} * (2.2 - 9)$	2.2 < Score < 9	1<MEFB<1.9	$4.8 - \frac{MEFB - 1}{1.9 - 1} * (4.8 - 9)$	4.8 < Score < 9
4.0<MEFB<10.3	N/A	9	1.9<MEFB<7.8	N/A	9
10.3<MEFB<18.5	$9 - \frac{MEFB - 10.3}{18.5 - 10.3} * (9 - 7.5)$	9 > Score > 7.5	7.8<MEFB<9.8	$9 - \frac{MEFB - 7.8}{9.8 - 7.8} * (9 - 7.5)$	9 > Score > 7.5
MEFB ≥ 18.5	N/A	7.5	MEFB ≥ 9.8	N/A	7.5

A PHA with a Months Expendable Fund Balance value of less than one will receive zero points for this component. For a Months Expendable Fund Balance ratio of 1 or greater, a PHA will receive points that are determined by the distribution of data by size category.

Quick References: FDS Line Item Description for Months Expendable Fund Balance Component

Line	Numerator - Available Current Resources
111	Cash - unrestricted
114	Cash - tenant security deposits
115	Cash - restricted for payment of current liability
120	Total receivables, net of allowances for doubtful accounts
131	Investments - unrestricted
135	Investments - restricted for payment of current liability



Line	Numerator - Available Current Resources
142	Prepaid expenses and other assets
310	Total current liabilities
343	Current portion of long-term debt - capital projects
347	Interprogram due to
352	Long-term debt, net of current - operating borrowings

Line	Denominator - Total Operating and Other Expenses
969	Total operating expenses
971	Extraordinary maintenance
972	Casualty losses - non-capitalized
977	Debt principal payment - governmental funds
978	Dwelling units rent expense
1102	Debt principal payments - enterprise funds
1105	Changes in compensated absence liability (in the GLTDAG)
1106	Changes in contingent liability balance (in the GLTDAG)
1107	Changes in unrecognized pension transition liability (in the GLTDAG)
1108	Changes in special term/severance benefits liability (in the GLTDAG)
1109	Changes in allowance for doubtful accounts - dwelling rents
1110	Changes in allowance for doubtful accounts - other

3) *Tenant Receivable Outstanding*

Area of Measurement: Tenant receivable outstanding measures rent collectibility. The purpose of this indicator is to calculate the average number of days it takes a PHA to collect its tenant accounts receivable.

This indicator divides the gross tenant accounts receivable, including receivables for rent, maintenance charges, excess utility charges and other adjustments, by the average daily rental income. The average daily rental income is the revenue shown on the rent roll plus revenue for excess utilities and other tenant charges, divided by the number of days in the reporting period. The allowance for doubtful accounts is excluded from the gross tenant accounts receivable calculation.

PHAs utilizing the governmental fund model directly reduce their tenant revenue by the allowance for doubtful accounts. Therefore, the change in the balance of the allowance account will be considered when determining the net tenant revenue for financial indicator ratios (i.e., increase the revenue for bad debts recognized during the current year). The maximum point value for this component is 4.5 points.

Calculation: The calculation methodology and the detail FDS line items included in the calculation are as follows:

$$\text{Calculation Methodology} = \frac{\text{Tenant Accounts Receivables}}{\text{Average Daily Rental Income}}$$



$$\text{Detail Line Item Calculation} = \frac{126}{(705+1109+1110)/\text{reporting period} - \text{days}}$$

Translating the Component Value into Scores: Under the TRO component, the PHA is also evaluated and assigned a score based on its financial performance relative to its peers, hence the scoring thresholds are estimated by examining the distributions of component values by peer groups. The current size and peer groupings are listed in Section VI. 1. Current Ratio Component.

The tables below contain the component values and the corresponding score calculations derived from the thresholds. For example, an Extra Large size PHA with a TRO of 11 will receive 4.5 points. If this Extra Large PHA has a component value of 19.85, the PHA will receive a score of 4.05 points (the formula is $4.5 - [((\text{Component value} - 13)/(81-13)) * (4.5 - 0)]$). If this Extra Large PHA has a component value of 85, the PHA will receive zero points. (The formula represents the equation equivalent to the scoring model published in the scoring notices.)

Tenants Receivable Outstanding (TRO)					
Very Small	Formula	Score	Small	Formula	Score
TRO ≤ 1	N/A	4.5	TRO ≤ 2	N/A	4.5
1 < TRO < 37	$4.5 - [((\text{TRO}-1)/(37.0-1)) * (4.5-0)]$	4.5 > Score > 0	2 < TRO < 26	$4.5 - [((\text{TRO}-2)/(26.0-2)) * (4.5-0)]$	4.5 > Score > 0
TRO ≥ 37	N/A	0	TRO ≥ 26	N/A	0

Tenants Receivable Outstanding (TRO)					
Low Medium	Formula	Score	High Medium	Formula	Score
TRO ≤ 4	N/A	4.5	TRO ≤ 5	N/A	4.5
4 < TRO < 31	$4.5 - [((\text{TRO}-4)/(31.0-4)) * (4.5-0)]$	4.5 > Score > 0	5 < TRO < 29	$4.5 - [((\text{TRO}-5)/(29.0-5)) * (4.5-0)]$	4.5 > Score > 0
TRO ≥ 31	N/A	0	TRO ≥ 29	N/A	0

Tenants Receivable Outstanding (TRO)					
Large	Formula	Score	Extra Large	Formula	Score
TRO ≤ 7	N/A	4.5	TRO ≤ 13	N/A	4.5
7 < TRO < 33	$4.5 - [((\text{TRO}-7)/(33.0-7)) * (4.5-0)]$	4.5 > Score > 0	13 < TRO < 81	$4.5 - [((\text{TRO}-13)/(81.0-13)) * (4.5-0)]$	4.5 > Score > 0
TRO ≥ 33	N/A	0	TRO ≥ 81	N/A	0

Quick References: FDS Line Item Description for Tenant Receivables Outstanding Component

Line	Numerator - Total Tenant Accounts Receivable
126	Accounts receivable - tenants - dwelling units

Line	Denominator - Total Daily Tenant Revenue
705	Total tenant revenue
1109	Changes in allowance for doubtful accounts - dwelling rents
1110	Changes in allowance for doubtful accounts – other



4) **Occupancy Loss**

Area of Measurement: Occupancy Loss (OL) measures the maximization of rental revenue. It measures the extent to which the PHA is not realizing potential rental income due to unoccupied units or units taken off-line under the low rent program, or other state and local programs.

This component compares unit months available to the unit months leased. The unit months available is the total number of units managed by a PHA under all programs (HUD, state, or other funds) multiplied by 12, with the exception of unit months vacant due to:

- Demolition,
- Conversion,
- On-going modernization, and
- Units approved for non-dwelling purposes.

The unit months leased is the actual number of months each unit was rented during the fiscal year as calculated from the PHA's tenant rent rolls or Housing Assistance Payments records.

The ability of management to keep units in service and occupied can be estimated based on this calculation. If the occupancy loss ratio is high, and operating expenses per unit are low, the PHA may not be managing or maintaining the housing units in a manner that encourages or optimizes occupancy. The maximum point value for this component is **4.5** points.

Calculation: The calculation methodology and the detail FDS line items included in the calculation are as follows:

$$\text{Calculation Methodology} = 1 - \frac{\text{Unit Months Leased}}{\text{Unit Months Available}}$$

$$\text{Detail Line Item Calculation} = \left(1 - \frac{1121}{1120}\right) * 100$$

Translating the Component Value into Scores: Under the OL component, the PHA is also evaluated and assigned a score based on its financial performance relative to its peers, hence the scoring thresholds are estimated by examining the distributions of component values by peer groups. The current size and peer groupings are listed in Section VI. 1. Current Ratio Component.

The tables below contain the component values and the corresponding score calculations derived from the thresholds. For example, a Large size PHA with an OL of 5% will receive 4.5 points. If this Large PHA has a component value of 7.18%, the PHA will receive a score of 4.12 points (the formula is $4.5 - \frac{((\text{Component value} - 6) / (20 - 6)) * (4.5 - 0)}$). If this Large PHA has a component value of 22%, the PHA will receive zero points. (The formula represents the equation equivalent to the scoring model published in the scoring notices.)



Occupancy Loss (OL)					
Very Small	Formula	Score	Small	Formula	Score
OL ≤ 1%	N/A	4.5	OL ≤ 3%	N/A	4.5
1 < OL < 18%	$4.5 - [((OL-1)/(18-1)) * (4.5-0)]$	4.5 > Score > 0	3% < OL < 21%	$4.5 - [((OL-3)/(21-3)) * (4.5-0)]$	4.5 > Score > 0
OL ≥ 18%	N/A	0	OL > 21%	N/A	0

Occupancy Loss (OL)					
Low Medium	Formula	Score	High Medium	Formula	Score
OL ≤ 5%	N/A	4.5	OL ≤ 5%	N/A	4.5
5% < OL < 21%	$4.5 - [((OL-5)/(21-5)) * (4.5-0)]$	4.5 > Score > 0	5% < OL < 21%	$4.5 - [((OL-5)/(21-5)) * (4.5-0)]$	4.5 > Score > 0
OL > 21%	N/A	0	OL ≥ 21%	N/A	0

Occupancy Loss (OL)					
Large	Formula	Score	Extra Large	Formula	Score
OL ≤ 6%	N/A	4.5	OL ≤ 7%	N/A	4.5
6% < OL < 20%	$4.5 - [((OL-6)/(20-6)) * (4.5-0)]$	4.5 > Score > 0	7% < OL < 22%	$4.5 - [((OL-7)/(22-7)) * (4.5-0)]$	4.5 > Score > 0
OL > 20%	N/A	0	OL > 22%	N/A	0

Quick References: FDS Line Item Description for Occupancy Loss Component

Line	Numerator - Unit Months Leased
1121	Number of unit months leased

Line	Denominator - Unit Months Available
1120	Unit months available

5) Expense Management/Utility Consumption

Area of Measurement: Expense Management/Utility Consumption measures the PHA’s ability to manage key areas of its annual expenditures at a level relative to its peers, adjusted for size and geographic location. This component compares summary expenditures to unit months leased for the fiscal year for the Low-Rent Public Housing Program only (CFDA #14.850a). Total routine expenses measured include the following six expense categories: administrative, tenant services, utilities, ordinary maintenance and operation, protective services, and general expenses. This component enables PHA management to determine if the per unit cost is reasonable or if unnecessary operating expenditures should be reduced and/or further analyzed. The maximum point value for this component is **1.5** points.

Calculation: The calculation methodology and the detail FDS line items included in the calculation are as follows:

$$\text{Calculation Methodology} = \frac{\text{Sum of Weighted Expenses (Low Rent Only)}}{\text{Unit Months Leased (Low Rent Only)}}$$



$$\begin{aligned} \text{Detail Line Item Calculation} = & (.34 * [911+912+913+914+915+916+1105+1107+1108] + \\ & .10 * [921+922+923+924] + \\ & .03 * [931+932+933+934+935+937+938] + \\ & .10 * [941+942+943+945+971] + \\ & .10 * [951+952+953+955] + \\ & .33 * [961+962+963+964+965+966+967+968+975+977+978+ \\ & 1102+1106+1109+1110]) / 1121 \end{aligned}$$

Translating the Component Value into Scores: Under the Expense Management/Utility Consumption component, the PHA is evaluated and assigned a score based on its financial performance relative to its peers adjusted for size and geographic location (region) the PHA resides in. The current size peer groupings are listed in Section VI. 1. Current Ratio Component. The regional peer groupings are based on the first number of the PHA’s zip code, and are divided as follows:

Region	State
0	CT, MA, ME, NH, NJ, RI, VT
1	DE, NY, PA
2	DC, MD, NC, SC, VA, WV
3	AL, FL, GA, MS, TN, RQ, VQ
4	IN, KY, MI, OH
5	IA, MN, MT, ND, SD, WI
6	IL, KS, MO, NE
7	AR, LA, OK, TX
8	AZ, CO, ID, NM, NV, UT, WY
9	AK, CA, HI, OR, WA, GQ

There are six expense categories that comprise the Expense Management/Utility Consumption component. A PHA’s per unit, per month expense amount in each category is multiplied by the weights listed below, and summed to produce a weighted average. This summed number is compared to the threshold for that PHA’s size and regional peer group. If the PHA’s weighted average expense amount falls below the threshold, it receives 1.5 points, otherwise the PHA receives zero points. The weights for the categories are as follows:

Expenses	Percent Weight
Administrative Expense	34%
General Expense	33%
Tenant Service Expense	10%
Protective Service Expense	10%
Maintenance Expense	10%
Utilities Expense	3%
Total	100%



The thresholds based on PHAs' size and regional peer grouping are as follows:

Region	Extra Large	Large	High Med.	Low Med.	Small	Very Small
0	\$ 107.26	\$ 107.26	\$ 77.82	\$ 77.82	\$ 103.30	\$ 103.30
1	\$ 83.68	\$ 83.68	\$ 85.85	\$ 85.85	\$ 83.27	\$ 83.27
2	\$ 71.45	\$ 71.45	\$ 65.68	\$ 65.68	\$ 68.36	\$ 68.36
3	\$ 67.57	\$ 67.57	\$ 53.79	\$ 53.79	\$ 57.94	\$ 57.94
4	\$ 95.24	\$ 95.24	\$ 72.93	\$ 72.93	\$ 60.29	\$ 60.29
5	\$ 86.65	\$ 86.65	\$ 64.00	\$ 64.00	\$ 55.13	\$ 55.13
6	\$ 82.95	\$ 82.95	\$ 63.60	\$ 63.60	\$ 53.65	\$ 53.65
7	\$ 62.65	\$ 62.65	\$ 52.51	\$ 52.51	\$ 51.91	\$ 51.91
8	\$ 78.67	\$ 78.67	\$ 72.74	\$ 72.74	\$ 59.00	\$ 59.00
9	\$ 99.45	\$ 99.45	\$ 89.04	\$ 89.04	\$ 77.48	\$ 77.48

The table below is an example of the Expense Management component value and score calculation. The following PHA is in the Extra Large size category geographically located in region 0 and has the following expense per unit by the six expense categories:

Expense	Amount	Weighted Average
Administrative Expense	\$115	.34 * \$115 = \$39.10
General Expense	\$105	.33 * \$105 = \$34.65
Tenant Services	\$15	.10 * \$15 = \$1.50
Protective Service Expense	\$20	.10 * \$20 = \$2.00
Maintenance Expense	\$45	.10 * \$45 = \$4.50
Utilities Expense	\$150	.03 * \$150 = \$4.50
TOTAL Weighted Average Expense		\$86.25

The threshold for an Extra Large PHA in Region 0 is \$107.26. Because the PHA has a weighted average expense total of \$86.25 per unit, that is less than the applicable threshold, the PHA receives the full 1.5 points.

Quick References: FDS Line Item Description for Expense Management Component

Administrative Expense (34 percent of total)

Line	Numerator - Administrative
911	Administrative salaries
912	Auditing fees
913	Outside management fees
914	Compensated absences
915	Employee benefit contributions - administrative
916	Other operating - administrative
1105	Changes in compensated absence liability (in the GLTDAG)
1107	Changes in unrecognized pension transition liability (in the GLTDAG)
1108	Changes in special term/severance benefits liability (in the GLTDAG)

**Tenant Services Expense (10 percent of total)**

Line	Numerator - Tenant Services
921	Tenant services - salaries
922	Relocation costs
923	Employee benefit contributions - tenant services
924	Tenant services – other

Utilities Expense (03 percent of total)

Line	Numerator – Utilities
931	Water
932	Electricity
933	Gas
934	Fuel
935	Labor
937	Employee benefit contributions - utilities
938	Other utilities expense

Ordinary Maintenance Expense (10 percent of total)

Line	Numerator - Ordinary Maintenance
941	Ordinary maintenance and operations - labor
942	Ordinary maintenance and operations - materials & other
943	Ordinary maintenance and operations - contract costs
945	Employee benefit contributions - ordinary maintenance
971	Extraordinary maintenance

Protective Services Expense (10 percent of total)

Line	Numerator - Protective Services
951	Protective services - labor
952	Protective services - other contract costs
953	Protective services - other
955	Employee benefit contributions - protective services

General Expenses (33 percent of total)

Line	Numerator – General Expenses
961	Insurance premiums
962	Other general expenses
963	Payments in lieu of taxes
964	Bad debt - tenant rents
965	Bad debt - mortgages
966	Bad debt - other
967	Interest expense
968	Severance expense
975	Fraud losses
977	Debt principal payment - governmental funds
978	Dwelling units rent expense
1102	Debt principal payments - enterprise funds
1106	Changes in contingent liability balance (in the GLTDAG)
1109	Changes in allowance for doubtful accounts - dwelling rents



Line	Numerator – General Expenses
1110	Changes in allowance for doubtful accounts - other

Line	Denominator - Total Units Month Leased
1121	Number of Unit Months Leased

6) *Net Income or Loss*

Area of Measurement: Net income (loss) measures how the results of the year’s current operations have affected the PHA’s viability.

This component compares the PHA’s adjusted net income (loss) to the net available (unrestricted) current resources (the EFB). It indicates whether the PHA is adequately managing its income and expenses to maintain a balanced budget. A PHA which has excessive net losses will be unable to sustain operations if income is not maximized and expenses are not more efficiently and effectively controlled.

PHAs utilizing the governmental fund model do not record certain items as operating expenses. Therefore, the change in the associated liability accounts must be considered when calculating total net income. FDS lines 1109 and 1110, however, need not be considered since the bad debt expense recognized by PHAs utilizing the enterprise fund model approximately adjusts net income in the same manner that the allowance reduces gross income for PHAs utilizing the governmental fund model. However, all liabilities associated with operating borrowings, whether current or long-term, are recognized as current liabilities and considered for the NI ratio computation. The maximum point value for this component is 1.5 points.

Calculation: The calculation methodology and the detail FDS line items included in the calculation are as follows:

$$\text{Calculation Methodology} = \frac{\text{Net Income or Loss}}{\text{Expendable Fund Balance}}$$

$$\text{Detail Line Item Calculation} = \frac{(970-706.1-971-972-973-975-976-978-1105-1106-1107-1108)}{(111+114+115+120+131+135+142)-(310-343-347)-352}$$

For the Net Income component, a PHA can receive either 1.5 or zero points. A PHA that has a net income for the year receives the full score. If a PHA reports a net loss for the year that does not exceed 20% of its expendable fund balance, the PHA will also receive the full score. This 20% threshold does not vary by region or size. The scoring methodology of the Net Income component is as follows:



	Negative Reserves (Negative Denominator)	Positive Reserves (Positive Denominator)
Net Income (Positive Numerator)	I. Score = 1.5 Points	II. Score = 1.5 Points
Net Loss (Negative Numerator)	III. Score = 0.0 Points	IV. Net Loss/Reserve > 20% = 0.0 Points Net Loss/Reserve ≤ 20% = 1.5 Points

Quick References: FDS Line Item Description for Net Income Component

Line	Numerator - Adjusted Net Income (Loss)
970	Excess operating revenue over operating expenses
706.1	Capital grants
971	Extraordinary maintenance
972	Casualty losses - non-capitalized
973	Housing assistance payments
975	Fraud losses
976	Capital outlays - governmental funds
978	Dwelling units rent expense
1105	Changes in compensated absence liability (in the GLTDAG)
1106	Changes in contingent liability balance (in the GLTDAG)
1107	Changes in unrecognized pension transition liability (in the GLTDAG)
1108	Changes in special term/severance benefits liability (in the GLTDAG)

Line	Denominator - Available Current Resources
111	Cash -unrestricted
114	Cash - tenant security deposits
115	Cash - restricted for payment of current liability
120	Total receivables, net of allowances for doubtful accounts
131	Investments – unrestricted
135	Investments - restricted for payment of current liability
142	Prepaid expenses and other assets
310	Total current liabilities
343	Current portion of long-term debt - capital projects
347	Interprogram due to
352	Long-term debt, net of current - operating borrowings



VII. SUMMARY FASS COMPONENT FORMULA AND CALCULATIONS

1) Current Ratio Component Calculation:

Calculation Methodology = $\frac{\text{Cash} + \text{Cash Equivalents} + \text{Current Receivables}}{\text{Current Liabilities}}$

Detail Line Item Calculation = $\frac{(111+114+115+120+131+135+142)}{(310-347)}$

2) Months Expendable Fund Balance Component Calculation:

Calculation Methodology = $\frac{\text{Expendable Fund Balance}}{\text{Average Monthly Operating and Other Expenses}}$

Detail Line Item Calculation = $\frac{(111+114+115+120+131+135+142)-(310-343-347)-352}{(969+971+972+977+978+1102+1105+1106+1107+1108+1109+1110)/\text{reporting period-months}}$

3) Tenant Receivable Outstanding Component Calculation:

Calculation Methodology = $\frac{\text{Tenant Accounts Receivables}}{\text{Average Daily Rental Income}}$

Detail Line Item Calculation = $\frac{126}{(705+1109+1110)/\text{reporting period-days}}$

4) Occupancy Loss Component Calculation:

Calculation Methodology = $1 - \frac{\text{Unit Months Leased}}{\text{Unit Months Available}}$

Detail Line Item Calculation = $(1 - \frac{1121}{1120}) * 100$

5) Expense Management/Utility Consumption Component Calculation:

Calculation Methodology = $\frac{\text{Sum of Weighted Expenses (Low Rent Only)}}{\text{Unit Months Leased (Low Rent Only)}}$

Detail Line Item Calculation = $(.34*[911+912+913+914+915+916+1105+1107+1108] + .10*[921+922+923+924] + .03*[931+932+933+934+935+937+938] + .10*[941+942+943+945+971] + .10*[951+952+953+955] + .33*[961+962+963+964+965+966+967+968+975+977+978+1102+1106+1109+1110])/1121$

6.) Net Income Component Calculation:

Calculation Methodology = $\frac{\text{Net Income or Loss}}{\text{Expendable Fund Balance}}$

Detail Line Item Calculation = $\frac{(970-706.1-971-972-973-975-976-978-1105-1106-1107-1108)}{(111+114+115+120+131+135+142)-(310-343-347)-352}$