Treasury Analysis and Liquidity Status Report

Prepared for: Finance and Administration Committee - Period Ending June 30, 2024

Public Employees' Retirement Fund (PERF)

The PERF provides retirement benefits to the State of California, schools and other California public agency employees. The PERF benefits are funded by member contributions, employer contributions, and by investment earnings. Changes in investment asset allocation and investment strategies can significantly impact data reported from period to period.

Liquidity Coverage Ratio Analysis

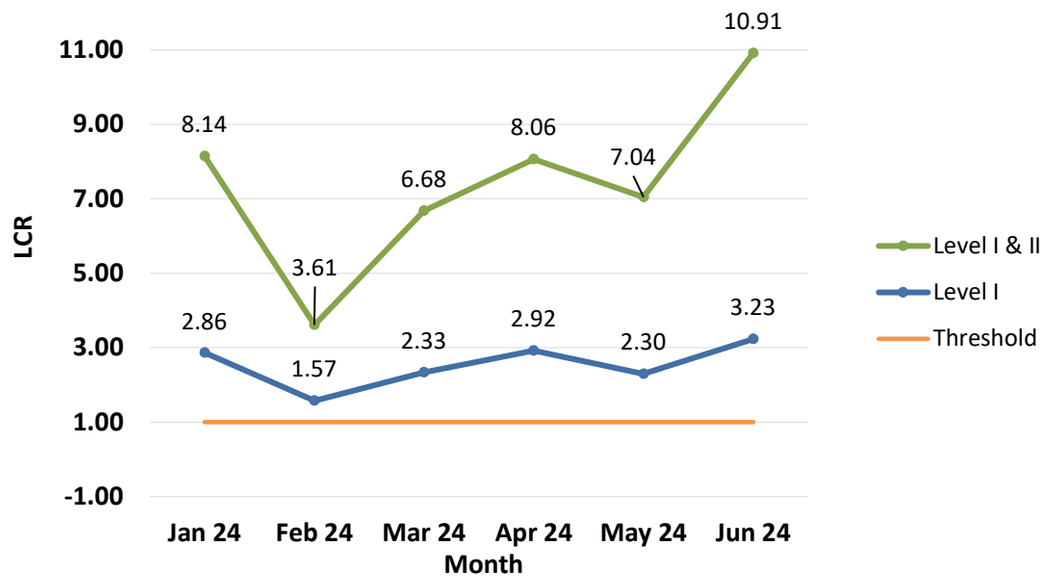
$$\text{Liquidity Coverage Ratios (LCR)} = \frac{\text{cash + assets convertible to cash + incoming cash sources}}{\text{outgoing cash uses + contingent cash uses}}$$

Funding Sources and Graph Details

Level I: Cash & cash equivalents (assets maturing less than 30-days)
Level II: Cash equivalents maturing greater than 30-days + borrowed liquidity held in cash
Level III: Sale of public assets
Threshold: Indicates the Fund's ability to cover 100% of monthly obligations.

Stress Environment - 30-Day Liquidity Coverage Ratios

The 30-day LCR included investment and non-investment available cash flows.

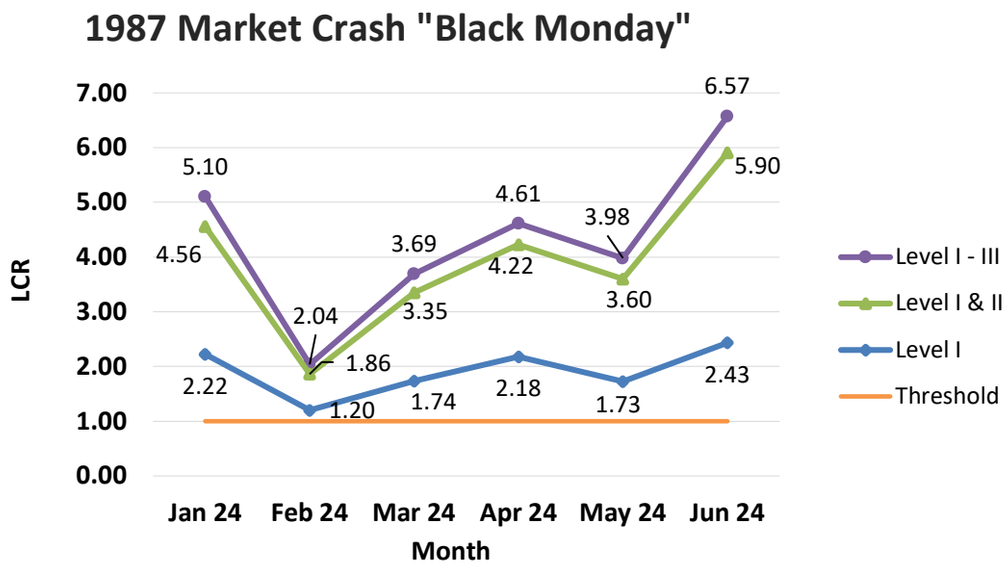


Level I: Level I LCRs remained above the threshold in January through June.

Level I & II: Since Level I LCRs remained above the threshold, it was not necessary to utilize Level II assets. Fluctuations in Level II assets are due to normal volatility of security lending balances.

Crisis Environments - 5 Day and 30 Day Liqudity Coverage Ratios

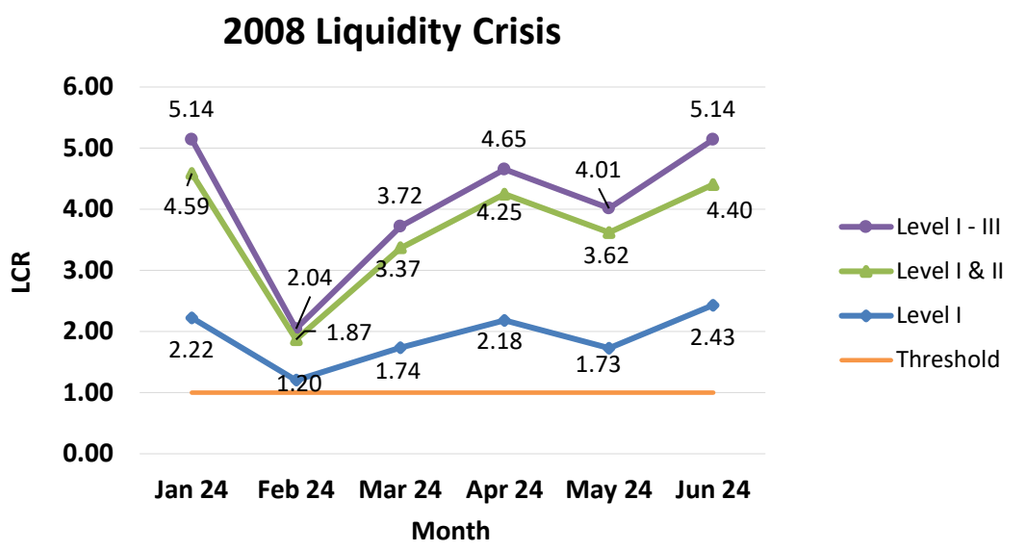
Crisis environment LCR scenarios were modeled by applying stress percentages equivalent to those observed during the 1987 market crash over 5 days and the September 2008 financial crisis over 30 days. Starting assets were further reduced by a transactional liquidity % equal to the estimated % of the assets that could have been liquidated during the 5-day and 30-day periods. Under the crises scenarios, asset class sources were reduced to zero and uses were doubled.



Level I: Level I assets would have been adequate had a crisis event similar to "Black Monday" occurred.

Level I & II: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level II assets.

Level I – III: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets.



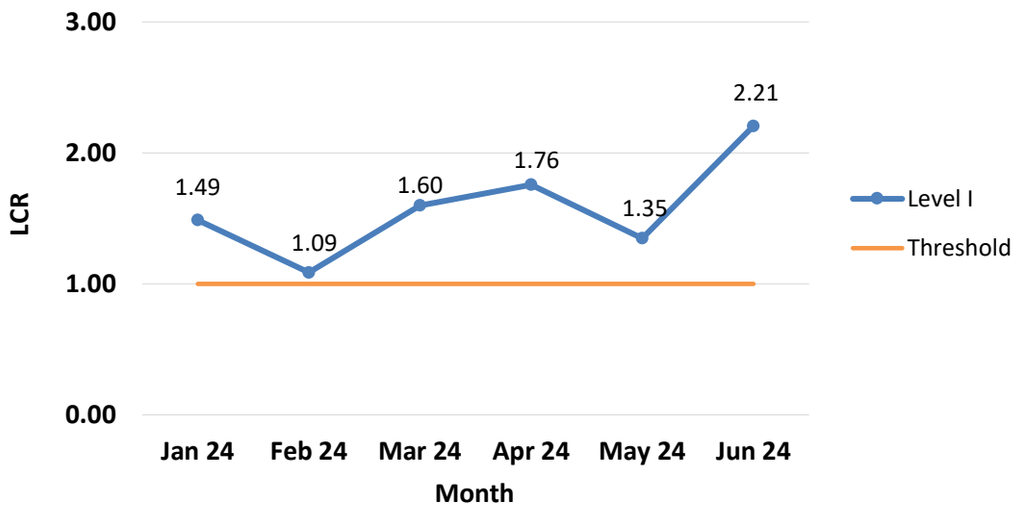
Level I: Level I assets would have been adequate had a crisis event similar to the "2008 Liquidity Crisis" occured.

Level I & II: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level II assets.

Level I – III: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets.

Crisis Environment - 10-Day Liquidity Coverage Ratio

The 10-day LCR utilized only the available cash balance ten days prior to the payment date. The calculation assumed a five business day market lockdown as experienced on September 11th, 2001.



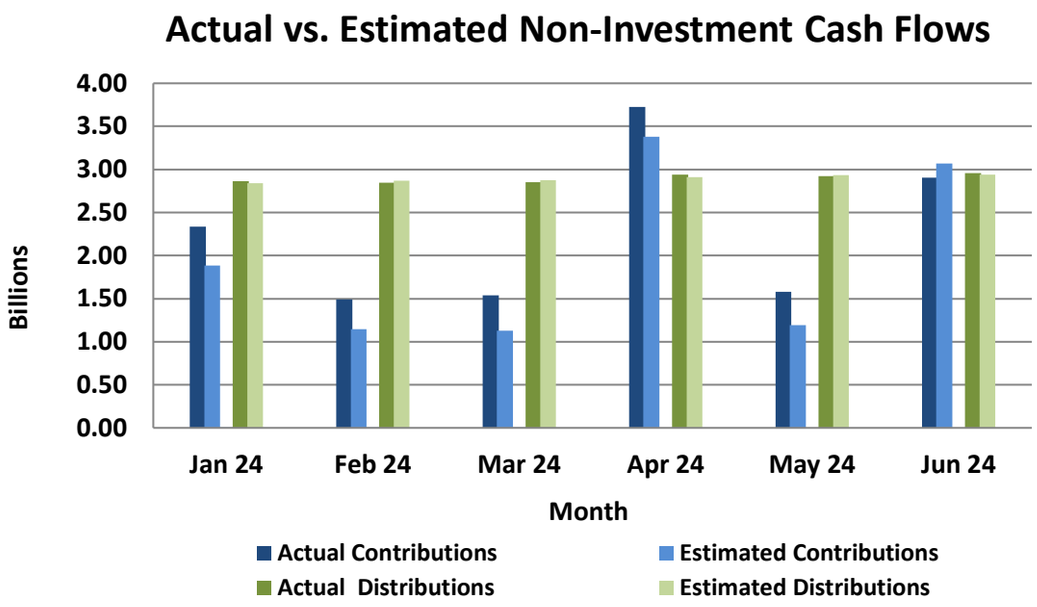
Level I: The PERF had sufficient cash to cover obligations ten days prior to the funding of member benefits from January to June. This indicated Level I assets were adequate had a crisis event occurred. In a crisis environment, CalPERS would not have access to Level II and Level III assets because it is assumed there was a five business day market lockdown similar to September 11, 2001.

Overall PERF Liquidity Health

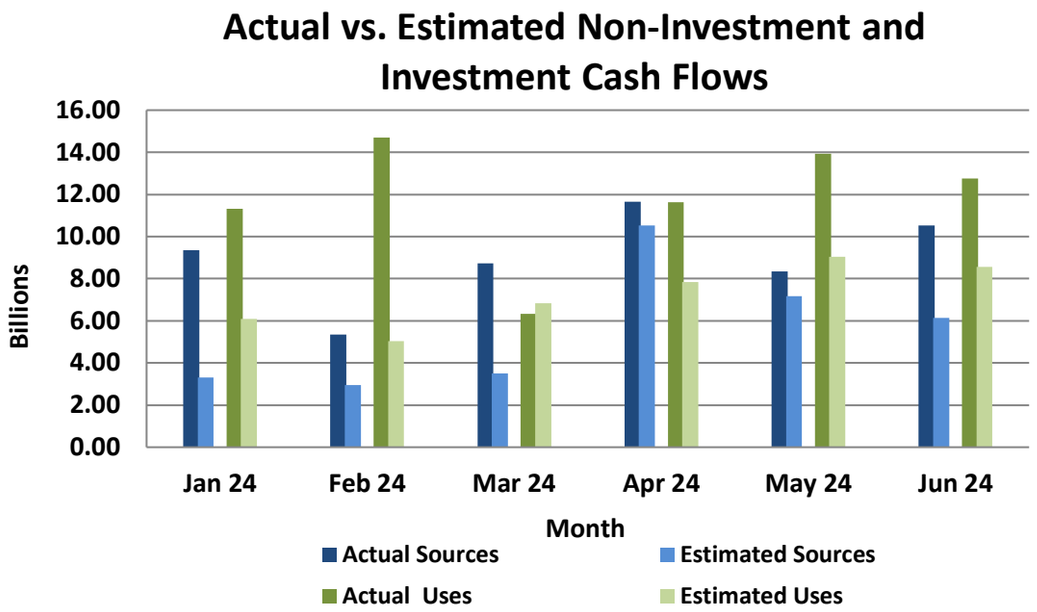
Coverage Ratio Analysis:

- ✓ CalPERS was able to make payments for benefits, operating expenses and projected investments regardless of market conditions.
- ✓ PERF's liquidity remained above the threshold in stress scenarios and was adequate in crisis environments.

PERF Cash Flow Forecasting



Cash flow forecasting for January through June was in the 90th percentile. The increase in PERF's contributions in April was primarily driven by the receipt of the quarterly State Employer contribution. The rise in contributions observed in June was attributed to the timing of both the quarterly State Employer contributions and the Unfunded Accrued Liability contributions.



Cash flow forecasting for total fund cash activities (both non-investment and investment) can be volatile. Actual cash flows will deviate from estimates due to trading, rebalancing, private asset contributions/distributions, and investment expenses.

Treasury Analysis and Liquidity Status Report

Prepared for: Finance and Administration Committee - Period Ending June 30, 2024

Legislators' Retirement Fund (LRF)

The LRF provides retirement benefits to California Legislators elected to office before November 7, 1990, and to constitutional, legislative, and statutory officers elected or appointed prior to January 1, 2013. The Fund is closed to new participants. The number of LRF members has been declining in the last decade as eligible incumbent Legislators leave office and are replaced by those ineligible to participate in the LRF. Actuarially determined contributions will continue to be made by the State of California to supplement the existing assets until all benefit obligations have been fulfilled. The Fund maintains a cash equivalent reserve equal to two months of member benefit payments and obligations.

Liquidity Coverage Ratio Analysis

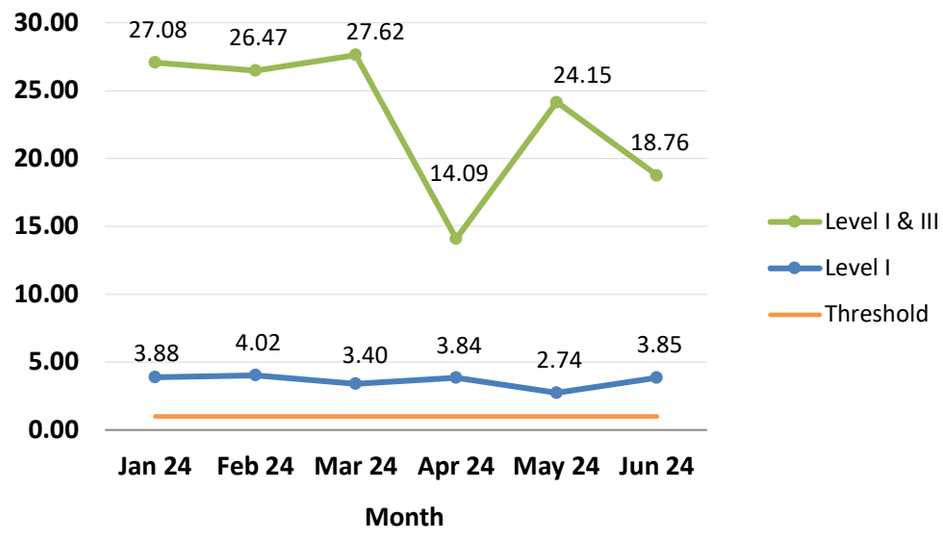
$$\text{Liquidity Coverage Ratios (LCR)} = \frac{\text{cash + assets convertible to cash + incoming cash sources}}{\text{outgoing cash uses + contingent cash uses}}$$

Funding Sources and Graph Details

Level I: Cash and cash equivalents + Reserves
Level III: Sale of public assets
Threshold: Indicates the Fund's ability to cover 100% of monthly obligations

Stress Environment - 30-Day Liquidity Coverage Ratios

The 30-day LCR included investment and non-investment available cash flows.

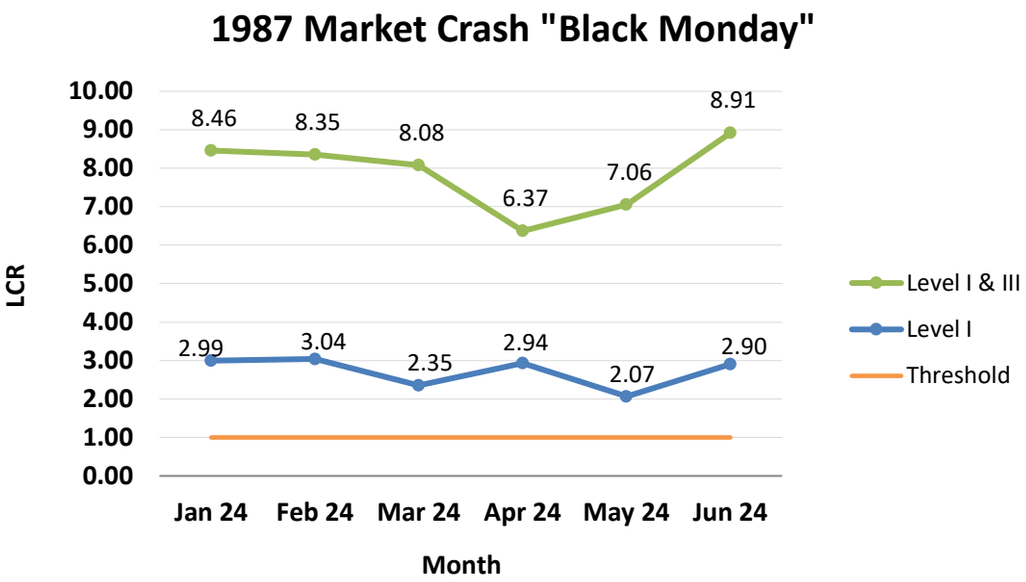


Level I: Level I LCRs remained above the threshold in January through June.

Level I & III: Since Level I LCRs remained above the threshold, it was not necessary to utilize Level III assets.

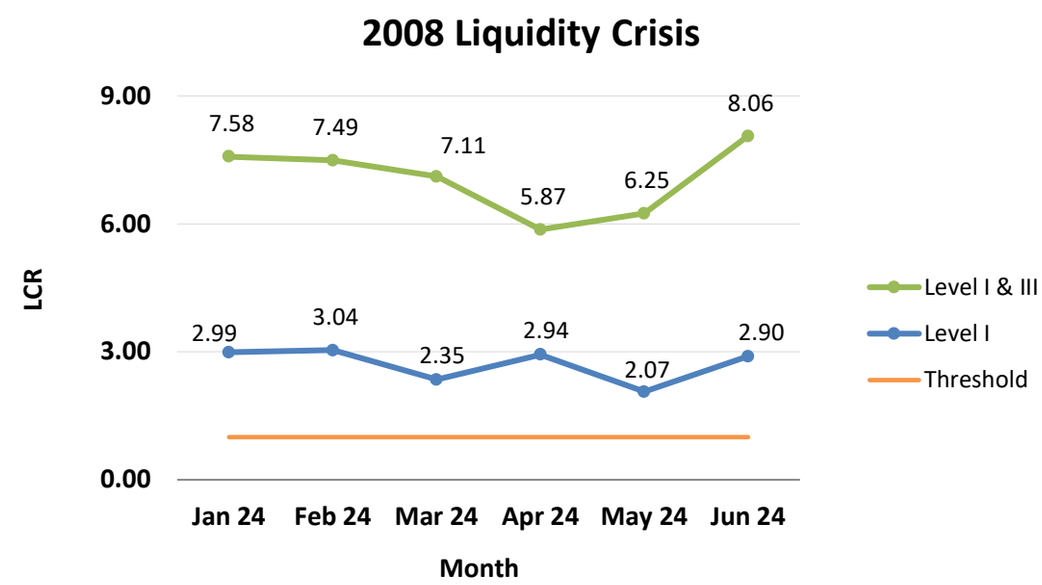
Crisis Environments - 5 Day and 30 Day Liqudity Coverage Ratios

Crisis environment LCR scenarios were modeled by applying stress percentages equivalent to those observed during the 1987 market crash over 5 days and the September 2008 financial crisis over 30 days. Starting assets were further reduced by a transactional liquidity % equal to the estimated % of the assets that could have been liquidated during the 5-day and 30-day periods. Under the crises scenarios, asset class sources were reduced to zero and uses were doubled.



Level I: Level I assets would have been adequate had a crisis event similar to "Black Monday" occurred.

Level I & III: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets.

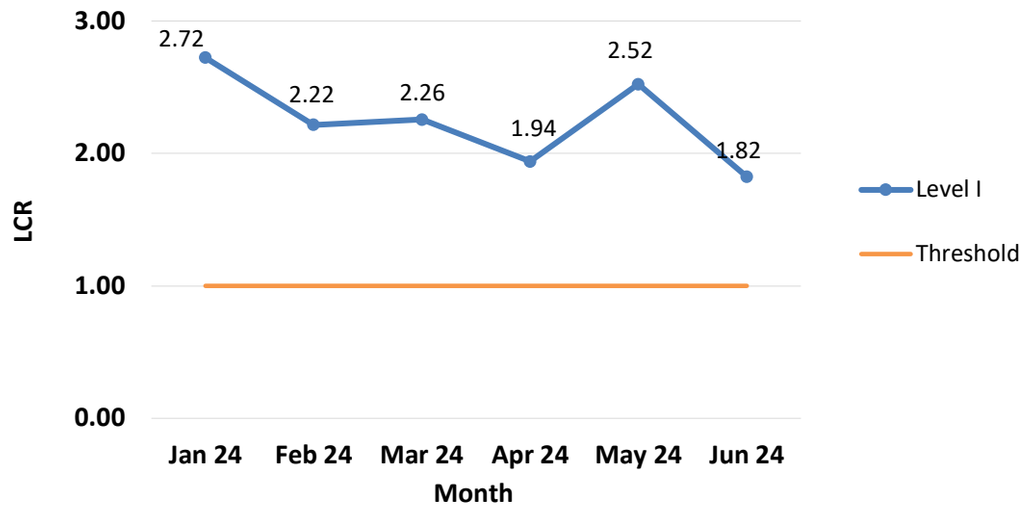


Level I: Level I assets would have been adequate had a crisis event similar to the "2008 Liquidity Crisis" occurred.

Level I & III: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets.

Crisis Environment - 10-Day Liquidity Coverage Ratios

The 10-day LCRs utilized only the available cash balance ten days prior to the payment date. The calculation assumed a five business day market lockdown as experienced on September 11th, 2001.



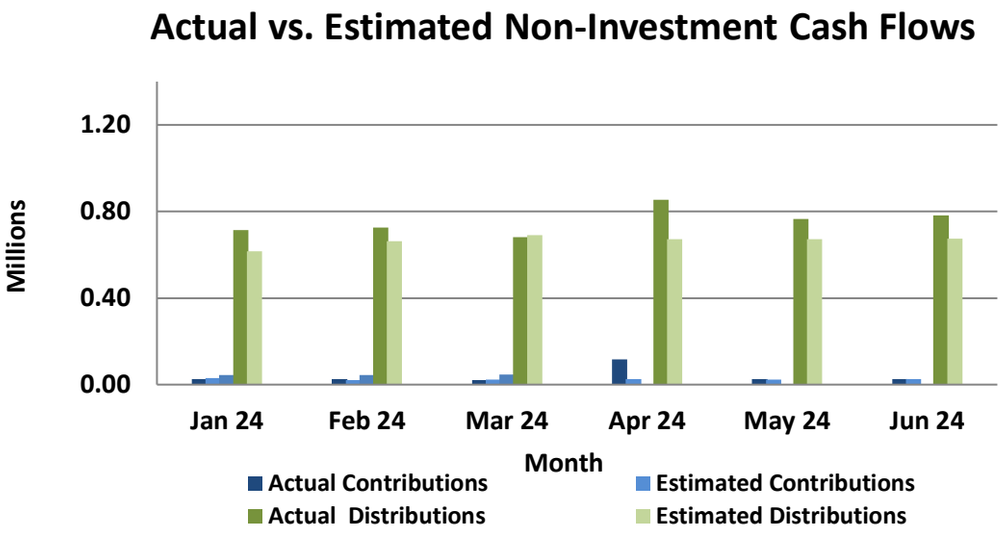
Level I: The LRF had sufficient cash to cover obligations ten days prior to the payment date. This indicated Level I would have been adequate had a crisis event occurred. In a crisis environment, CalPERS would not have access to Level III assets since it is assumed there was a five business day market lockdown similar to September 11, 2001.

Overall LRF Liquidity Health

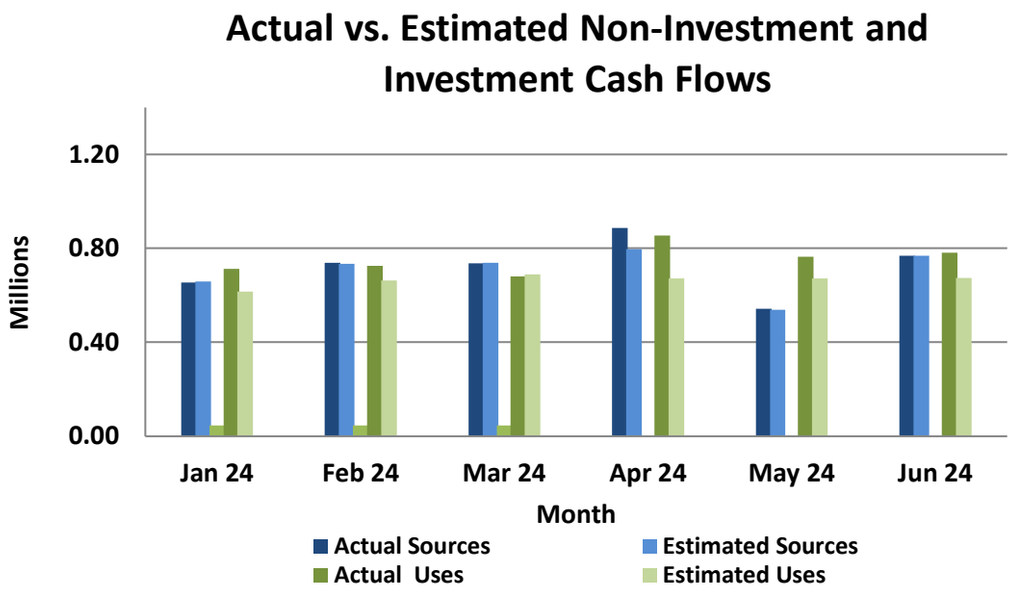
Coverage Ratio Analysis:

- ✓ LRF was able to make payments for benefits and operating expenses regardless of market conditions.
- ✓ LRF's liquidity remained above the threshold regardless of market conditions.

LRF Cash Flow Forecasting



Cash flow forecasting for January through June was in the 90th percentile.



Cash flow forecasting for total fund cash activities (both non-investment and investment) was in the 90th percentile.

Treasury Analysis and Liquidity Status Report

Prepared for: Finance and Administration Committee - Period Ending June 30, 2024

Judges' Retirement Fund I (JRF I)

The JRF I provides retirement benefits to California Supreme and Appellate Court Justices and Superior Court Judges appointed or elected before November 9, 1994. The State of California does not pre-fund the benefits for this fund. The benefits are funded on a pay-as-you-go basis. The Fund maintains a reserve equal to two months of member benefit payments and obligations.

Liquidity Coverage Ratio Analysis

$$\text{Liquidity Coverage Ratios (LCR)} = \frac{\text{cash + assets convertible to cash + incoming cash sources}}{\text{outgoing cash uses + contingent cash uses}}$$

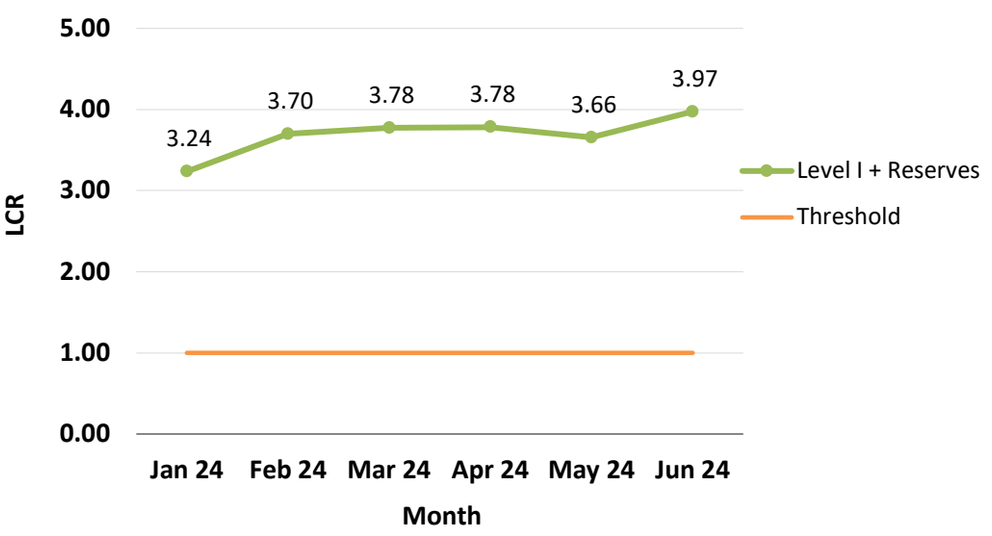
Funding Sources and Graph Details

Level I: Cash and cash equivalents + Reserves

Threshold: Indicates the Fund's ability to cover 100% of monthly obligations

Stress Environment - 30-Day Liquidity Coverage Ratios

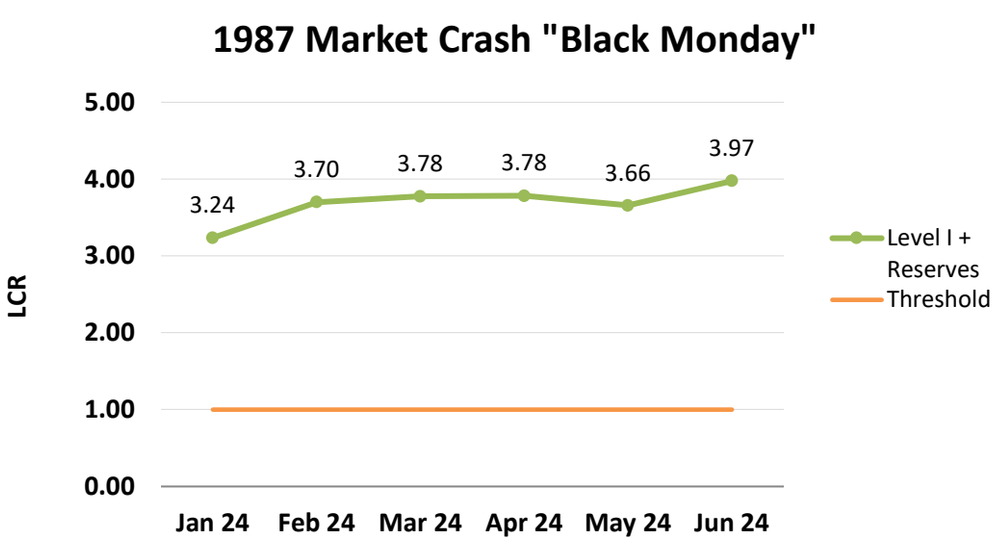
The 30-day LCR included investment and non-investment available cash flows.



Level I & Reserves: Level I + Reserves LCRs remained above the threshold in January through June. Fluctuations in Level I assets are typically due to Extended Service Incentive Program payments.

Crisis Environments - 5 Day and 30 Day Liqudity Coverage Ratios

Crisis environment LCR scenarios were modeled by applying stress percentages equivalent to those observed during the 1987 market crash over 5 days and the September 2008 financial crisis over 30 days. Starting assets were further reduced by a transactional liquidity % equal to the estimated % of the assets that could have been liquidated during the 5-day and 30-day periods. Under the crises scenarios, asset class sources were reduced to zero and uses were doubled.



Level I & Reserves: Level I & Reserve assets would have been adequate had a crisis event similar to "Black Monday" occurred.

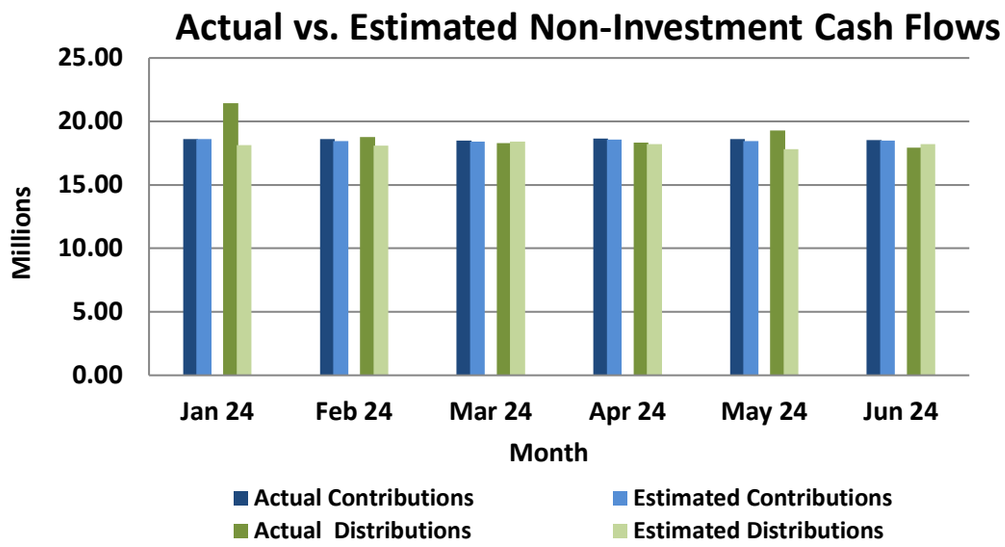
Level I & Reserves: Level I & Reserve asset would have been adequate had a crisis event similar to the "2008 Liquidity Crisis" occurred.

Overall JRF I Liquidity Health

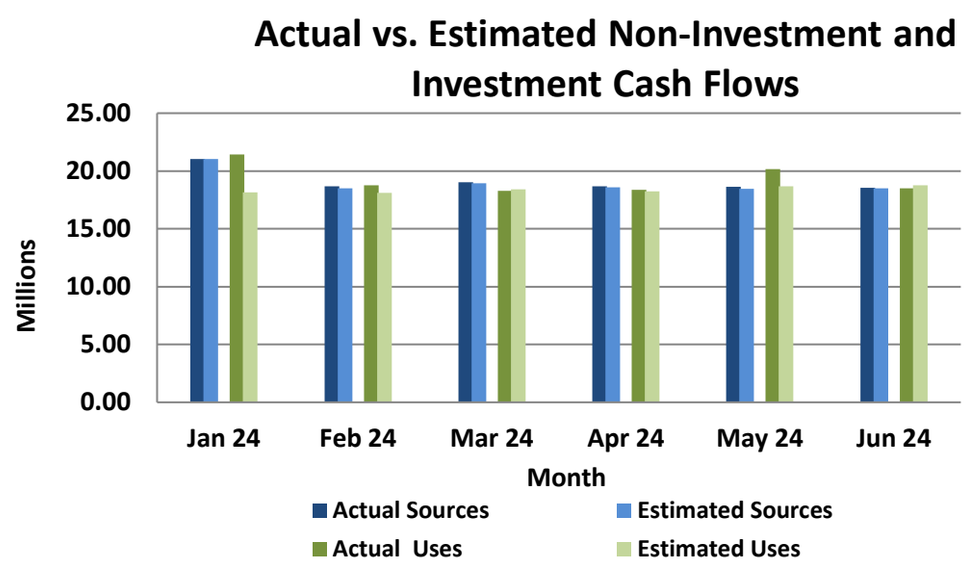
Based Coverage Ratio Analysis:

- ✓ JRF I was able to make payments for benefits and operating expenses regardless of market conditions.
- ✓ JRF I's liquidity remained above the threshold in stress scenarios and was adequate in both crisis environments.

JRF I Cash Flow Forecasting



Cash flow forecasting accuracy for January through June was in the 90th percentile.



Cash flow forecasting for total fund cash activities (both non-investment and investment) was in the 90th percentile.

Treasury Analysis and Liquidity Status Report

Prepared for: Finance and Administration Committee - Period Ending June 30, 2024

Judges' Retirement Fund II (JRF II)

The JRF II provides retirement benefits to California Supreme and Appellate Court Justices and Superior Court Judges first appointed or elected on or after November 9, 1994. This system provides a unique combination of two basic types of retirement benefits: a defined benefit plan and a monetary credit plan. The benefit payment is comprised of member contributions and a portion of employer contributions, plus interest. Monetary Credits provide a lump sum payment to those Judges who leave the bench before reaching eligibility for the defined benefit plan.

Liquidity Coverage Ratio Analysis

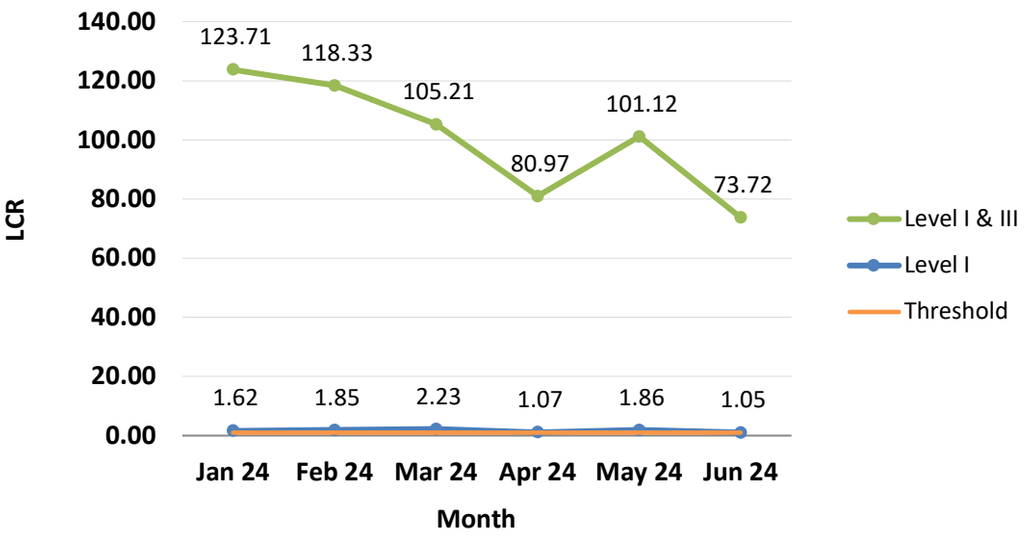
$$\text{Liquidity Coverage Ratios (LCR)} = \frac{\text{cash + assets convertible to cash + incoming cash sources}}{\text{outgoing cash uses + contingent cash uses}}$$

Funding Sources

Level I: Cash and cash equivalents
Level III: Sale of public assets
Threshold: Indicates the Fund's ability to cover 100% of monthly obligations

Stress Environment - 30-Day Liquidity Coverage Ratios

The 30-day LCR included investment and non-investment available cash flows.

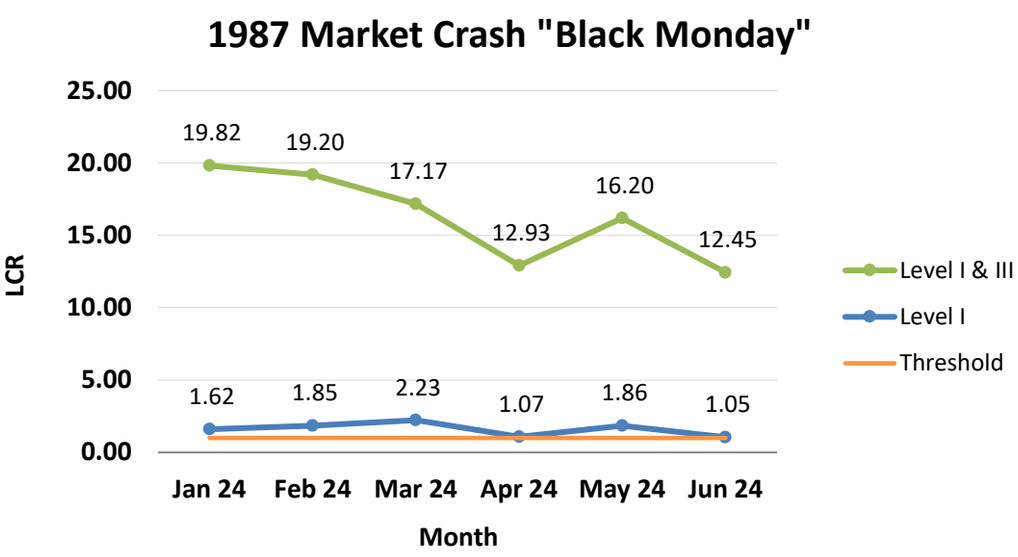


Level I: Level I LCRs remained above the threshold in January through June. Fluctuations in Level I assets are typically due to Monetary Credit Payments. Monetary Credit Payment discrepancies can occur when the actual retirement date payout differs from the initial planned retirement date. Monetary Credits provide a lump sum payment to those Judges who leave the bench before reaching eligibility for the defined benefit plan.

Level I & III: Since Level I LCRs remained above the threshold, it was not necessary to utilize Level III assets. Fluctuations in Level III assets are primarily due to Monetary Credit Payments which can double the outflows for the month.

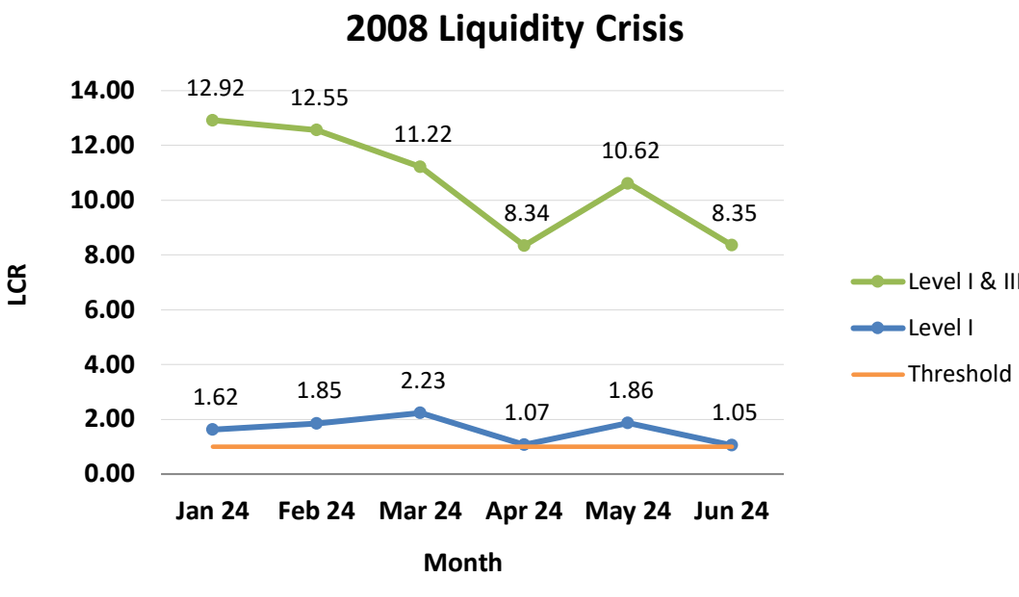
Crisis Environments - 5 Day and 30 Day Liqudity Coverage Ratios

Crisis environment LCR scenarios were modeled by applying stress percentages equivalent to those observed during the 1987 market crash over 5 days and the September 2008 financial crisis over 30 days. Starting assets were further reduced by a transactional liquidity % equal to the estimated % of the assets that could have been liquidated during the 5-day and 30-day periods. Under the crises scenarios, asset class sources were reduced to zero and uses were doubled.



Level I: Level I assets would have been adequate had a crisis event similar to "Black Monday" occurred. Fluctuations in Level I assets are typically due to Monetary Credit Payments. Monetary Credit Payment discrepancies can occur when the actual retirement date payout differs from the initial planned retirement date. Monetary Credits provide a lump sum payment to those Judges who leave the bench before reaching eligibility for the defined benefit plan.

Level I & III: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets. Fluctuations in Level III assets are primarily due to Monetary Credit Payments which can double the outflows for the month.

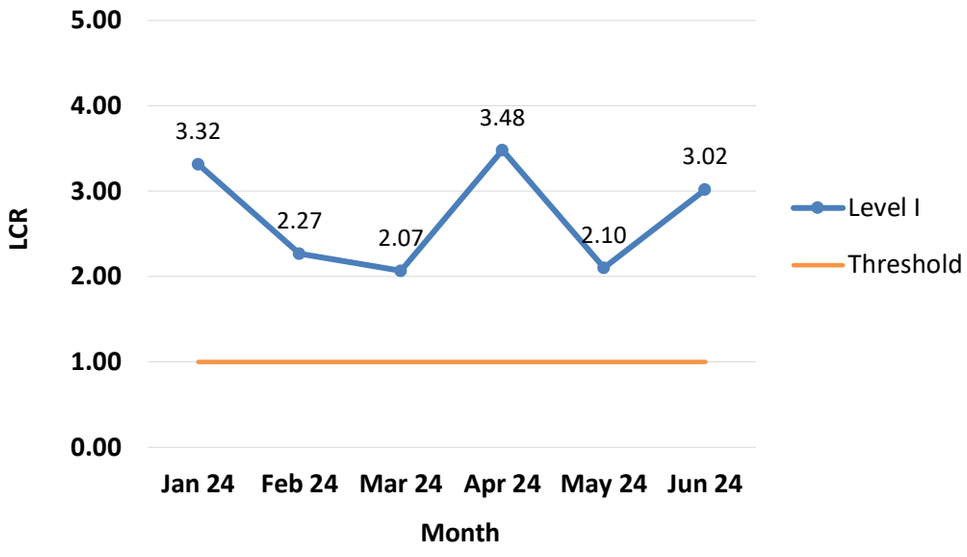


Level I: Level I assets would have been adequate had a crisis event similar to the "2008 Liquidity Crisis" occurred. Fluctuations in Level I assets are typically due to Monetary Credit Payments. Monetary Credit Payment discrepancies can occur when the actual retirement date payout differs from the initial planned retirement date. Monetary Credits provide a lump sum payment to those Judges who leave the bench before reaching eligibility for the defined benefit plan.

Level I & III: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets. Fluctuations in Level III assets are primarily due to Monetary Credit Payments which can double the outflows for the month.

Crisis Environment - 10-Day Liquidity Coverage Ratios

The 10-day LCR utilized only the cash balance ten days prior to the payment date. The calculation assumed a five business day market lockdown as experienced on September 11th, 2001.



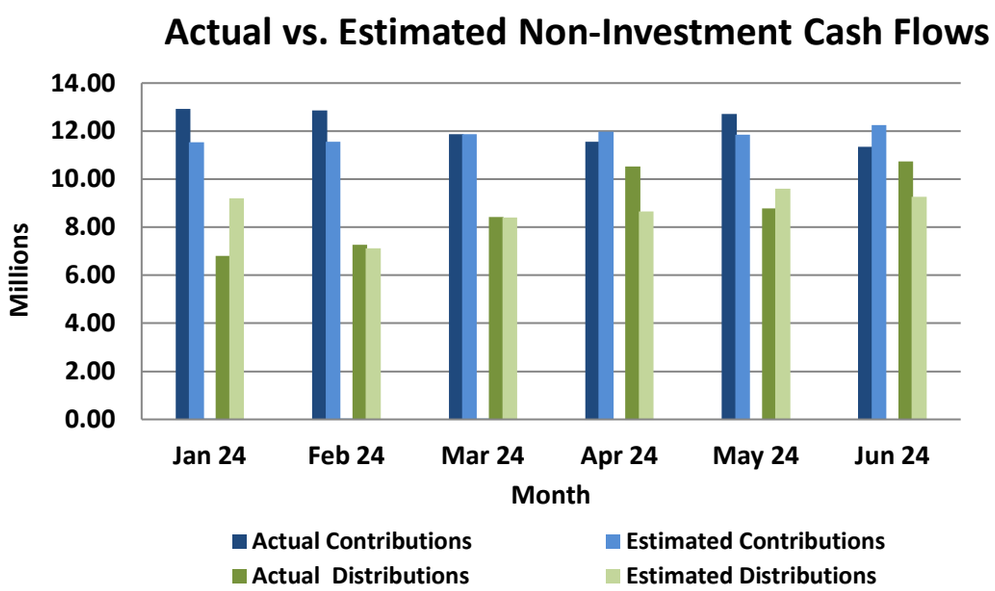
Level I: JRF II had sufficient cash to cover obligations ten days prior to the payment date. This indicated Level I was adequate had a crisis event occurred. In a crisis environment, CalPERS would not have access to Level III assets since it is assumed there was a five business day market lockdown similar to September 11, 2001.

Overall JRF II Liquidity Health

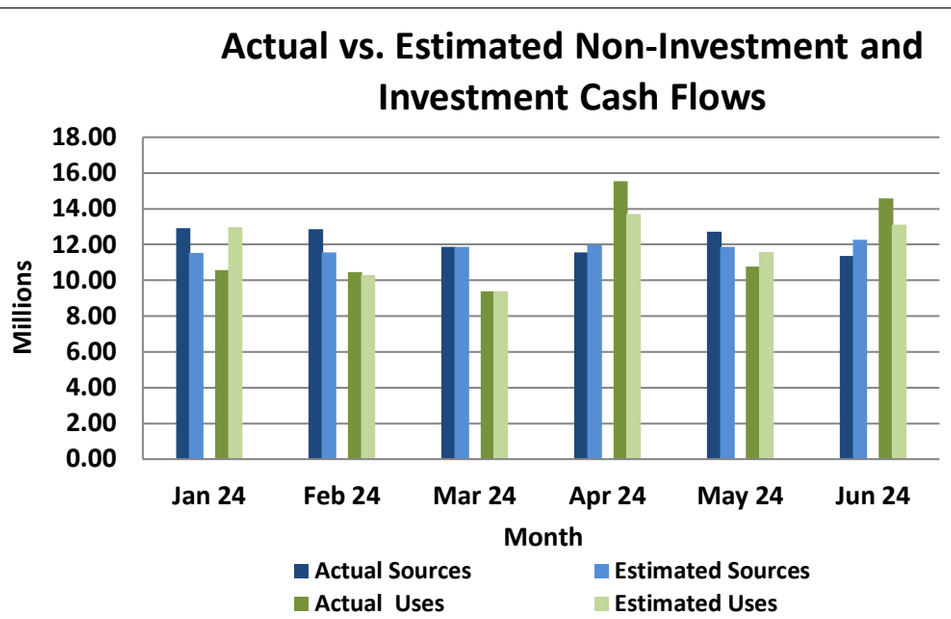
Coverage Ratio Analysis:

- ✓ JRF II was able to make payments for benefits and operating expenses regardless of market conditions.
- ✓ JRF II's liquidity remained above the threshold in stress scenarios and was adequate under crisis conditions.

JRF II Cash Flow Forecasting



Cash flow forecasting accuracy for January through June was in the 90th percentile.



Cash flow forecasting for total fund cash activities (both non-investment and investment) was in the 90th percentile.

Treasury Analysis and Liquidity Status Report

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Health Care Fund (HCF)

The HCF accounts for the activities of the CalPERS self-insured health care programs. Health premiums are collected from employers and members and used to directly pay for medical services and pharmaceutical usage.

Liquidity Coverage Ratio Analysis

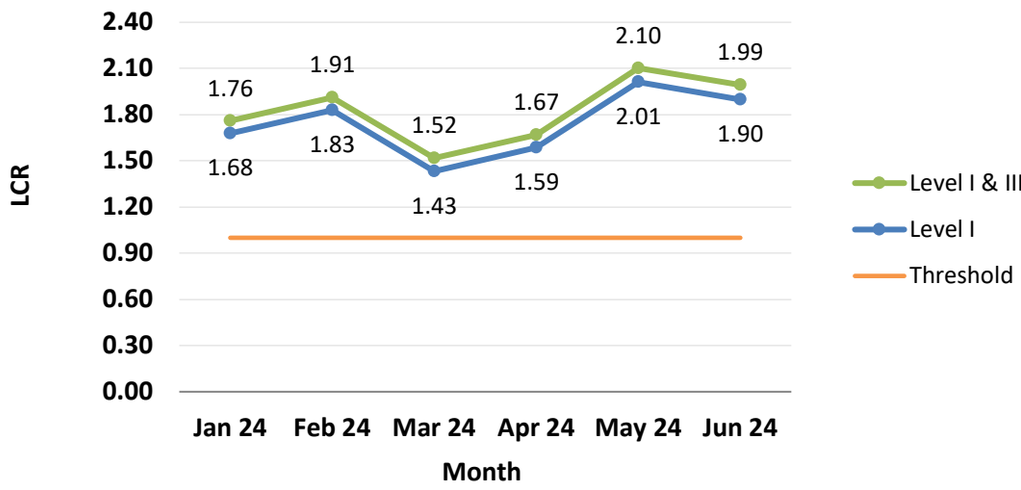
$$\text{Liquidity Coverage Ratios (LCR)} = \frac{\text{cash + assets convertible to cash + incoming cash sources}}{\text{outgoing cash uses + contingent cash uses}}$$

Funding Sources and Graph Details

Level I: Cash and cash equivalents
Level III: Sale of public assets
Threshold: Indicates the Fund's ability to cover 100% of monthly obligations

Stress Environment - 30-Day Liquidity Coverage Ratios

The 30-day LCR included investment and non-investment available cash flows.

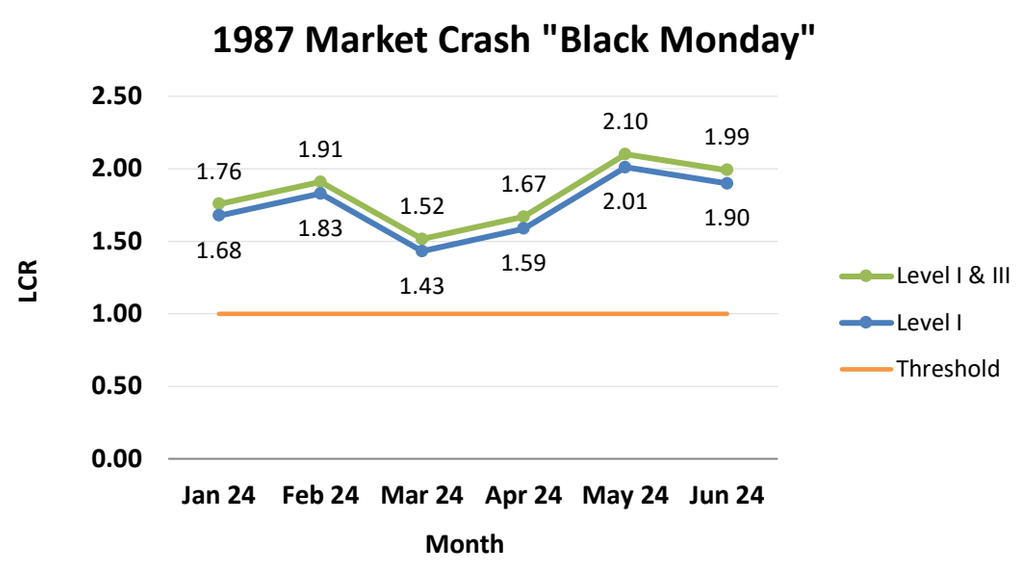


Level I: Level I LCR's remained above the threshold from January through June. Fluctuations in Level I assets are typically due to claim disbursements which continue to outpace premium collections.

Level I & III: Overall, since Level I LCRs remained above the threshold, it was not necessary to utilize Level III assets.

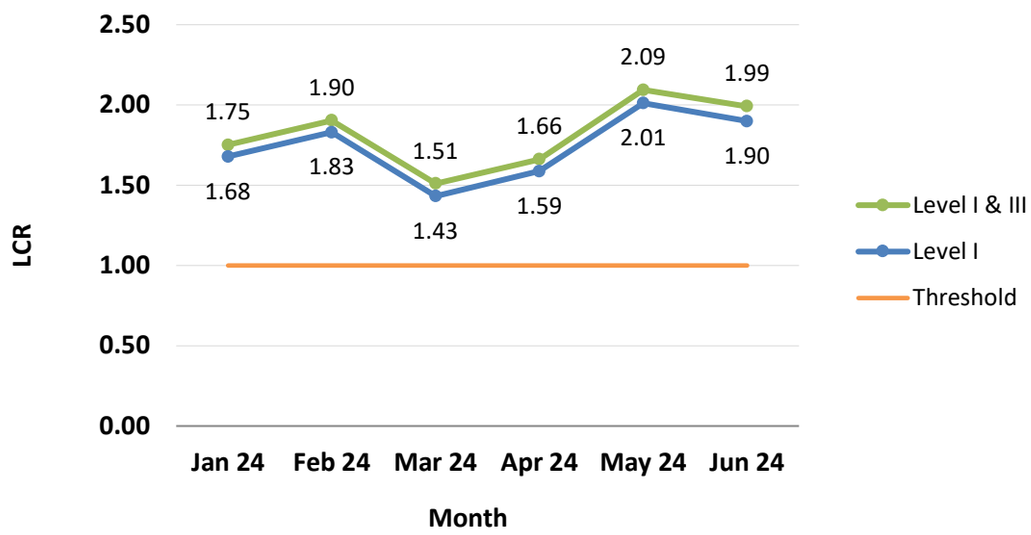
Crisis Environments - 5 Day and 30 Day Liqudity Coverage Ratios

Crisis environment LCR scenarios were modeled by applying stress percentages equivalent to those observed during the 1987 market crash over 5 days and the September 2008 financial crisis over 30 days. Starting assets were further reduced by a transactional liquidity % equal to the estimated % of the assets that could have been liquidated during the 5-day and 30-day periods. Under the crises scenarios, asset class sources were reduced to zero and uses were doubled.



Level I: Overall, Level I assets would have been adequate had a crisis event similar to "Black Monday" occurred. Fluctuations in Level I assets are typically due to claim disbursements which continue to outpace premium collections.

Level I & III: Since overall, Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets. Previously, 100% of Level III assets for HCF were held in cash, cash equivalents, and fixed income, resulting in minimal impact on LCRs from stress factors. However, starting in June, these assets are now held solely in cash, further reducing potential variability and ensuring even greater stability in the LCR during crisis conditions.



Level I: Overall, Level I assets would have been adequate had a crisis event similar to the "2008 Liquidity Crisis" occurred. Fluctuations in Level I assets are typically due to claim disbursements which continue to outpace premium collections.

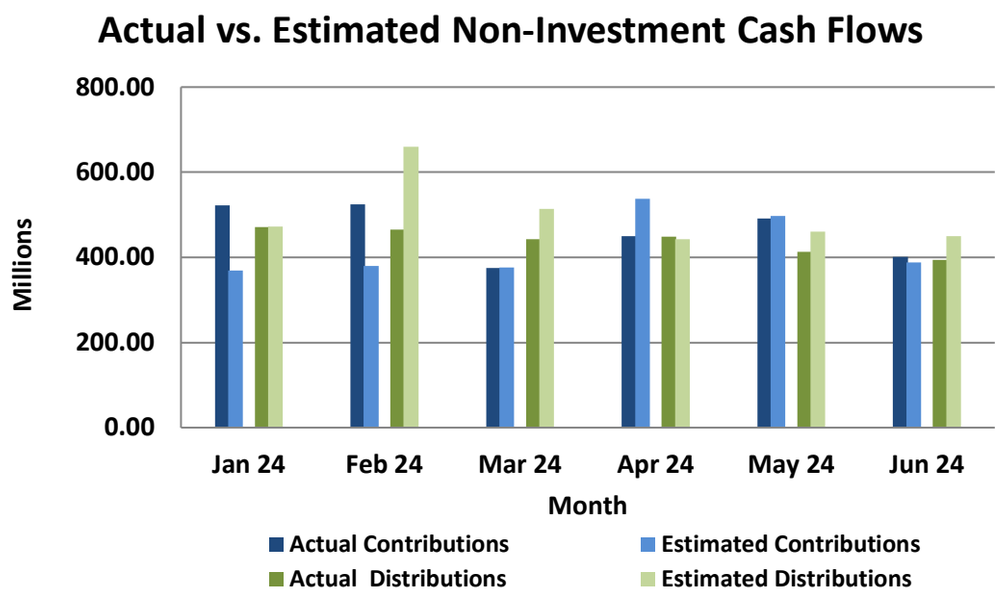
Level I & III: Since overall Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets. Starting in June Level III assets are now held solely in cash, further reducing potential variability and ensuring even greater stability in the LCR during crisis conditions.

Overall HCF Liquidity Health

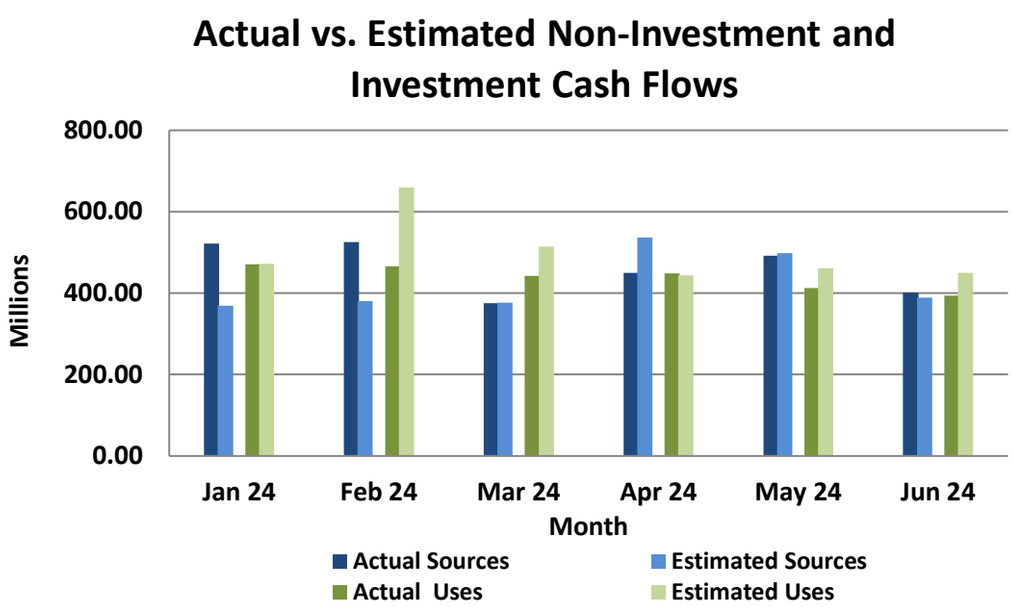
Coverage Ratio Analysis:

- ✓ HCF was able to make payments for health premiums, medical claims and operating expenses regardless of market conditions.
- ✓ HCF's liquidity remained above the threshold in stress scenarios and was adequate in crisis environments.

HCF Cash Flow Forecasting



Cash flow forecasting accuracy for January to June was in the 90th percentile.



Cash flow forecasting for total fund cash activities (both non-investment and investment) was in the 90th percentile.

Treasury Analysis and Liquidity Status Report

Prepared for: Finance and Administration Committee - Period Ending June 30, 2024

Long Term Care Fund (LTCF)

The LTCF provides financial protection to active participants from the high cost of covered services caused by chronic illness, injury or old age. Long-Term Care products reimburse the cost for covered personal care (activities of daily living) services. LTCF participation is voluntary and benefits are funded by member premiums and the LTCF investment income. The Fund maintains a reserve to mitigate potential funding risk during a stressed environment. Please note there is a one-month delay in reporting for the LTCF.

Liquidity Coverage Ratio Analysis

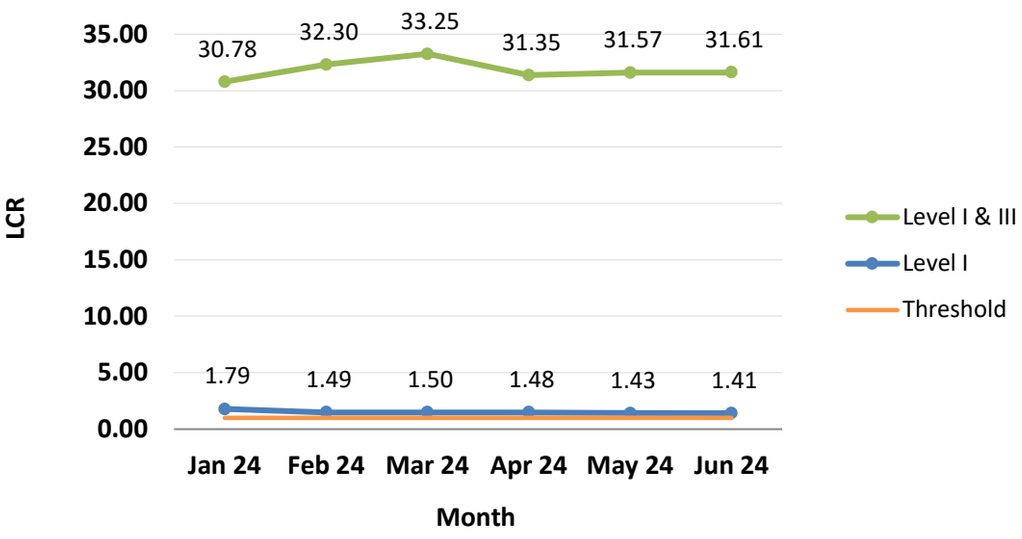
$$\text{Liquidity Coverage Ratios (LCR)} = \frac{\text{cash + assets convertible to cash + incoming cash sources}}{\text{outgoing cash uses + contingent cash uses}}$$

Funding Sources and Graph Details

Level I: Cash and cash equivalents
Level III: Sale of public assets
Threshold: Indicates the Fund's ability to cover 100% of monthly obligations

Stress Environment - 30-Day Liquidity Coverage Ratios

The 30-day LCR included investment and non-investment available cash flows.

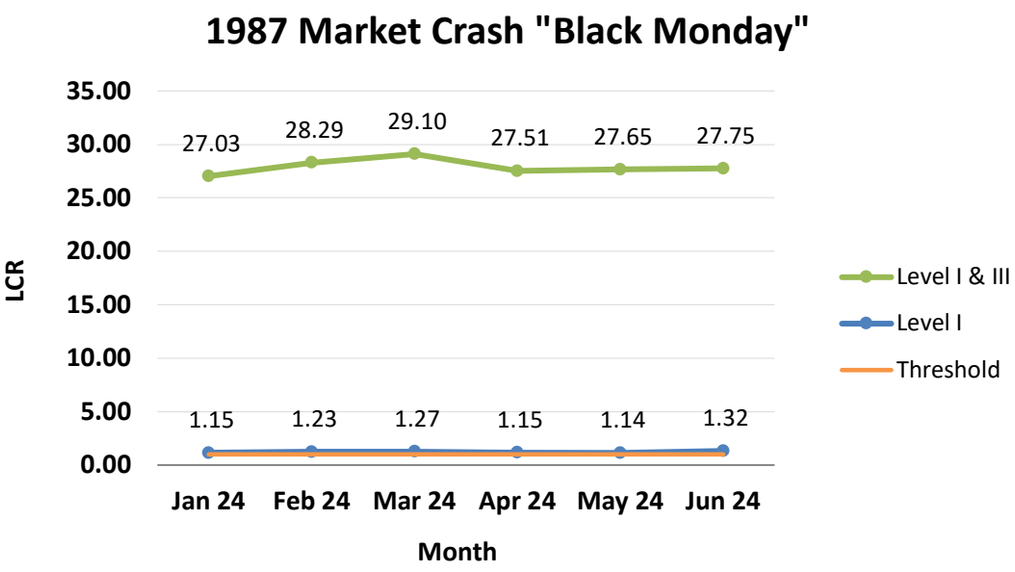


Level I: Level I LCRs remained above the threshold in January through June.

Level I & III: Since Level I LCRs remained above the threshold, it was not necessary to utilize Level III assets.

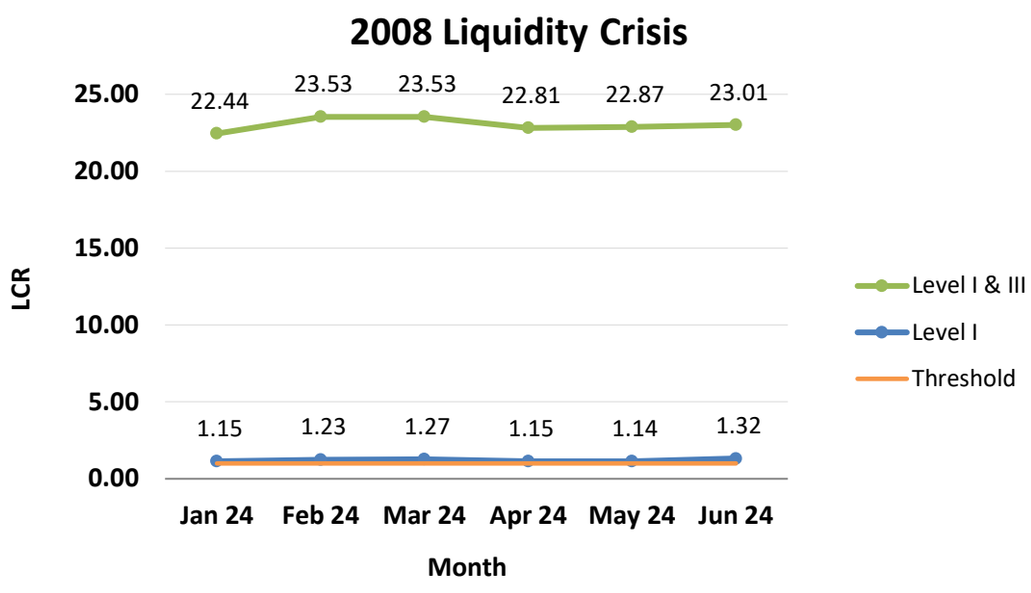
Crisis Environments - 5 Day and 30 Day Liqudity Coverage Ratios

Crisis environment LCR scenarios were modeled by applying stress percentages equivalent to those observed during the 1987 market crash over 5 days and the September 2008 financial crisis over 30 days. Starting assets were further reduced by a transactional liquidity % equal to the estimated % of the assets that could have been liquidated during the 5-day and 30-day periods. Under the crises scenarios, asset class sources were reduced to zero and uses were doubled.



Level I: Level I assets would have been adequate had a crisis event similar to "Black Monday" occurred.

Level I & III: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets.



Level I: Level I assets would have been adequate if a crisis event similar to the "2008 Liquidity Crisis" occured.

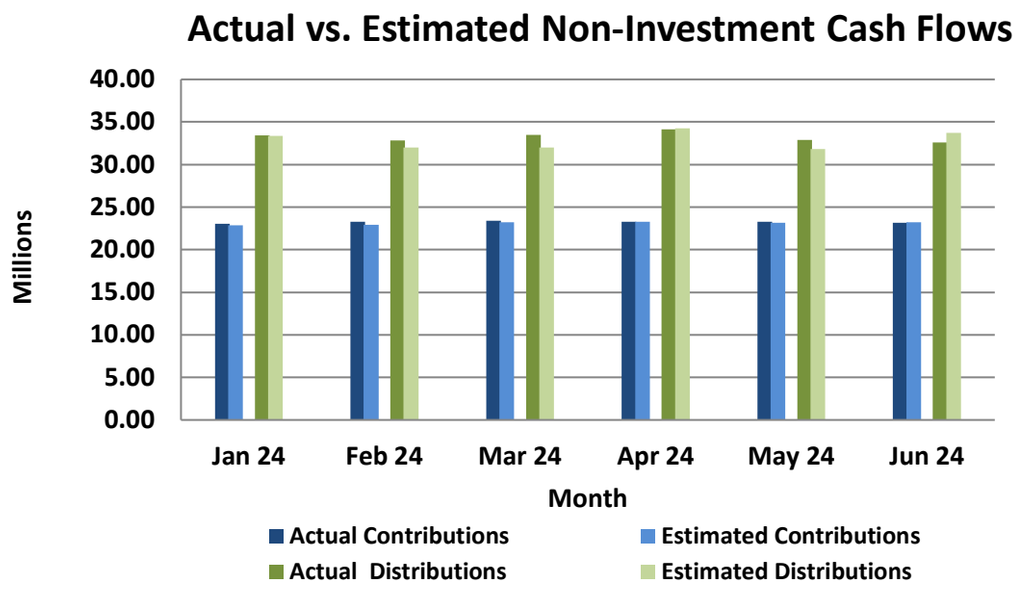
Level I & III: Since Level I LCRs remained above the threshold, it would not have been necessary to utilize Level III assets.

Overall LTCF Liquidity Health

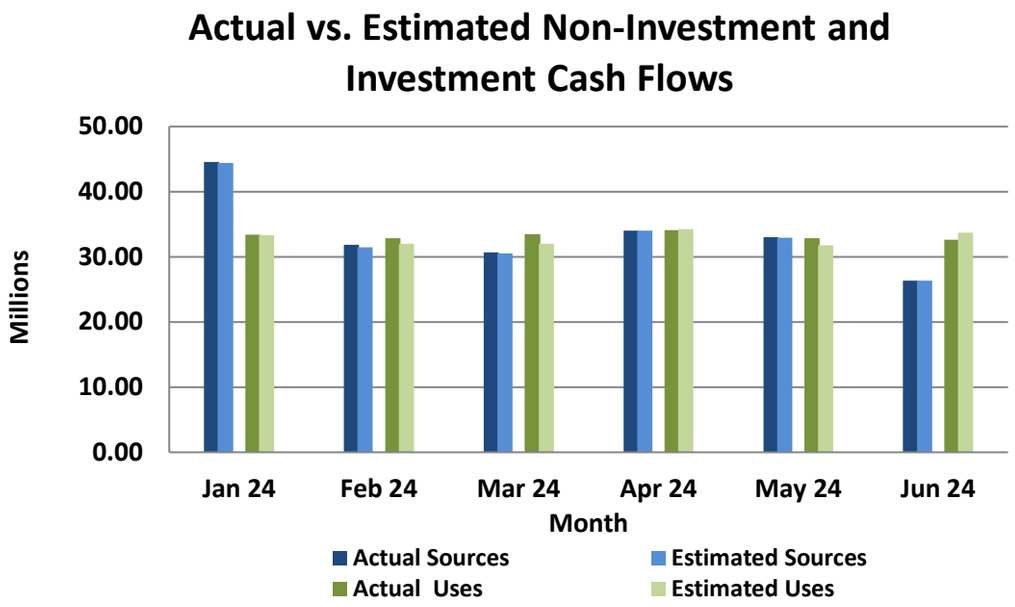
Based Coverage Ratio Analysis:

- ✓ LTCF was able to make payments for benefits and operating expenses regardless of market conditions.
- ✓ LTCF's liquidity remained above the threshold in the stress and crisis environment.

LTCF Cash Flow Forecasting



Cash flow forecasting accuracy for January through June was in the 90th percentile.



Cash flow forecasting for total fund cash activities (both non-investment and investment) was in the 90th percentile.