

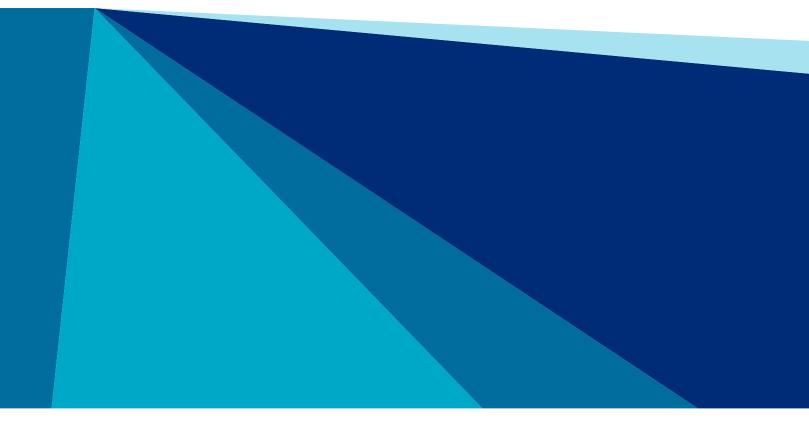
# **January 30, 2020**

# ACTUARIAL STUDY OF HEALTH FACILITY CONSTRUCTION LOAN INSURANCE FUND AS OF JUNE 30, 2018

OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

CAL-MORTGAGE LOAN INSURANCE DIVISION

CALIFORNIA HEALTH FACILITY CONSTRUCTION LOAN INSURANCE PROGRAM





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# **Executive Summary**

Health and Safety Code, Section 129330, requires the Office of Statewide Health Planning and Development (OSHPD) to contract for an actuarial study in each even-numbered year to determine the reserve sufficiency of the funds held in the Health Facility Construction Loan Insurance Fund (HFCLIF). Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) has been asked by OSHPD, Cal-Mortgage Loan Insurance Division (Cal-Mortgage), to conduct the actuarial analysis of the California Health Facility Loan Insurance Program (Program) and the HFCLIF.

Under the administration of OSHPD, the Program insures loans to nonprofit and public health facilities for construction projects that improve access to needed health care. The sources of revenue for the Program are premiums and fees used to pay all default and administrative expenses. As of June 30, 2018, OSHPD insured 80 projects with an original amount insured totaling \$2,196,270,000.

The HFCLIF reserve level was analyzed by comparison to the reserve level which would be required under the standards of the Department of Insurance (DOI) if the Program were a private insurance company. The Program is not subject to DOI standards; it is important to note that the DOI standards require that private insurers have front-end capitalization of at least \$75 million before they can be licensed to do business in California. The Legislature did not capitalize the Program, but the payment of principal and interest on the loans are fully and unconditionally guaranteed by the State of California. All of the HFCLIF reserves (referred to as "cash balance" as per the Cal-Mortgage Loan Insurance Division Monthly Activity Report Ending June 30, 2018), \$169.76 million as of June 30, 2018, have been derived from the Program's "earnings" over the past 40-plus years. Nonetheless, if the DOI standards were applied to the Program, the reserve requirement would total \$189.67 million as of June 30, 2018. Thus, under the DOI standards, there is a \$19.92 million shortfall in the HFCLIF.

The financial strength of the HFCLIF was evaluated by conducting a cash flow projection analysis, which estimates cash in-flows, out-flows, and year-end balances over the next 30 years. The projections under the Expected Scenario indicated a positive expected fund balance through Fiscal Year 2047/48.

# Introduction and Scope

Health and Safety Code, Section 129330, requires OSHPD to contract for an actuarial study in each even-numbered year to determine the reserve sufficiency of the funds held in the HFCLIF. Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) has been asked by Cal-Mortgage to conduct an actuarial analysis of the HFCLIF and the Program. Specifically, Oliver Wyman's analysis provides the following:

- A determination of the reserve sufficiency for the HFCLIF as of June 30, 2018. Calculations reflect foreseeable risks, including extraordinary administrative expenses and actual defaults (Health & Safety Code, Section 129330)
- An assessment of the risk to the State's General Fund of the Program

The study was based on the Program's insured portfolio as of June 30, 2018 and additional information provided to Oliver Wyman through April 16, 2019.

Oliver Wyman analyzed the reserve sufficiency of the HFCLIF by application of the capital and reserve standards of the California Department of Insurance. Oliver Wyman also assessed the reserve sufficiency of the HFCLIF as well as the risk to the General Fund based upon a 30-year projected cash flow analysis of the Cal-Mortgage Loan Insurance Program.

As detailed in Section 4 Results and Methodology, the following analyses were performed to meet the abovementioned objectives:

- Reserve Sufficiency of HFCLIF
- Income Debt Service Ratios
- Cash Flow Debt Service Ratios
- Risk to the State's General Fund

# Background

#### **Program**

The Program was authorized by California Constitution Article XIII, Section 21.5 (now Article XVI, Section 4), and approved by the voters in 1968. Modeled after federal home mortgage programs, the Program makes it possible for nonprofit healthcare facilities to obtain private financing, without cost to taxpayers, to develop or expand their services in communities throughout California. Without such a guarantee, many of these facilities simply could not arrange the financing required to serve their communities.

Under the administration of OSHPD, the Program insures loans to nonprofit and public health facilities for construction projects that improve access to needed healthcare. OSHPD can insure loans to nonprofit public benefit corporations or public entities (cities, counties, hospital districts, or joint power authorities) in which the State of California guarantees the payments of principal and interest on the loans. The loan insurance allows borrowers access to lower interest rates.

Health and Safety Code, Section 129200 established the HFCLIF, which is used as a depository of fees and insurance premiums. Pursuant to Health and Safety Code, Section 129215, the HFCLIF is a trust fund to be used to pay administrative costs of the Program and claims resulting from defaults from insured borrowers.

As previously noted, Section 129330 of the Health and Safety Code requires that Cal-Mortgage obtain, in each even-numbered year, an actuarial study to determine the reserve sufficiency of funds. The purpose of the study is to examine the portfolio of existing insured loans and provide an estimate of reserve funds necessary to respond adequately to potential foreseeable risks, including extraordinary administrative expenses and actual defaults.

#### **Premiums and Fees**

The sources of revenue for the Program are premiums and fees used to pay all default and administrative expenses.

For loans closed prior to January 1, 2001, Health and Safety Code, Section 129040, provided that "The annual [insurance] premium charge shall not be more than an amount equivalent to one-half of 1%, or 0.5%, per annum of the average amount of the principal obligation of the loan during the year in which the charge is made, without taking into account delinquent payments."

For loans closed on or after January 1, 2001, Health and Safety Code, Section 129040 provides, "[OSHPD] shall establish a premium charge for the insurance of loans under this chapter, and the charge shall be deposited in the fund. A one-time nonrefundable premium charge shall be paid at the time the loan is insured. The premium rate may vary based upon the assessed level of relative financial risk determined pursuant to Section 129051 but shall in no event be greater than 3.0%. The amount of the premium shall be computed on the basis of the application of the rate to the total amount of principal and interest payable over the term of the loan."

In addition to premiums, the Program is financed by an application fee of 0.5% of the loan applied for, but not to exceed \$500 (Health and Safety Code, Section 129090) and a certification and inspection fee not in excess of 0.4% of the loan that is insured (Health and Safety Code, Section 129035).

# **Financial Status of the Program**

As of June 30, 2018, OSHPD insured 80 projects with an original amount insured totaling \$2,196,270,000. Pursuant to Health and Safety Code, Section 129210, the total amount of insured loans may not exceed \$3 billion.

Most insured loans have a debt service reserve fund of one year's debt service under the control of a trustee and the Program. It is our understanding that, as of 2016, Cal-Mortgage began accepting half a year's debt service reserve in some cases and no debt service reserve in the case of investment grade borrowers. If a borrower fails to make all its payments and its debt service reserve account is depleted, OSHPD is required to pay the annual debt service shortfall from the HFCLIF.

• The HFCLIF is held and invested by the State Treasurer; HFCLIF's cash balance as of June 30, 2018 was \$169,757,738.

- The HFCLIF annual net income (insurance premiums plus recoveries from previously defaulted projects, less default expenses and administrative expenses) for 2016/17 was \$12,179,675 and for 2017/18 was \$9,186,151.1
- The recoveries from previously defaulted projects that are deposited in the HFCLIF are generated from enforcement by OSHPD of security interests in the real and personal property of borrowers evidenced by deeds of trust, fixture filings, UCC-1s, and Deposit Account Control Agreements

If there are inadequate reserves in the HFCLIF, the State Treasurer is required to exchange the bonds for debentures of the State, which will be fully and unconditionally guaranteed by the State. If debentures are issued, the HFCLIF is required to repay the debentures.

The current Standard & Poor's (S&P) credit rating of the Program, which is derived from the State's rating, was raised from A+ to AA- in July 2015. S&P cited the enactment of California's 2015-2016 budget, marking an improved fiscal sustainability.

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<sup>&</sup>lt;sup>1</sup> These figures are internally prepared, non-SCO-adjusted, non-GAAP figures

# Results and Methodology

## Section I - Reserve Sufficiency of HFCLIF

Cal-Mortgage's sources of funds available to pay claims include the sale of assets over which Cal-Mortgage holds a security interest and the HFCLIF cash balance. The HFCLIF cash balance of \$169.76 million as of June 30, 2018 was analyzed against the California Department of Insurance reserve and capital requirements standard.

California Insurance Code, Sections 12100 through 12122, outline the statutory requirements for private financial guaranty insurers licensed in California. Although Cal-Mortgage is not subject to these requirements, Oliver Wyman has estimated the required reserve and capital funds that Cal-Mortgage would need based on the statutory requirements.

The statutory insurance laws of the State of California discuss the following requirements:

- Minimum Capital and Surplus
- Loss Reserves:
  - Case Reserves
  - Pipeline Incurred But Not Reported (IBNR) Reserves
  - Future Recoveries
- Contingency Reserves
- Unearned Premium Reserves

Requirements are individually discussed in the sections that follow.

## Minimum Capital and Surplus Requirement

The California Statutory Insurance Code specifying minimal capital and surplus levels is contained in Section 12107. If Cal-Mortgage were subject to the provisions of Section 12107, it would be required to maintain minimum capital and surplus of \$75 million consisting of the following: 1) \$15 million for minimum paid-in capital and 2) \$60 million additional minimum surplus.

# Loss Reserves: Case Reserves, Pipeline IBNR Reserves and Future Recoveries

Section 12109 of the California Statutory Insurance Code specifies the requirements for loss reserves, including case reserves, IBNR reserves, and future recoveries as follows:

 Case Reserves – The case basis method or other method as may be prescribed by the commissioner shall be used to determine loss reserves, which shall include a reserve for claims reported and unpaid net of collateral. A deduction from loss reserves shall be allowed for the time value of money by application of a discount rate.

Discounted case reserves on defaulted loans as provided by Cal-Mortgage and utilized in this analysis total \$44.29 million as shown in Section I, Exhibit 2. Additionally, Section I, Exhibit 3, displays the projected loss payments by fiscal year for the same currently defaulted projects. Note that case reserves were calculated as 100% of the expected principal and interest payments on Sherman Oaks and Kern Valley's payments scheduled to be made by Cal-Mortgage, discounted. Additionally, a case reserve was added for the payments Kern Valley is currently making to the trustee, with a 10% probability applied to account for the eventuality that Kern Valley may not be able to complete these payments. This amount was then discounted.

• IBNR Reserves – A reserve component for incurred but not reported claims shall be reasonably estimated if deemed necessary by the financial guaranty insurance corporation, or following an examination or actuarial analysis, by the commissioner.

If Cal-Mortgage were subject to the above statutory requirement, Oliver Wyman believes that pure IBNR reserves would be at Cal-Mortgage's discretion. As such, Oliver Wyman has included scenarios both with and without a provision for "pipeline IBNR reserves" in our analysis. Oliver Wyman is using the term "pipeline IBNR reserves" to refer to reserves for projects which may default in fiscal year 2018/19. Oliver Wyman has estimated losses from pipeline default projects based on discussions with Cal-Mortgage regarding the probability of default and estimated loss amount by project. Oliver Wyman's estimated pipeline IBNR reserve is \$10.10 million as of June 30, 2018, as summarized in Section I, Exhibit 2.

• Future Recoveries – No deduction shall be made for anticipated salvage in computing case basis loss reserves, unless that salvage is held by or under the control of the financial guaranty

insurance corporation and would qualify as an admitted asset, or unless that salvage constitutes or is secured by a clean, irrevocable letter of credit.

In addition to the currently defaulted or pipeline default projects previously mentioned, there are a number of previously defaulted projects that have been resolved. Based on information provided by Cal-Mortgage, Oliver Wyman has estimated the present value of recoveries from these resolved projects to be \$7.57 million. Note that although Kern Valley Healthcare District is classified as a defaulted loan, recoveries are expected to be collected. With the inclusion of Kern Valley recoveries, the total estimated recoveries are \$15.10 million. Section I, Exhibits 4 and 5 show the detailed calculation of the recoveries.

#### Contingency Reserves

Based on Section 12108 of the California Statutory Insurance Code, Oliver Wyman has calculated a fully funded contingency reserve provision for Cal-Mortgage of approximately \$13.44 million. Section I, Exhibit 6 shows the detailed calculation of contingency reserves.

Since Cal-Mortgage does not earn premium on a statutory basis, Oliver Wyman has calculated the contingency reserves based on insured loan principal outstanding. Also, Oliver Wyman has applied the provisions of Section 12108 as they pertain to municipal obligation bonds as Oliver Wyman believes that municipal bonds best correlate with the type of bond insured by Cal-Mortgage.

#### Unearned Premium Reserves

The California Statutory Insurance Code specifying the unearned premium reserve requirement is contained in Section 12110. Oliver Wyman calculated unearned premium reserves based on the sum of:

- Pro-rating written premium on a monthly basis for annual premium; and
- Amortization of written premium based on outstanding loan balance for one-time nonrefundable premium.

The resulting unearned premium reserve provision is approximately \$61.94 million as calculated in Section I, Exhibits 7 and 8.

## Total Funds Required

Oliver Wyman based its calculation of the total funds required as of June 30, 2018 on California statutory requirements. Estimates are provided with and without pipeline IBNR reserve. Section I, Exhibit 1, and Table 1, below, summarize the total funds required with and without pipeline IBNR reserves.

	Table	1								
	Cal-Mortgage Statutory Requirements									
	2016 Stu	<u>ıdv</u>	2018 Study	L						
	Without Pipeline	With Pipeline	Without Pipeline	With Pipeline						
ltem	IBNR Reserve	IBNR Reserve	IBNR Reserve	IBNR Reserve						
Capital and Surplus	75,000,000	75,000,000	75,000,000	75,000,000						
Case Reserve (Current Default)	69,988,873	69,988,873	44,294,107	44,294,107						
Pipeline IBNR Reserve	N/A	4,351,500	N/A	10,101,926						
Recoveries	(16,769,068)	(16,769,068)	(15,096,069)	(15,096,069)						
Contingency Reserve	13,103,921	13,103,921	13,436,731	13,436,731						
Unearned Premium Reserve	62,792,359	62,792,359	61,937,455	61,937,455						
Total	204,116,086	208,467,586	179,572,224	189,674,150						
HFCLIF Balance	166,632,464	166,632,464	169,757,738	169,757,738						
Reserve Shortfall	37,483,622	41,835,122	9,814,486	19,916,412						

As of June 30, 2018, the actual HFCLIF balance is \$169.76 million. Thus, under California Statutory standards, there is a \$9.81 million shortfall without considering pipeline IBNR reserves. Including the pipeline IBNR reserves increases the shortfall to \$19.92 million. It is at Cal-Mortgage's discretion to include such reserves.

## Comparison to Prior Reserves

Total required reserves as of June 30, 2018 decreased by approximately \$18.79 million since the prior evaluation as of June 30, 2016. The reconciliation of prior to current loss reserve requirements is detailed in the following table.

Table 2

Cal-Mortgage Statutory Requirements Comparison (in millions)							
	2016	2018					
Item	Study	Study	Change				
Capital and Surplus	75.00	75.00	0.00				
Case Reserve (net of recoveries)	53.22	29.20	(24.02)				
Pipeline IBNR Reserve	4.35	10.10	5.75				
Contingency Reserve	13.10	13.44	0.33				
Unearned Premium Reserve	62.79	61.94	(0.85)				
Total	208.47	189.67	(18.79)				
HFCLIF Balance	166.63	169.76	3.13				
Reserve Shortfall	41.84	19.92	(21.92)				

This decrease is predominantly due to the decrease of \$24.02 million in net case reserves since the prior evaluation. This decrease in net case reserves is mostly due to a decrease in the outstanding case reserves on current defaults of \$25.69 million. The decrease in outstanding case reserves is due most significantly to the continued pay-down of Cal-Mortgage's obligation on Sherman Oaks. The Sherman Oaks principal balance decreased \$15.01 million between June 30, 2016 and June 30, 2018. Additionally, the unearned premium reserve (UEPR) decreased by \$855 thousand. Partially offsetting the decreases noted above, the pipeline IBNR reserve increased by \$5.75 million and the contingency reserve increased by \$333 thousand.

# **Section II - Debt Service Coverage Ratios**

Oliver Wyman conducted an analysis of the debt service coverage ratios of borrowers insured under the Cal-Mortgage Program to measure a borrower's ability to meet its debt service obligations. Oliver Wyman calculated the following two debt service ratios for calendar years 2011 through 2017 based on financial statements of active insured borrowers provided by Cal-Mortgage:

- Debt Service Coverage Ratio
- Total Income Debt Service Ratio

These ratios are defined as follows:

#### **Debt Service Coverage Ratio =**

Net Income + Interest Expense + Depreciation + Amortization

Interest Paid + Current Portion of Long Term Debt + Capital Leases + Sinking Fund Payments

The debt service coverage ratio measures the ability of a borrower to meet its debt service obligations from funds generated by its revenue net of expenses incurred during a year. Since depreciation and amortization are non-cash expenses, they do not affect the cash flow available for debt service. Thus, they are excluded from total expenses.

#### Total Income Debt Service Ratio =

Net Income + Interest Expense

Interest Paid + Current Portion of Long Term Debt + Capital Leases + Sinking Fund Payments

The total income debt service ratio, based on more stringent criteria than the cash flow ratio, measures the ability of a borrower to meet its debt service obligations from funds generated by its net income.

In summary, the cash flow ratio measures the short-term financial viability of a borrower relative to its debt service since it ignores the cost of capitalized equipment that will eventually require replacement. In contrast, the total income ratio measures the long-term financial viability of a borrower relative to its debt service since it takes into account depreciation and amortization. In other words, the total income ratio includes a provision for the cost of capitalized equipment that will eventually need to be replaced.

A debt service ratio of 1.00 indicates that all funds available after netting expenses against revenue from the current year's operations must be used to service debt. If a borrower has a debt service ratio of less than 1.00, the borrower has not demonstrated the ability to meet its debt service obligations from the current year's operations. A debt service ratio of 1.20 or greater provides some assurance that a borrower can continue to meet its debt service under current conditions.

Section II, Exhibit 1, Page 2, summarizes the average debt service ratios for the Cal-Mortgage insured borrowers. In order to better understand the borrower's ability to cover debt service, three different types of ratio averages were calculated by facility type: weighted average, arithmetic

average, and median. The weighted ratio is calculated by giving weight to individual ratios in proportion to the size of each facility's component based on original loan balance. The arithmetic average ratio is calculated by adding the borrowers within a facility type and dividing by the number of borrowers regardless of loan size. The median ranks the ratios from smallest to largest and takes the mid-point. In other words, half of the borrowers' ratios are greater than the median and half are less than the median, regardless of loan size or number of borrowers.

Section II, Exhibit 1, Pages 3 and 4, display a comparison of the debt service ratios of borrowers insured by Cal-Mortgage for calendar years 2011 through 2017 by facility type. The percentage of in-force loans (based on original loan balance for each loan) is segmented by the following debt service ratios:

- Less than 1.00
- Between 1.00 and 1.19
- Greater than or equal to 1.20

Section II, Exhibits 2 and 3, graphically depict the summary of debt service ratios by facility type. For each exhibit, a comparison by year of the debt service ratio grouping is shown for each of the following segments:

- Page 1 Total of All Projects
- Page 2 Hospitals
- Page 3 Multi-level Facilities
- Page 4 Clinics
- Page 5 Skilled Nursing Facilities (SNFs)
- Page 6 Other Facilities

Other Facilities include Group Homes, Hospices, Intermediate Care Facilities, Adult Care Centers, and Chemical Dependency Recovery Hospitals.

## Ability to Cover Debt Service

In reviewing the distribution of active loan amounts by facility type (Section II, Exhibit 1, Page 1), Oliver Wyman observes that the distribution of original insured amount and principal balance by type of facility has changed since the prior report. The most notable changes by distribution of principal balance are a 7% increase in Multi-levels (a continuing trend from the 2016 analysis), an 8% increase in Skilled Nursing Facilities, as well an 11% decrease in Hospitals.

For all types of facilities in total, the weighted average, average, and median debt service coverage ratios varied in 2017 and 2016 in comparison with historical years. Most facilities showed some volatility in debt service coverage ratios in recent years, with no clear trend; however, Skilled Nurse Facilities showed a significant increase between 2015 and 2016 but then returned to a more typical ratio in 2017.

The weighted average debt service coverage ratio for Hospitals was considerably higher in 2012 than in other years, due to the inclusion of Chinese Hospital. In 2012 (the year in which Chinese Hospital joined the Cal-Mortgage program), Chinese Hospital paid very little in interest, which drove its debt service coverage ratio quite high. The weighted average debt service coverage ratio for Hospitals in 2013-2017 was more in line with what has been seen in the past, though somewhat of a dip in ratio was experienced in 2016.

The percentage of borrowers with debt service coverage ratios above 1.20 in 2016 and 2017 increased in comparison with recent prior years (Section II, Exhibit 1, Pages 3 and 4). In total, 82% of facilities had a cash flow debt service ratio above 1.20 in 2016 and 81% in 2017, compared with 76% in the 2015 and 73% in 2014. Both 2014 and 2015 percentages were more in line with years prior to 2012. There was a slight decrease in income debt service ratios above 1.20 in 2016 and 2017 in comparison with 2015; however, this was more in line with income debt service ratios in years prior to 2015.

# **Section III - Cash Flow Projections**

In order to evaluate the financial strength of the HFCLIF, Oliver Wyman conducted a cash flow projection analysis, which estimates cash in-flows, out-flows, and year-end balances over the next 30 years. Section III, Exhibit 1, Pages 1 and 2 display Oliver Wyman's cash flow projections with future insured loans (Expected Scenario) and without future insured loans (Run-off Scenario) at the selected default rates.

Oliver Wyman's cash flow projections under the Expected Scenario indicate a positive expected fund balance through fiscal year 2047/48, with an expected ending balance of \$164.32 million. This represents an increase in ending balance as compared to the 2016 study, which projected a balance of \$94.07 million through fiscal year 2045/46; note that the projected ending cash balance at the same point in time (namely as of the end of the 2045/46 fiscal year) projected in this analysis is \$170.29 million. Table 3 provides a comparison of assumptions between the 2016 and 2018 reports. Additionally, the following contribute to the change:

\$3.13 million increase in the starting cash balance at June 30, 2018 versus at June 30, 2016

- \$130 thousand decrease in expected premium income from annual premium loans (due to these types of loans running off)
- \$15.01 million increase in expected premium income from up-front premium loans
- \$24.83 million decrease in expected payments on current defaults over the next 30 years
- The impact on investment income due to the cumulative effect of above items
- The projected investment yield curve decreased slightly, with the average yield decreasing from 2.76% in the 2016 study to 2.71% in the current study (assuming all funds remain in the state's Pooled Money Investment Account, or PMIA). The updated yield curve results in \$9.21 million less in investment income over the forecast period, versus the investment income which would be indicated by applying the yield curve assumed in the 2016 study to the cash flows in the 2018 study. As of the current study, Oliver Wyman utilized an updated method for projecting future PMIA investment yields. A deterministic forecast of 6-month US Treasury yields was set based on forward rates implied by the US Treasury yield curve. The implied forward rates were derived using a technique called 'bootstrapping'. Oliver Wyman believes this approach more accurately reflects expectations of future economic conditions.

Table 3

Cal-Mortgage Cash Flow Analysis Change in Assumptions

	2016	2018
Item	Study	Study
Average Investment Yield	2.76%	2.71%
Premium Rate	2.54%	2.66%
Certification and Inspection Fee as % of Loan Principal	0.40%	0.40%
Projected Default Rate	6.10%	6.40%
Estimated Claim Severity	64.50%	64.50%
Estimated Payment Pattern (Paid Within)	10 years	10 years
Administrative Expenses	4,880,938	4,425,158
Trend in Administrative Expenses	3.40%	3.40%

Although the study indicates that the expected fund balance will not be depleted until sometime after 2047/48, the expected net cash flow is negative in quite a few of the next thirty years. Please refer to Section III, Exhibit 1, Page 1 for more detail.

Where Cal-Mortgage's own historical data was either (i) not available, (ii) not appropriate or (iii) not sufficiently credible to develop our actuarial assumptions, we supplemented it with industry data, as we deemed appropriate. Although we believe this industry data may be more predictive of future Cal-Mortgage experience than any other external data of which we are aware, the use of industry data adds to the uncertainty associated with our projections.

To measure the sensitivity associated with changes in the selected default rate, two adverse scenarios were developed (Section III, Exhibit 1, Pages 3 and 4) with default rates of 8.0% and 10.0% respectively (Adverse Scenarios). Please note that the degree of uncertainty in the projections becomes increasingly more significant in the later projection years, particularly after 15 years.

Table 4, below, summarizes the HFCLIF's expected financial position under each of the modeled scenarios:

	Table 4	
Scenario	Description	Positive Balance Until
Expected	New Loans Insured - 6.40% Default Rate	at least 2047/48
Run-Off	No New Loans Insured - 6.40% Default Rate	2044/45
Adverse	New Loans Insured - 8.0% Default Rate	at least 2047/48
Adverse	New Loans Insured - 10.0% Default Rate	2041/42

During the course of Oliver Wyman's analysis, the following assumptions were examined:

- Projected default rate
- Claim severity
- Payment pattern
- Termination rate
- Premium income
- Certification and Inspection fee income
- Administrative expenses
- Investment income

## Projected Default Rate

The first step in Oliver Wyman's analysis is to project ultimate default rates. The ultimate default rate is calculated as the percentage of original loan balance dollars (OLB) resulting in default. Specifically, the ultimate default rate is equal to the OLB of all defaulting loans divided by the OLB of all loans for that specific issue year.

Oliver Wyman has applied two actuarial methodologies: the loss development method and the Bornhuetter-Ferguson method. Both methods rely primarily on industry default experience due to Cal-Mortgage's limited experience. The industry data consists of OLB by issue year along with default information provided by Alacra, Inc. and Income Securities Advisors.

Under the loss development method, a loss reporting pattern is applied directly to the latest reported losses to project ultimate losses. Under the *Bornhuetter-Ferguson method* (B-F method), the loss reporting pattern used in the loss development method is used to estimate the percentage of ultimate losses which are unreported as of the evaluation date. This percentage is then multiplied by expected ultimate losses to produce expected unreported losses. An advantage of the B-F method is that estimates of ultimate losses tend to be more stable than estimates produced by the loss development method. This is because estimates based on the B-F method are a weighted average of estimates based on the loss development method and expected estimates of ultimate losses.

An ultimate default rate is calculated for Cal-Mortgage for each issue year based on two segments of historical experience. For the first segment, based on countrywide hospitals experience (Section III, Exhibit 2, Page 2), we select a 1.15% ultimate default rate. For the second segment, based on countrywide nursing home experience (Section III, Exhibit 2, Page 5), we select an 12.10% ultimate default rate.

Based on countrywide industry data, in conjunction with the Cal-Mortgage empirical loss experience including and excluding Sherman Oaks Health System (Triad), Oliver Wyman selected a combined ultimate default rate of 6.40% (Section III, Exhibit 2, Page 1). The selected ultimate default rates for hospitals and nursing homes from the prior actuarial study were 1.20% and 12.00%, respectively; and the combined selected ultimate default rate was 6.10%.

With respect to the analysis of the projected default rates, it was necessary to split Cal-Mortgage insureds into two categories – "Hospitals" and "Nursing Homes" – corresponding with the countrywide industry default data which was available for hospitals and nursing homes. For purposes of this categorization, Hospitals include the following Cal-Mortgage facility types: ADC-DD, ADHC, BB, CDC: DD, CDRF, CLINIC: MULTI, CLINIC-AIDS, CLINIC-MH, CLINIC-PC, HOSP, HOSP-DIST, and HOSP-PSYCH. Additionally, the Nursing Homes category includes the following Cal-Mortgage facility types: GH-DD, GH-DD/MD, GH-MD, HOSPICE, ICF-DD, MULTI-CCRC, MULTI-OTH, and SNF (see Legend, Section 9).

## Claim Severity

In the event of a default on a mortgage bond obligation, Cal-Mortgage is required to pay timely interest and principal. That is, Cal-Mortgage is required to pay interest and amortized payments on the defaulted bonds as they come due. Depending on the circumstances, Cal-Mortgage may sell the facility to recover its losses and pay off the debt early.

Oliver Wyman has estimated claim severity on the default loan as the net loss payments to be a percentage of OLB for all loans resulting in default. Net loss payments represent the amount of loss dollars paid by Cal-Mortgage to extinguish the OLB on a defaulted loan and any other expenses associated with the claim such as realtor's fees.

Oliver Wyman selected a claim severity of 64.5% for Cal-Mortgage as shown in Section III, Exhibit 3 which is unchanged from the selected severity in the prior analysis. The selected severity is consistent with industry experience (based on Income Securities Advisors data) as well as Cal-Mortgage's actual default experience with and without Sherman Oaks Health System (Triad).

#### Payment Pattern

Oliver Wyman also projected the timing of loss payments after loan defaults. Oliver Wyman selected a thirteen-year payout pattern from the year of default. Section III, Exhibit 4, Page 1 shows the selected payment pattern based on industry countrywide experience indicated from the Income Securities Advisors data (Section III, Exhibit 4, Page 2).

#### Termination Rate

Consideration is given to the possibility that some older loans with an annual premium will be terminated earlier than expected, and not renewed in the Program. In such cases, the HFCLIF will neither make payments on these loans after termination, nor will the HFCLIF receive premium income on these loans after termination. The selected termination rate including refinanced loans is 7.0% for 2018/19 and thereafter, as shown in Section III, Exhibit 5. As noted in the prior report, the drop in selected rate from 9.0% for 2016/17 and 2017/18 is based on the observation that termination rates had been somewhat higher in those years, but now drop back to a rate reflecting the longer-term averages.

The termination rate assumption is not as influential on cash flow projections for future insured business since Cal-Mortgage adopted a one-time nonrefundable premium plan as of January 1, 2001.

#### Premium Income

The premium for Cal-Mortgage insured loans is set pursuant to statute (Health & Safety Code, Section 129040) and regulation (22 California Code of Regulations, Section 91477). Prior to January 2001, a premium was charged annually on the declining principal balance of the loan; after January 1, 2001, a wholly earned premium based on total debt service over the life of the loan is charged at closing. Therefore, premium income is calculated each calendar year as the sum of the premiums written on loans in-force as of January 1, 2001, and the premiums written on future loans.

The premiums written on loans in-force issued before January 1, 2001 are calculated as the average of the prior year's outstanding loan balance on in-force loans and the current year's outstanding loan balance on in-force loans multiplied by 50 basis points, or 0.5%.

Premiums for insured loans issued subsequent to January 1, 2001 are charged as a one-time premium at the beginning of the loan term, based on a percentage of total debt service. Total debt service is calculated as the nominal sum of expected interest payments to fully service the loan plus the original principal amount. The volume of new insured loans by issue year (Section III, Exhibit 1, Page 1) is based on information and estimates provided by Cal-Mortgage.

The standard premium rate is 300 basis points, or 3.00%, times total debt service. However, borrowers with a rating of CCC or higher from S&P, Moody's, or Fitch may receive a discounted premium.

The selected premium rate Oliver Wyman used for future business is a weighted average of two different premium rates based on BBB loans (for investment grade) and below investment grade loans (Section III, Exhibit 6). Below investment grade loans receive a 300-basis point premium rate. The discounted premium rate for investment grade BBB loans is 185 basis points. Investment grade loans are expected to comprise 30% of the total future portfolio while non-investment grade loans are expected to comprise the remaining 70%. The resulting weighted average premium rate is 266 basis points. It is applied to the total debt service of future loans to calculate the effective premium rate as a percentage of principal amount for new insured loans.

# Certification and Inspection Fee Income

In addition to the premium, a Certification and Inspection fee (C&I fee) is charged on the total proceeds of any new loan when any amount of the loan will be used for construction, remodel, or land purchase.

The C&I fee is calculated as 0.4% of the principal amount of the loan for new projects, excepting loans refinanced within the Cal-Mortgage Program.

#### Administrative Expenses

Cal-Mortgage supplied Oliver Wyman with projected fiscal year 2018/19 administrative expenses of \$4.43 million, and an assumed increase in expenses of 3.4% annually thereafter.

#### Investment Income

Investment income for each fiscal year is calculated based on the product of an average of the prior fiscal year-end and the current fiscal year-end fund balances and an annual yield. For cash flow projections, investment income is calculated based on variable estimated investment yields that, over the next thirty years, averaging 2.71%. Oliver Wyman's approach to modeling future investment yields is discussed above.

#### Section IV - Risk to State's General Fund

In order to evaluate the risk to the State's General Fund of the Cal-Mortgage Program, Oliver Wyman developed a stochastic simulation model to measure the volatility of cash flow by varying the projected parameters of the cash-flow model. In addition, Oliver Wyman included a scenario analysis for the possibility of catastrophic loss.

The tables below summarize the results of the simulation model. Table 5 displays the year that the fund balance is expected to be depleted in each scenario. Table 6 shows the expected ending fund balance as of fiscal year 2047/48. Note that the size of the original loan amount for a catastrophic claim is assumed to be \$120 million.

Table 5

Cal-Mortgage Year of Fund Balance Depletion <sup>1</sup>									
Probability of Catastrophic Scenario									
Confidence Level	0%	1%	5%	10%					
Expected	at least 2047/48	at least 2047/48	2044/45	2033/34					
70%	at least 2047/48	at least 2047/48	2039/40	2028/29					
80%	at least 2047/48	at least 2047/48	2034/35	2026/27					
90%	at least 2047/48	2047/48	2028/29	2023/24					

<sup>&</sup>lt;sup>1</sup> The fund balance becomes negative by the end of the indicated fiscal year

Table 6

Cal-Mortgage Fiscal Year 2047/48 Ending Fund Balance									
	Probability of Catastrophic Scenario								
Confidence Level	0%	1%	5%	10%					
Expected	161,835,800	119,224,600	(50,798,380)	(263,744,200)					
70%	149,794,000	125,313,800	(128, 339, 400)	(375,448,500)					
80%	142,648,400	50,086,920	(188,784,900)	(460,314,100)					
90%	132,645,300	(3,928,120)	(290,389,100)	(583,694,100)					

For each catastrophic scenario, the mean year-end fund balance is forecasted for fiscal years 2018/19 through 2047/48 (Section IV, Exhibit 1). The greater the probability of a catastrophic default, the faster the fund balance is depleted.

To further analyze the risk, Oliver Wyman examined the year-end fund balance at various probability levels. Probability levels are a means to show the risk of results varying from expected. Section IV, Exhibits 2, 3, 4, and 5 correspond to catastrophic probability scenarios of 0%, 1%, 5%, and 10%, respectively. The fund balance projections at various confidence levels are displayed.

For example, in the most pessimistic scenario in which a 10.0% probability of catastrophic loss is used (Section IV, Exhibit 5, Page 1), there is a 30.0% chance (represented by the 70.0% confidence level) that the Fund will be depleted by the end of fiscal year 2028/29. And, there is a 10.0% chance (represented by the 90.0% confidence level) that the Fund balance will be depleted by fiscal year-end 2023/24. Oliver Wyman cautions that confidence level estimates should be used as a guide in determining funding levels and not as a rigorous statistical measure of variability.

Please note that the simulation model illustrates the projected impact of actual results varying from projected results due to variability inherent in the claims process. This variability is referred to as process risk. Oliver Wyman's simulation does not reflect the variation of actual results from

projections due to parameter risk. Parameter risk refers to the risk associated with the selection of the parameters underlying the applicable projection model. The methodology also does not consider "model risk," or the risk that the techniques used by Oliver Wyman may not be appropriate.

Following is a discussion of the assumptions used in the stochastic simulation model:

#### Ultimate Default Rate

A truncated lognormal distribution is used to model the ultimate default rate. The expected value of the lognormal distribution is equal to Oliver Wyman's selected ultimate default rate of 6.40%. A coefficient of variation of 57.0% is determined based on an analysis of industry data from Income Securities Advisors (Section IV, Exhibit 6, Page 1). The lognormal distribution is truncated between 20.0% and 500.0% of the selected ultimate default rate, in order to establish reasonable bounds on the distribution, based on actuarial judgment.

#### Claim Severity

The claim severity was modeled as a triangle distribution with a minimum of 30.0% of OLB of the default loan and a maximum of 100.0%. The parameters are selected based on the analysis of the data from Income Securities Advisors and Cal-Mortgage's own loss experience.

#### New Insured Loans

The volume of new insured loans was modeled as a uniform distribution. It is assumed that the volume of new insured loans is evenly distributed around the expected volume of new insured loans, plus or minus \$50.0 million.

#### Termination Rate

The termination rate of loans was modeled as a triangle distribution with a minimum of 0.0% and a maximum of 15.0%.

#### Investment Yield

The annual investment yield for each fiscal year is independently modeled as a triangle distribution with a mean equal to the selected investment yield, with plus or minus 2% minimum and maximum,

subject to a maximum yield of 8% (though with our currently modeled forecast rates and the low interest rate environment, an 8% result is not possible).

#### Catastrophic Loss

Four scenarios with 0%, 1%, 5%, and 10% probabilities of catastrophic default have been analyzed. Catastrophic loss is assumed to be independent for each upcoming fiscal year. These scenarios are intended to assist Cal-Mortgage in evaluating the impact of catastrophic defaults or higher defaults on Hospitals in the future due to seismic upgrade costs. Section IV, Exhibit 7 shows the ten largest borrowers based on in-force insured loans. Oliver Wyman selected a catastrophe loss level of \$120 million. The claim severity of catastrophic loss is modeled by a triangle distribution with a minimum of 50% of OLB, an expected of 75% of OLB, and a maximum of 100% of OLB.

#### Data

For this study, Oliver Wyman relied on the following information provided by Cal-Mortgage:

- State Plan California Health Facility Construction Loan Insurance Program
- Problem Project Reports June 2018
- Monthly Activity Report June 30, 2018
- Detailed list of each active Cal-Mortgage loan with the following information: loan ID, name of facility, type of facility, issue date, term of loan, type of premium payment, original insured amount, status of loan (paid off, refinance, default, etc), interest rate, outstanding balance, and internal risk rating as of June 30, 2018
- · Credit rating information
- Historical defaulted loan information: loan ID, default date, outstanding balance at the time of default, estimated future payment or recovery as of June 30, 2018
- Projected payments from the HFCLIF on currently defaulted projects or projects anticipated to default
- Information on resolved loans and expectations of future reimbursements to the HFCLIF
- Historical investment earnings of the HFCLIF
- Up-front premium for loans issued since the last report as well as premium receipts by month for all annual-premium loans
- Information on historical and expected administrative expenses, application income, and certification and inspection fees
- Financial statements for each insured for two fiscal years ending during calendar years 2016 and 2017

Oliver Wyman also relied on industry data as follows:

- Countrywide information regarding defaulted bonds for nursing homes and hospitals prepared by Income Securities Advisors
- Countrywide information regarding bond issues for the period 2005 to 2018 for nursing homes and hospitals prepared by Alacra, Inc.

### Distribution and Use

**Usage and Responsibility of Client** – Oliver Wyman prepared this report for the sole use of the client named herein for the stated purpose. This report includes important considerations, assumptions, and limitations and, as a result, is intended to be read and used only as a whole. This report may not be separated into, or distributed, in parts other than by the client to whom this report was issued, as needed, in the case of distribution to such client's directors, officers, or employees. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the client named herein.

Third Party Reliance and Due Diligence – Oliver Wyman's consent to any distribution of this report (whether herein or in the written agreement pursuant to which we issued this report) to parties other than of the client named herein does not constitute advice by Oliver Wyman to any such third parties. Any distribution to third parties shall be solely for informational purposes and not for purposes of reliance by any such parties. Oliver Wyman assumes no liability related to third party use of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein. This report should not replace the due diligence on behalf of any such third party.

## Considerations and Limitations

Oliver Wyman has prepared this analysis in conformity with its intended utilization by persons technically competent in the areas addressed and for the stated purposes only. Judgments as to the conclusions, indications, methods and data contained in this analysis should be made only after studying the analysis in its entirety. Furthermore, Oliver Wyman staff is available to explain any matter presented herein. It is assumed that the user of the analysis will seek such explanation as to any matter in question.

**Data Verification** – For our analysis, we relied on data and information provided by the client named herein without independent audit. Though we have reviewed the data for reasonableness and consistency, we have not audited or otherwise verified this data. Our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions might therefore be unreliable.

**Prospective Period Estimates** – We estimated the prospective period estimates developed in this analysis based on historical experience and certain assumptions and information provided us by the client. Therefore, if actual experience or information differs from that provided by client, we would need to adjust the prospective period estimates accordingly.

**Supplemental Data** – Where historical data of the client named herein was either (i) not available, (ii) not appropriate or (iii) not sufficiently credible to develop our actuarial assumptions, we supplemented it with external information, as we deemed appropriate. Although we believe these external sources may be more predictive of future experience of the client named herein than any other data of which we are aware, the use of external data adds to the uncertainty associated with our projections.

**Exclusion of Other Program Costs** – The scope of the project does not include the estimation of any costs other than those described herein. Such ancillary costs may include costs of trustee, legal, administrative, risk management and actuarial services; fees and assessments; and other costs.

**Discounting** – Discounted estimates are subject to additional uncertainty that results from the following:

- In addition to the risk of underestimating or overestimating the overall amount of the liabilities, there is the additional risk that the timing of the future payments will differ from the expected payout.
- There is the risk the actual future yield on the underlying assets (if any) will differ from the assumed yield rate used for determining present value factors.

We have not included any specific provision for this additional risk in our actuarial central estimates.

**Funding of Payments** – We have not examined any assets that may be supporting the liabilities, and have made no assumptions regarding the maturities and liquidity of these assets, should they exist. This examination is beyond the scope of our review.

**Rounding and Accuracy** – Our models may retain more digits than those displayed. Also, the results of certain calculations may be presented in the exhibits with more or fewer digits than would be considered significant. As a result, there may be rounding differences between the results of calculations presented in the exhibits and replications of those calculations based on displayed underlying amounts. Also, calculation results may not have been adjusted to reflect the precision of the calculation.

**Unanticipated Changes** – We developed our conclusions based on an analysis of the data of the client named herein and on the estimation of the outcome of many contingent events. We developed our estimates from the historical experience and covered exposure, with adjustments for anticipated changes. Our estimates make no provision for extraordinary future emergence of new types of claims or defaults not sufficiently represented in historical databases or which are not yet quantifiable.

Internal / External Changes – The sources of uncertainty affecting our estimates are numerous and include factors internal and external to the client named herein. Internal factors include items such as changes in claim reserving or settlement practices. The most significant external influences include, but are not limited to, changes in the legal, social, or regulatory environment surrounding the default process. Uncontrollable factors such as general economic conditions also contribute to the variability.

**Uncertainty Inherent in Projections** – While this analysis complies with applicable Actuarial Standards of Practice and Statements of Principles, users of this analysis should recognize that our projections involve estimates of future events and are subject to economic and statistical

variations from expected values. We have not anticipated any extraordinary changes to the legal, social, or economic environment that might affect the frequency or severity of claims. For these reasons, we do not guarantee that the emergence of actual losses will correspond to the projections in this analysis.

**Probability Levels** – We have calculated estimates of the statistical uncertainty associated with the process risk inherent in our estimates. However, unless otherwise indicated, our probability level estimates do not address parameter or model risk. To the extent that the probability estimates do not address parameter risk or model risk, the true variability of results is greater than the range of outcomes presented. The client named herein may wish to consider this additional uncertainty in evaluating the estimates presented in this report.

# **Acknowledgment of Qualifications**

Esther Becker and Tanya Eshel are Associates of the Casualty Actuarial Society (ACAS), Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to provide the actuarial analysis contained herein.

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# Legend

ADC-DD - Adult Day Care: Developmentally Disabled

ADHC - Adult Day Health Care

BB - Blood Banks

CDC: DD - Child Day Care: Developmentally Disabled CDRF - Chemical Dependency Recovery Facility

CLINIC: MULTI - Clinic: Multi-Specialty and Diagnostic Services

CLINIC-AIDS - Clinic: A.I.D.S.
CLINIC-MH - Clinic: Mental Health
CLINIC-PC - Clinic: Primary Care

GH-DD - Group Home: Developmentally Disabled

GH-DD/MD - Group Home: Developmentally Disabled and Mentally Disabled

GH-MD - Group Home: Mentally Disabled

HOSP - Hospital

HOSP-DIST - Hospital: District
HOSP-PSYCH - Hospital: Psychiatric

HOSPICE - Hospice

ICF-DD - Intermediate Care Facility: Developmentally Disabled

MULTI-CCRC - Multi-level Facility: Continuing Care Retirement Community

MULTI-OTH - Multi-level Facility: Other (Month-to-Month)

SNF - Skilled Nursing Facility: Stand Alone

#### Summary of California Statutory Requirements Based on Data as of June 30, 2018

	Statutory Item	Total Reserve without Pipeline IBNR	Total Reserve with Pipeline IBNR
(1)	Capital and Surplus	75,000,000	75,000,000
(2)	Case Reserve (Current Default)	44,294,107	44,294,107
(3)	Pipeline IBNR Reserve	N/A	10,101,926
(4)	Recoveries	(15,096,069)	(15,096,069)
(5)	Contingency Reserve	13,436,731	13,436,731
(6)	Unearned Premium Reserve	61,937,455	61,937,455
(7)	Total	179,572,224	189,674,150

#### Notes:

- (1) Minimum capital and surplus requirement according to California Statutory Insurance Code Section 12107
- (2) From Section I, Exhibit 2, Column (11) Total defaulted as of 6/30/18
- (3) From Section I, Exhibit 2, Column (11) Pipeline defaulted after 6/30/18
- (4) From Section I, Exhibit 4, Column (9) and Section I, Exhibit 5, Column (5); including Kern Valley
- (5) From Section I, Exhibit 6, Row (3)
- (6) From Section I, Exhibit 7, Row (6)
- (7) Sum of Rows (1) through (6)

#### Summary of Defaulted Loans - Current or in Pipeline Case Reserves as of June 30, 2018

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Loan ID	Borrower	Dates of Default	Original Loan Balance	Loan Balance at Time of Default	Current Loan Principal Balances	Projected Principal and Interest Payment	Probability of Payment	Estimated Undiscounted Case Reserve	Discount Factor	Estimated Discounted Case Reserve
0695, 1007	Sherman Oaks Health System	7/26/1995, 12/11/2013	182,230,000	206,755,000	39,220,000	42,931,227	100%	42,931,227	96.3%	41,342,506
0764, 0830	Kern Valley Healthcare District *	6/23/2010, 7/1/2011	17,770,000	14,438,133	6,070,300	6,198,681				
	a) Kern Valley Shortfall					2,728,000	100%	2,728,000	96.0%	2,617,822
	b) Kern Valley Bond Payment to	Trustee				3,470,681	10%	347,068	96.2%	333,780
	Pipeline Default (Financial Performan	ce Problems) **								
	CA Nevada Methodist Homes San Benito Health Care District		36,445,000 24,915,000		32,685,705 19,305,000		25% 10%	8,171,426 1,930,500	N/A N/A	8,171,426 1,930,500
	Total Defaulted as of 6/30/18		200,000,000	221,193,133	45,290,300			46,006,295		44,294,107
	Pipeline Default After 6/30/18		61,360,000	N/A	51,990,705			10,101,926		10,101,926
	TOTALS		261,360,000	221,193,133	97,281,005			56,108,221		54,396,033

#### Notes

(1) - (8) Provided by Cal-Mortgage

 $<sup>(9) = (7) \</sup>times (8)$ 

<sup>(10)</sup> from Section I, Exhibit 3

 $<sup>(11) = (9) \</sup>times (10)$ 

<sup>\*</sup> Note Cal Mortgage's obligation or case reserve is the the "shortfall" amounts being paid by Cal Mortgage (b); however Kern Valley is still making payments to Trustee (b) and it is possible that Cal Mortgage will be responsible to pay a portion of the payments to the Trustee in the event Kern Valley is unable to

<sup>\*\*</sup> HFCLIF payments expected for other borrowers not yet in default; referred to as "Financial Performance Problems" in PPR Reports

# Projected Principal and Interest Payment for Defaulted Loans Nominal (Excluding Pipeline) Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)
Fiscal Year	Sherman Oaks Health System	Kern Valley Healthcare District Shortfall	Kern Valley Healthcare District Bond Payment to Trustee	Total	Total, Probability Adjusted
7/1/2018-6/30/2019 7/1/2019-6/30/2020 7/1/2020-6/30/2021 7/1/2021-6/30/2022 7/1/2022-6/30/2023	11,311,102 11,822,000 11,808,250 7,989,875	633,000 660,000 700,000 735,000	917,331 890,500 850,675 812,175	12,861,433 13,372,500 13,358,925 9,537,050	12,035,835 12,571,050 12,593,318 8,806,093
(6) Total (Undiscounted)	42,931,227	2,728,000	3,470,681	49,129,908	46,006,295
(7) Expected PV(loss) after 6/30/18	41,342,506	2,617,822	3,337,797	47,298,125	44,294,107
(8) Discount Factor	96.30%	95.96%	96.17%	96.27%	96.28%
(9) Probability of Payment	100.00%	100.00%	10.00%		

#### Notes:

- (1) Provided by Cal-Mortgage
- (2) Provided by Cal-Mortgage
- (3) Provided by Cal-Mortgage
- (4) = (1) + (2) + (3)
- (5) = 4, adjusted by probability of payment in (9)
- (6) Sum of each column
- (7) Discounted total of payments, based on interest rates from Section III, Exhibit 1, Page 1, Column (14)
- (8) = (7) / (6)
- (9) from Section I, Exhibit 2, Column 8

#### Summary of Resolved Loans Based on Data as of June 30, 2018

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Loan ID	Borrower	Original Loan Balance	Date of Loan Default	Loan Balance at Time of Default	Total Net Payment From HFCLIF*	Date Resolved	Estimated Recoveries or Future Income**	Estimated Discounted Recovery
0446, 0846, 0926 0738, 0739, 0748 0973 0564, 0929, 0944, 0945	Hermandad Mexicana Nacional Los Medanos HealthCare District Verdugo Mental Health Mendocino Coast District Hospital	4,585,000 11,080,000 6,315,000 12,830,000	12/29/1998 8/28/1995 12/9/2010 12/14/2012	4,095,000 9,161,896 5,220,000 1,000,000	4,231,569 1,702,671 4,246,249 624,539	9/9/2010 6/18/2007 5/13/2011 3/31/2015	680,951 1,000,000 6,577,023 945,561	616,467 978,949 4,722,997 1,254,810
TOTALS		34,810,000			10,805,028		9,203,535	7,573,223

#### Notes:

(1) - (8) Provided by Cal-Mortgage

(9) From Section I, Exhibit 5

<sup>\*</sup> Total Payment from HFCLIF is net; includes payouts and recoveries

<sup>\*\*</sup> Recovery or future income includes principal and interest income

#### **Estimated Recoveries by Borrower** Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Hermandad	Los Medanos	Verdugo Mental	Mendocino	Kern Valley		Total,
Fiscal Period	Mexicana	HealthCare	Health	Coast District	Healthcare	Total	Probability
	Nacional	District		Hospital	District		Adjusted
7/1/2018-6/30/2019	72,897	500,000	252,962	233,207	211,180	1,270,247	1,217,452
7/1/2019-6/30/2020	72,897	500,000	252,962	223,207	241,570	1,290,637	1,230,244
7/1/2020-6/30/2021	72,897		252,962	243,884	273,310	843,053	774,726
7/1/2021-6/30/2022	72,897		252,962	245,264	307,050	878,173	801,411
7/1/2022-6/30/2023	72,897		252,962		1,052,340	1,378,200	1,115,115
7/1/2023-6/30/2024	72,897		252,962		1,025,590	1,351,450	1,095,052
7/1/2024-6/30/2025	72,897		252,962		993,340	1,319,200	1,070,865
7/1/2025-6/30/2026	72,897		252,962		980,840	1,306,700	1,061,490
7/1/2026-6/30/2027	72,897		252,962		967,090	1,292,950	1,051,177
7/1/2027-6/30/2028	24,874		252,962		962,090	1,239,926	999,404
7/1/2028-6/30/2029			252,962		935,340	1,188,302	954,467
7/1/2029-6/30/2030			252,962		899,635	1,152,597	927,688
7/1/2030-6/30/2031			252,962			252,962	252,962
7/1/2031-6/30/2032			252,962			252,962	252,962
7/1/2032-6/30/2033			252,962			252,962	252,962
7/1/2033-6/30/2034			252,962			252,962	252,962
7/1/2034-6/30/2035			252,962			252,962	252,962
7/1/2035-6/30/2036			252,962			252,962	252,962
7/1/2036-6/30/2037			252,962			252,962	252,962
7/1/2037-6/30/2038			252,962			252,962	252,962
7/1/2038-6/30/2039			252,962			252,962	252,962
7/1/2039-6/30/2040			252,962			252,962	252,962
7/1/2040-6/30/2041			252,962			252,962	252,962
7/1/2041-6/30/2042			252,962			252,962	252,962
7/1/2042-6/30/2043			252,962			252,962	252,962
7/1/2043-6/30/2044			252,962			252,962	252,962
7/1/2044-6/30/2045							
(8) Total (undiscounted)	680,951	1,000,000	6,577,023	945,561	8,849,372	18,052,907	15,840,564
(9) Probability of recovery	100%	100%	100%	100%	75%		
(10) Probable recovery	680,951	1,000,000	6,577,023	945,561	6,637,029	15,840,564	15,840,564
(11) Discounted recovery	616,467	978,949	4,722,997	1,254,810	7,522,847	15,096,069	13,847,444

#### Notes:

<sup>(1) - (4)</sup> Provided by Cal-Mortgage

<sup>(6) = (1) + (2) + (3) + (5)</sup> (7) = (6), adjusted by probability of payment (8) Sum of each column

<sup>(9)</sup> Provided by Cal-Mortgage

 $<sup>(10) = (8) \</sup>times (9)$ 

<sup>(11)</sup> Discounted total of payments, based on interest rates from Section III, Exhibit 1, Page 1, Column (14)

## Contingency Reserves Calculation Based on Data as of June 30, 2018

(1) Principal Outstanding 1,679,591,385

(2) Contingency Factor 0.80%

(3) Contingency Reserves Requirement 13,436,731

- (1) Provided by Cal-Mortgage
- (2) According to California Statutory Insurance Code Section 12108
- $(3) = (1) \times (2)$ 
  - \* Contingency reserves are 0.8% of principal outstanding on a fully funded basis according to California Insurance Code 12108

#### Unearned Premium Reserves Calculation Based on Data as of June 30, 2018

	(1)	(2)	(3)
Month	Annual Premium	Unearned Premium Reserve Factor	Unearned Premium Reserves
Jul-17		0.0417	0
Aug-17	5,592	0.1250	699
Sep-17	3,099	0.2083	646
Oct-17	1,605	0.2917	468
Nov-17	6,357	0.3750	2,384
Dec-17	5,550	0.4583	2,544
Jan-18	0	0.5417	0
Feb-18	0	0.6250	0
Mar-18	1,334	0.7083	945
Apr-18	0	0.7917	0
May-18	5,853	0.8750	5,121
Jun-18	0	0.9583	0

(4)	Subtotal (Annual Premium)	12,807
(5)	Subtotal (One-time Premium)	61,924,648
(6)	Total Unearned Premium Reserves	61,937,455

- (1) Provided by Cal-Mortgage
- (2) Based on monthly pro-rata basis as required by California Insurance Code 12110
- $(3) = (1) \times (2)$
- (4) = sum of column (3)
- (5) = Section I, Exhibit 8, Column (9)
- (6) = (4) + (5)

#### Unearned Premium Reserves Calculation - One-time Nonrefundable Premium\* Based on Data as of June 30, 2018

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project Number	Borrower Name	Project Name	Facility Group	Date Loan Insured	Original Insured Amount	Current Principal Balance	Total Premium	Unearned Premium
0764	KERN VALLEY HEALTHCARE DISTRICT	KERN VALLEY HEALTHCARE DISTRICT - L O C	HOSP	23-Jun-2000	5.000.000	605.300	6.075	0
0764	PROTOTYPES	PROTOTYPES	OTHER	27-Jun-2001	4,195,000	1,385,000	228,529	75,450
0804	NORTH COUNTY SERENITY HOUSE	NORTH COUNTY SERENITY HOUSE	OTHER	28-Jan-2003	5.795.000	2,945,000	314.395	159 775
0815	PRINCIPLES, INC.	PRINCIPLES, INC.	OTHER	29-Apr-2003	2,040,000	600,000	92.054	27,075
0826	MOMENTUM FOR MENTAL HEALTH	MOMENTUM FOR MENTAL HEALTH - AMBAC	OTHER	13-Nov-2003	10,500,000	3,160,000	462,698	139,250
0830	KERN VALLEY HEALTHCARE DISTRICT	KERN VALLEY HEALTHCARE DISTRICT	HOSP	26-Sep-2003	17,770,000	5,465,000	821,553	252,661
0851	HEALTHRIGHT 360	HEALTHRIGHT 360 (WALDEN HOUSE) - RADIAN	OTHER	30-Dec-2004	7,475,000	2,215,000	316,354	93,742
0859 0895	COMMUNITY MEDICAL CENTER, INC.	COMMUNITY MEDICAL CENTERS, INC F G I C	CLINIC MULTI	12-Apr-2005 14-Feb-2008	3,220,000	1,195,000 17.595.000	145,060	53,834 795,414
0897	LOS ANGELES JEWISH HOME FOR THE AGING VALLEY HEALTH TEAM, INC.	LOS ANGELES JEWISH HOME FOR THE AGING VALLEY HEALTH TEAM, INC.	CLINIC	11-Mar-2008	59,595,000 2,325,000	1,400,000	2,694,101 112,760	67,898
0900	LA MAESTRA FAMILY CLINIC, INC.	LA MAESTRA FAMILY CLINIC, INC.	CLINIC	04-Sep-2008	18,500,000	15,730,000	1,029,251	875,142
0902	HEALTHRIGHT 360	HEALTHRIGHT 360 (WALDEN HOUSE - L O C)	OTHER	18-Jul-2008	4,500,000	4,500,000	10,800	0
0911	LOS ANGELES JEWISH HOME FOR THE AGING	LOS ANGELES JEWISH HOME FOR THE AGING - LOC	MULTI	20-Jan-2009	4,750,000	-	57,000	0
0930	SALUD PARA LA GENTE	SALUD PARA LA GENTE	CLINIC	17-Mar-2010	3,350,000	2,035,000	142,165	86,360
0931	THE HELP GROUP	THE HELP GROUP	CLINIC	19-Nov-2009	5,395,000	4,665,000	335,920	290,467
0932 0940	ST. ROSE HOSPITAL CASA DE LAS CAMPANAS	ST. ROSE HOSPITAL - L O C CASA DE LAS CAMPANAS	HOSP MULTI	28-May-2009 28-Jan-2010	10,000,000	45,990,000	42,175	1,675,635
0940	VOCATIONAL VISIONS	VOCATIONAL VISIONS	OTHER	09-Jul-2010	54,310,000 2,370,000	1,945,000	1,978,772 129,960	106,655
0952	NORTH KERN - SOUTH TULARE HOSPITAL DISTRICT	NORTH KERN SOUTH TULARE HOSPITAL DISTRICT	SNF	09-Sep-2010	7,115,000	4,985,000	331,817	232,482
0955	LINCOLN GLEN MANOR FOR SENIOR CITIZENS	LINCOLN GLEN MANOR	MULTI	27-Apr-2011	14,000,000	1,240,000	805,319	71,328
0961	UNITED HEALTH CENTER OF THE SAN JOAQUIN VALLEY	UNITED HEALTH CENTERS OF THE SAN JOAQUIN VALLEY	CLINIC	20-Apr-2011	5,020,000	4,455,000	343,846	305,146
0963	COMMUNITY PROGRAM FOR PERSONS WITH DEVELOPMENTAL	COMMUNITY PROGRAM FOR PERSONS WITH DEVELOPMENTAL DISABILITIES	OTHER	17-Feb-2011	76,970,000	49,090,000	2,319,304	1,479,208
0964	FELLOWSHIP HOMES, INC.	FELLOWSHIP HOMES - CASA DE MODESTO	MULTI	07-Oct-2011	2,785,000	770,000	99,044	27,384
0971	T L C CHILD & FAMILY SERVICES	TLC CHILD & FAMILY SERVICES	OTHER	06-Oct-2011	2,475,000	1,420,000	94,978	54,492
0974 0976	GATEWAYS HOSPITAL & MENTAL CENTERS THE HELP GROUP	GATEWAYS HOSPITAL & MENTAL HEALTH CENTER THE HELP GROUP	CLINIC	01-Dec-2011 23-Oct-2011	8,085,000 23,360,000	6,785,000 13,310,000	428,068 901.645	359,238 513,737
0976	BEACON HOUSE	BEACON HOUSE ASSOCIATION, THE	OTHER	20-Oct-2011	1,505,000	825,000	55.900	30.643
833B	MARSHALL MEDICAL CENTER	MARSHALL MEDICAL CENTER - AMBAC	HOSP	25-Mar-2004	20,000,000	20,000,000	1,943,759	1,943,759
903A	ENLOE MEDICAL CENTER	ENLOE MEDICAL CENTER	HOSP	20-Aug-2008	68,915,000	33,920,000	1,935,403	952,606
0991	ARARAT HOME OF LOS ANGELES, INC.	ARARAT HOME OF LOS ANGELES, INC.	MULTI	26-Nov-2012	2,990,000	1,205,000	103,445	41,689
0999	BECOMING INDEPENDENT	BECOMING INDEPENDENT	OTHER	30-Apr-2013	4,865,000	3,400,000	188,500	131,737
0988 1002	CHINESE HOSPITAL COMMUNITY CHURCH RETIREMENT CENTER	CHINESE HOSPITAL COMMUNITY CHURCH RETIREMENT CENTER (THE REDWOODS)	HOSP MULTI	08-Nov-2012 26-Nov-2013	65,000,000 29,970,000	60,960,000 28,930,000	2,347,615 1,700,435	2,201,702
1012	INSTITUTE ON AGING	INSTITUTE ON AGING - LO C	MULTI	26-Nov-2013 24-Mar-2014	4 000 000	2500.000	6 750	1,641,428
0992	LOMPOC DISTRICT HOSPITAL	LOMPOC DISTRICT HOSPITAL	HOSP	07-Mar-2013	18,875,000	17,625,000	861,510	804,456
0997	LOS ANGELES JEWISH HOME FOR THE AGING	LOS ANGELES JEWISH HOME FOR THE AGING	MULTI	20-Dec-2013	71,155,000	60,950,000	2,270,808	1,945,131
0984	MARSHALL MEDICAL CENTER	MARSHALL MEDICAL CENTER	HOSP	26-Sep-2012	17,805,000	7,870,000	414,659	183,284
1001	MONTECEDRO	MONTECEDRO	MULTI	12-Jun-2014	140,305,000	44,805,000	5,513,337	1,760,629
0996 0987	NORTHERN CALIFORNIA RETIRED OFFICERS COMMUNITY O'CONNOR WOODS HOLDING COMPANY	NORTHERN CALIFORNIA RETIRED OFFICERS COMMUNITY O'CONNOR WOODS	MULTI MULTI	04-Apr-2013	32,315,000	21,825,000	806,505	544,700 1.656.944
0982	ODD FELLOWS HOME OF CALIFORNIA	ODD FELLOWS HOME OF CALIFORNIA	MULTI	12-Jun-2013 25-Oct-2012	49,115,000 98.550.000	45,225,000 82,905,000	1,799,465 3.638.187	3.060.618
1003	POWAY R H F HOUSING, INC.	POWAY R H F HOUSING, INC THE GATEWAY	MULTI	07-Nov-2013	13.345.000	11,775,000	675.468	596.001
0983	SAN BENITO HEALTH CARE DISTRICT	SAN BENITO HEALTH CARE DISTRICT	HOSP	19-Mar-2013	24,915,000	19,305,000	953,981	739,177
1011	ST. JOHN'S WELL CHILD AND FAMILY CENTER	ST JOHN'S WELL CHILD AND FAMILY CENTER - L O C	CLINIC	14-Jan-2014	2,000,000	-	1,792,000	0
0977	THE HELP GROUP	THE HELP GROUP	CLINIC	02-Nov-2012	6,210,000	5,425,000	384,321	335,739
1018	CALIFORNIA NEVADA METHODIST HOMES	FOREST HILL MANOR (CA NEV METHODIST HOMES)	MULTI	20-Oct-2015	32,920,000	31,990,000	1,368,150	1,329,499
1015 1021	CASA DE LAS CAMPANAS ENLOE MEDICAL CENTER	CASA DE LAS CAMPANAS ENLOE MEDICAL CENTER	MULTI HOSP	04-Dec-2014 19-Nov-2015	19,000,000 173,730,000	18,190,000 173,730,000	279,145 3,346,810	267,245 3,346,810
1016	LINCOLN GLEN MANOR FOR SENIOR CITIZENS	LINCOLN GLEN MANOR	MULTI	11-Feb-2015	11.965.000	11.870.000	402.951	399.752
1009	LOS ANGELES JEWISH HOME FOR THE AGING	LOS ANGELES JEWISH HOME FOR THE AGING	MULTI	27-Aug-2014	115,605,000	33,735,000	4,956,309	1,446,314
1017	MARSHALL MEDICAL CENTER	MARSHALL MEDICAL CENTER	HOSP	09-Apr-2015	26,895,000	26,515,000	791,050	779,873
1014	NORTHERN CALIFORNIA PRESBYTERIAN HOMES & SERVICES	NORTHERN CALIFORNIA PRESBYTERIAN HOMES	MULTI	15-Apr-2015	63,210,000	60,770,000	2,122,766	2,040,824
1027	SIERRA VIEW HOMES INC.	SIERRA VIEW HOMES INC.	MULTI	09-Jun-2016	12,310,000	11,940,000	342,440	332,148
1006 1025	SOLVANG LUTHERAN HOME, INC. ST. ROSE HOSPITAL	SOLVANG LUTHERAN HOME, INC. ST. ROSE HOSPITAL	MULTI HOSP	17-Jul-2014 25-May-2016	3,470,000 38,000,000	3,340,000 33,579,380	151,941 1,014,952	146,249 896 880
1025	ASIAN COMMUNITY CENTER OF SACRAMENTO VALLEY	ASIAN COMMUNITY SKILLED NURSING FACILITY	SNF	25-May-2016 22-Nov-2016	16 080 000	33,579,380 15,545,000	1,014,952 443,678	896,880 428,916
1033	ATHERTON BAPTIST HOMES	ATHERTON BAPTIST HOMES	MULTI	04-Nov-2016	31.390.000	30,435,000	1,302,380	1.262.757
1053	CALIFORNIA NEVADA METHODIST HOMES	CALIFORNIA NEVADA METHODIST HOMES	MULTI	27-Jun-2018	3,525,000	695,705	9,728	1,920
1031	CASA DE LAS CAMPANAS	CASA DE LAS CAMPANAS	MULTI	24-Aug-2017	39,000,000	51,000	541,157	708
1041	CHANNING HOUSE	CHANNING HOUSE	MULTI	18-Apr-2017	54,045,000	53,760,000	1,732,948	1,723,810
1044	CHANNING HOUSE	CHANNING HOUSE	MULTI	25-Oct-2017	44,120,000	44,120,000	2,735,573	2,735,573
1034 1043	HILL COUNTRY COMMUNITY CLINIC INSTITUTE ON AGING	HILL COUNTRY COMMUNITY CLINIC INSTITUTE ON AGING	CLINIC MULTI	03-Nov-2016 31-May-2017	4,055,000 34,355,000	3,975,000 34,355,000	127,486 1,276,937	124,971 1,276,937
1043	JEWISH HOME OF SAN FRANCISCO	JEWISH HOME OF SAN FRANCISCO	SNF	31-May-2017 29-Nov-2016	135,920,000	135,920,000	1,276,937 6,667,494	6,667,494
1030	MENDOCINO COAST HEALTH CARE DISTRICT CORP.	MENDOCINO COAST HOSPITAL	HOSP	29-Jul-2016	5.745.000	5.090.000	170.817	151.342
1029	MOUNTAIN SHADOWS SUPPORT GROUP	MOUNTAIN SHADOWS SUPPORT GROUP	OTHER	27-Oct-2016	13,240,000	11,740,000	524,444	465,028
1037	NORTHERN CALIFORNIA RETIRED OFFICERS COMMUNITY	PARADISE VALLEY ESTATES	MULTI	30-Nov-2016	22,080,000	21,605,000	618,237	604,937
1045	OPTIONS FAMILY OF SERVICES	OPTIONS FAMILY OF SERVICES	OTHER	12-Oct-2017	2,140,000	2,085,000	61,203	59,630
1033	PETALUMA HEALTH CENTER	PETALUMA HEALTH CENTER	CLINIC	13-Sep-2016	5,775,000	5,600,000	153,716	149,058
1038 1028	PILGRIM PLACE IN CLAREMONT, INC. SANTA ROSA COMMUNITY HEALTH CENTERS	PILGRIM PLACE IN CLAREMONT, INC. SANTA ROSA COMMUNITY HEALTH CENTERS	MULTI	30-Nov-2016 12-Jul-2016	36,055,000 11,105,000	35,045,000 10,375,000	1,345,360 174,301	1,307,673 162.843
1028	SOUTHERN CALIFORNIA DEVELOPMENT - V O A, INC.	V O A NATIONAL CITY	OTHER	12-Jul-2016 15-Mar-2017	4,700,000	4,660,000	154,947	153,628
1042	ST. JOHN'S WELL CHILD AND FAMILY CENTER	ST. JOHN'S WELL CHILD AND FAMILY CENTER	CLINIC	12-Jul-2017	5,250,000	5,250,000	174,251	174,251
1047	VIAMONTE SENIOR LIVING	VIAMONTE SENIOR LIVING	MULTI	24-May-2018	187,230,000	187,230,000	7,174,964	7,174,964
				-				
			TOTALO		2 405 050 000	1 676 101 00-	04 004 000	64 004 040
			TOTALS		2,185,650,000	1,676,131,385	81,801,826	61,924,648

Notes:
(1) - (8) Provided by Cal-Mortgage
(9) = (7) - (6) x (8), capped by total premium

\* Under California Health Facility Construction Loan Insurance Law Section 129040, one-time premiums are nonrefundable

#### Distribution of Active Loans by Facility Type Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Facility Type	Number of Projects	Number of Borrowers	Original Insured Amount	Principal Balance	Distribution By Number of Projects	Distribution By Number of Borrowers	Distribution By Original Loan Amount	Distribution By Principal Outstanding
Hospitals	14	9	500,735,000	411,449,680	17.5%	15.0%	22.8%	24.5%
Multi-levels	30	20	1,287,465,000	944,846,705	37.5%	33.3%	58.6%	56.3%
Clinics	15	11	97,465,000	74,010,000	18.8%	18.3%	4.4%	4.4%
SNF	3	3	159,115,000	156,450,000	3.8%	5.0%	7.2%	9.3%
Other	18	17	151,490,000	92,835,000	22.5%	28.3%	6.9%	5.5%
Total	80	60	2,196,270,000	1,679,591,385	100.0%	100.0%	100.0%	100.0%

#### Notes:

(1) - (4) Provided by Cal-Mortgage

(5) = (1) / (1) Total

(6) = (2) / (2) Total

(7) = (3) / (3) Total

(8) = (4) / (4) Total

#### **Summary of Debt Service Coverage Ratios**

Facility Type			Weig	hted Ave	rage						Average							Median			
Facility Type	2017	2016	2015	2014	2013	2012	2011	2017	2016	2015	2014	2013	2012	2011	2017	2016	2015	2014	2013	2012	2011
Hospitals	2.37	1.70	3.32	2.53	1.93	13.46	1.75	2.31	1.78	2.99	1.83	1.36	1.89	1.25	2.58	2.58	2.63	1.63	1.11	1.86	1.34
Multi-levels	1.93	1.73	1.74	2.18	2.68	2.90	2.26	1.74	1.46	2.29	2.00	2.23	1.60	1.87	2.11	1.85	1.84	1.79	2.16	1.67	1.77
Clinics	2.54	3.17	4.06	3.62	2.89	3.58	4.26	3.15	3.13	4.27	5.07	2.17	2.62	2.59	3.02	3.27	3.29	2.81	2.68	2.97	2.43
SNF	2.33	8.86	2.02	2.42	2.52	2.85	3.89	2.68	5.72	2.03	2.19	2.45	2.85	3.31	4.12	2.92	2.04	1.90	2.33	2.85	5.58
Other	1.50	2.06	1.63	1.52	1.86	2.30	5.28	1.16	2.25	1.83	1.52	1.88	3.18	5.33	1.61	1.88	1.59	1.58	1.34	1.11	1.73
Total	2.10	2.61	2.51	2.42	2.33	7.82	2.45	2.08	1.85	2.80	2.31	1.79	1.99	1.92	2.20	2.15	2.26	1.93	1.81	1.57	1.94

#### **Summary of Income Debt Service Ratios**

Facility Type			Weig	ghted Ave	rage						Average							Median			
Facility Type	2017	2016	2015	2014	2013	2012	2011	2017	2016	2015	2014	2013	2012	2011	2017	2016	2015	2014	2013	2012	2011
Hospitals Multi-levels	0.93 0.80	0.28 0.78	2.10 0.46	1.36 0.94	0.86 1.43	11.26 1.84	0.87 0.86	0.93 0.78	0.49 0.60	1.85 1.07	0.78 0.98	0.47 1.21	1.10 0.86	0.47 1.06	1.03 0.91	1.23 0.85	1.55 0.68	0.48 0.90	0.30	0.98 0.82	0.58 1.05
Clinics	1.70	2.13 6.70	2.76 0.77	2.30	1.55	2.41	2.83	2.27	2.14	3.11	3.73	1.20	1.75	1.64	1.68	2.23	1.97	1.49	1.12	1.68	1.59
SNF Other	1.53 1.00	1.36	1.10	1.23 1.05	1.15 1.21	1.59 1.47	2.55 4.45	1.82 0.77	3.97 1.57	0.79 1.22	1.00 0.97	1.07 1.24	1.59 2.36	2.17 4.50	3.01 1.12	1.54 1.07	0.82 1.15	0.71 1.15	0.92 0.78	1.59 0.65	3.66 1.27
Total	0.96	1.41	1.31	1.27	1.18	6.23	1.29	1.05	0.86	1.66	1.27	0.86	1.20	1.09	1.08	1.08	1.29	1.05	0.97	0.82	1.17

#### **Summary of Debt Service Coverage Ratios over Last Seven Years**

#### **Debt Service Coverage Ratios**

Facility Type		2017			2016			2015			2014			2013			2012			2011	
Facility Type	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20
Hospitals Multi-levels Clinics SNF Other	0% 19% 0% 0% 29%	14% 6% 0% 0%	86% 75% 100% 100% 71%	25% 20% 7% 0% 13%	0% 5% 0% 0% 7%	75% 75% 93% 100% 80%	18% 25% 5% 0% 26%	0% 5% 0% 0% 16%	82% 70% 95% 100% 58%	25% 24% 17% 50% 18%	8% 10% 4% 0% 5%	67% 67% 79% 50% 77%	46% 16% 23% 0% 29%	8% 0% 5% 0% 19%	46% 84% 73% 100% 52%	31% 17% 35% 0% 48%	0% 6% 0% 0% 4%	69% 78% 65% 100% 48%	42% 5% 14% 0% 19%	8% 0% 4% 0% 8%	50% 95% 82% 100% 73%
Total	15%	4%	81%	15%	3%	82%	18%	6%	76%	21%	6%	73%	26%	8%	66%	34%	3%	64%	17%	4%	79%

#### Income Debt Service Ratios

Facility Type		2017			2016			2015			2014			2013			2012			2011	
1 acility Type	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20
Hospitals Multi-levels Clinics SNF Other	43% 56% 25% 0% 50%	14% 19% 13% 0% 0%	43% 25% 63% 100% 50%	38% 60% 40% 33% 47%	13% 15% 0% 0% 7%	50% 25% 60% 67% 47%	45% 55% 20% 100% 47%	0% 10% 5% 0% 5%	55% 35% 75% 0% 47%	67% 57% 38% 50% 45%	17% 14% 0% 0% 5%	17% 29% 63% 50%	69% 47% 32% 50% 62%	0% 11% 23% 0% 10%	31% 42% 45% 50% 29%	54% 67% 48% 0% 72%	8% 6% 0% 0% 12%	38% 28% 52% 100% 16%	67% 48% 43% 0% 42%	0% 14% 0% 0% 8%	33% 38% 57% 100% 50%
Total	45%	11%	45%	48%	8%	44%	43%	6%	51%	49%	7%	43%	51%	12%	38%	60%	6%	34%	46%	6%	48%

#### **Summary of Debt Service Ratios**

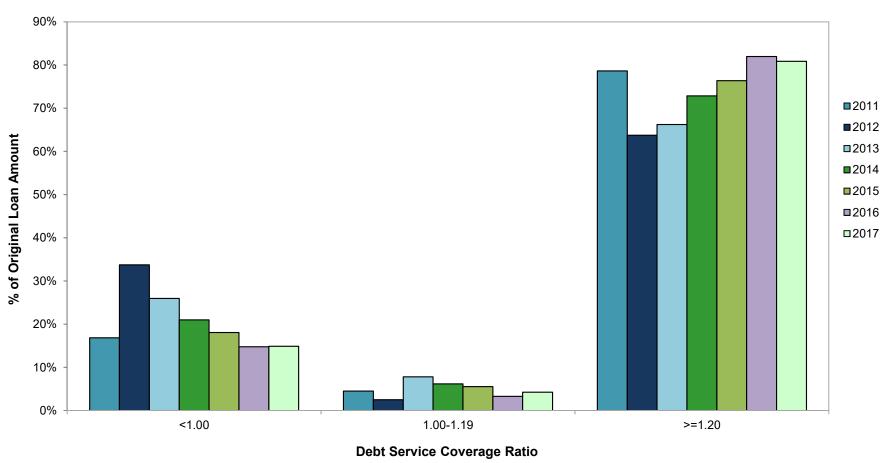
#### **Debt Service Coverage Ratios**

Year					Hospitals			Multi-level	s		Clinics			SNF			Other	
real	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20
2011 2012 2013 2014 2015 2016 2017	17% 34% 26% 21% 18% 15% 15%	4% 3% 8% 6% 6% 3% 4%	79% 64% 66% 73% 76% 82% 81%	42% 31% 46% 25% 18% 25% 0%	8% 0% 8% 8% 0% 0%	50% 69% 46% 67% 82% 75% 86%	5% 17% 16% 24% 25% 20% 19%	0% 6% 0% 10% 5% 5% 6%	95% 78% 84% 67% 70% 75%	14% 35% 23% 17% 5% 7% 0%	4% 0% 5% 4% 0% 0%	82% 65% 73% 79% 95% 93% 100%	0% 0% 0% 50% 0% 0%	0% 0% 0% 0% 0% 0%	100% 100% 100% 50% 100% 100%	19% 48% 29% 18% 26% 13% 29%	8% 4% 19% 5% 16% 7% 0%	73% 48% 52% 77% 58% 80% 71%

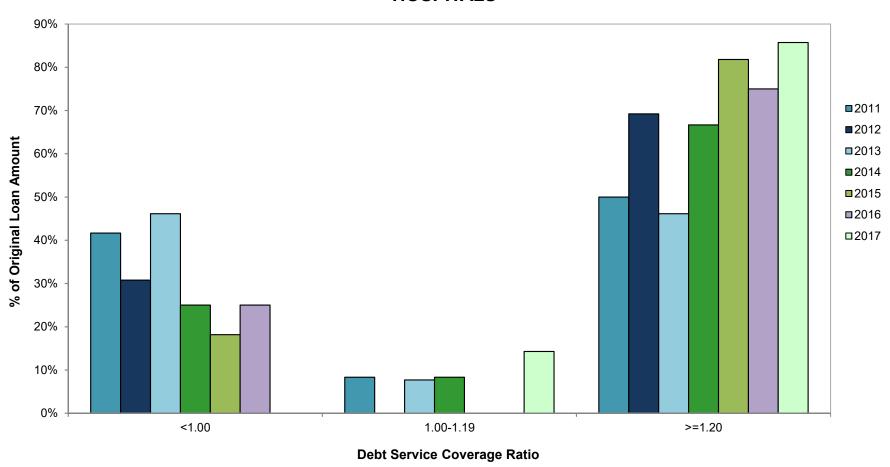
#### **Income Debt Service Ratios**

Year		Total			Hospitals			Multi-level	S		Clinics			SNF			Other	
real	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20	<1.00	1.00-1.19	>=1.20
2011 2012 2013 2014 2015 2016 2017	46% 60% 51% 49% 43% 48% 45%	6% 6% 12% 7% 6% 8% 11%	48% 34% 38% 43% 51% 44% 45%	67% 54% 69% 67% 45% 38% 43%	0% 8% 0% 17% 0% 13% 14%	33% 38% 31% 17% 55% 50% 43%	48% 67% 47% 57% 55% 60% 56%	14% 6% 11% 14% 10% 15%	38% 28% 42% 29% 35% 25%	43% 48% 32% 38% 20% 40% 25%	0% 0% 23% 0% 5% 0% 13%	57% 52% 45% 63% 75% 60% 63%	0% 0% 50% 50% 100% 33% 0%	0% 0% 0% 0% 0% 0%	100% 100% 50% 50% 0% 67% 100%	42% 72% 62% 45% 47% 47% 50%	8% 12% 10% 5% 5% 7% 0%	50% 16% 29% 50% 47% 47% 50%

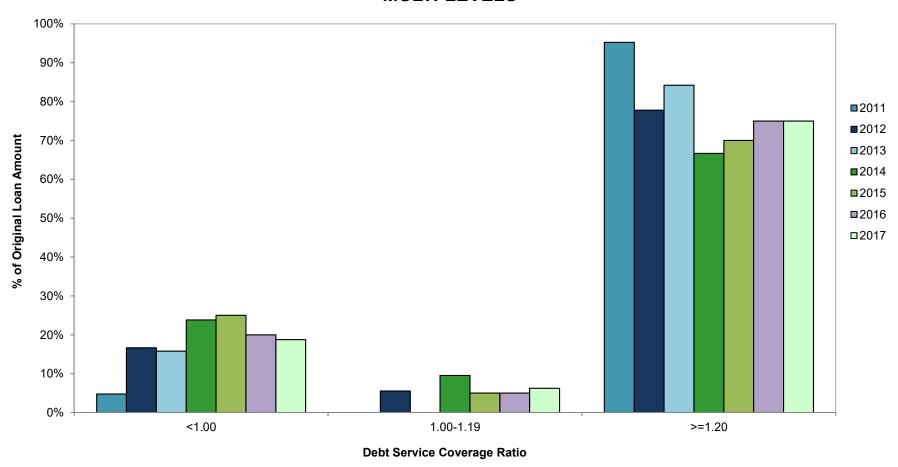
#### **TOTAL**



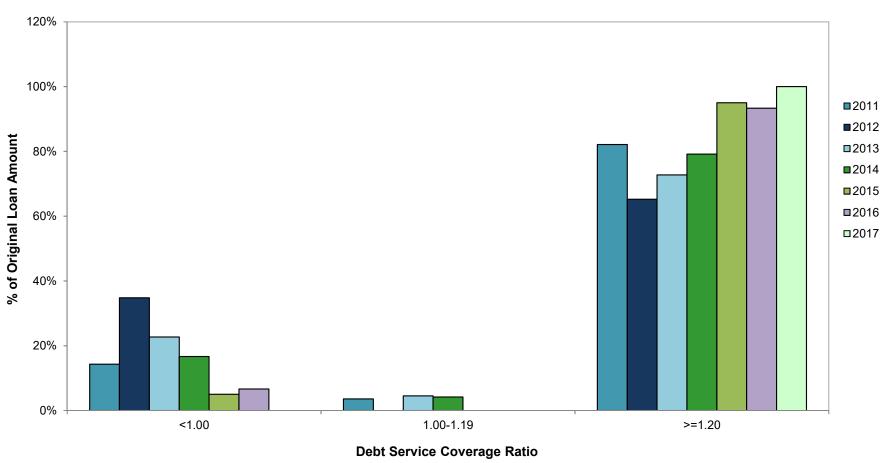
#### **HOSPITALS**



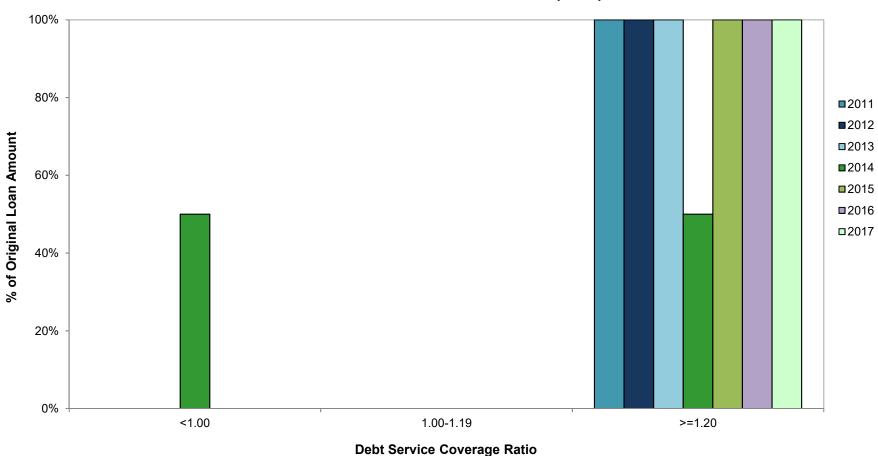
#### **MULTI-LEVELS**



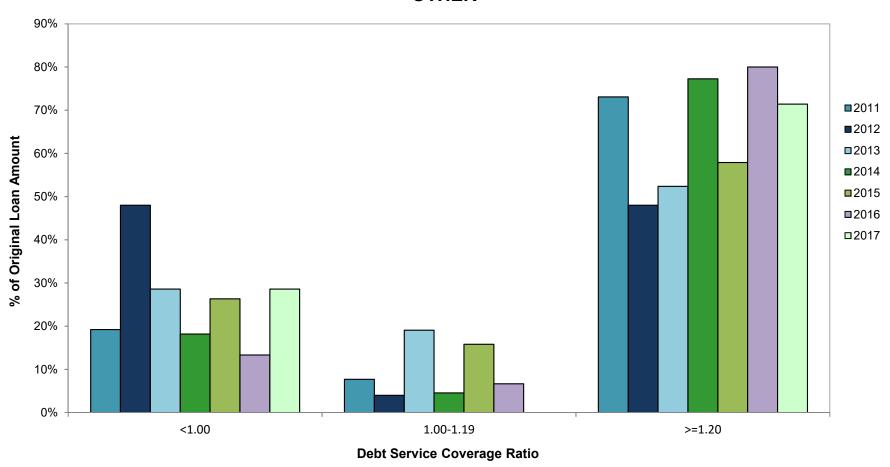
#### **CLINICS**



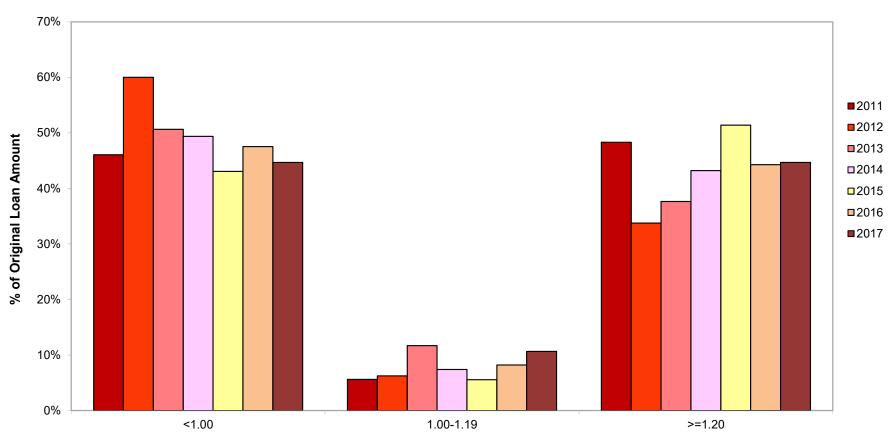
### **SKILLED NURSING FACILITIES (SNF)**



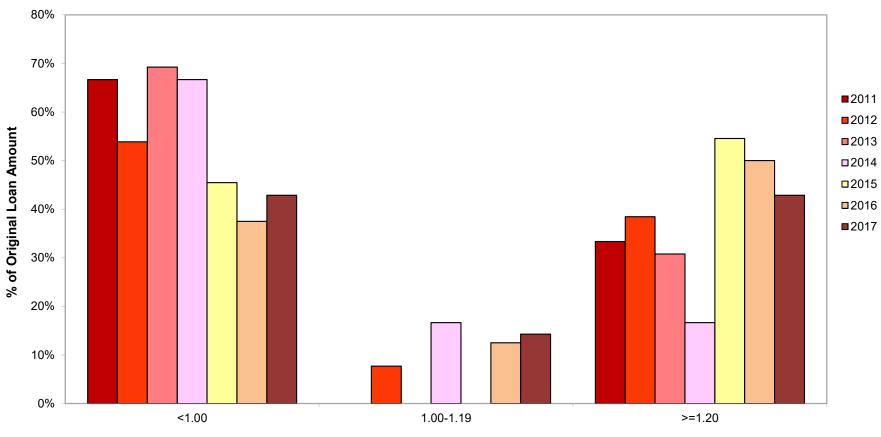
#### **OTHER**



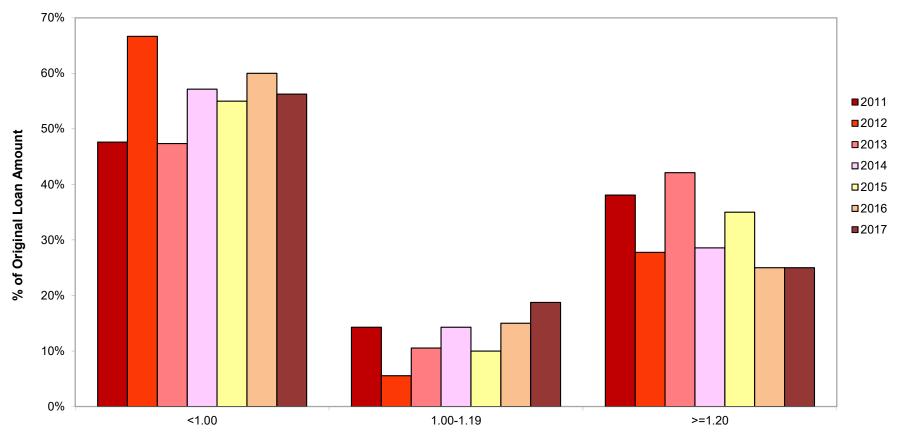
#### **TOTAL**



#### **HOSPITALS**

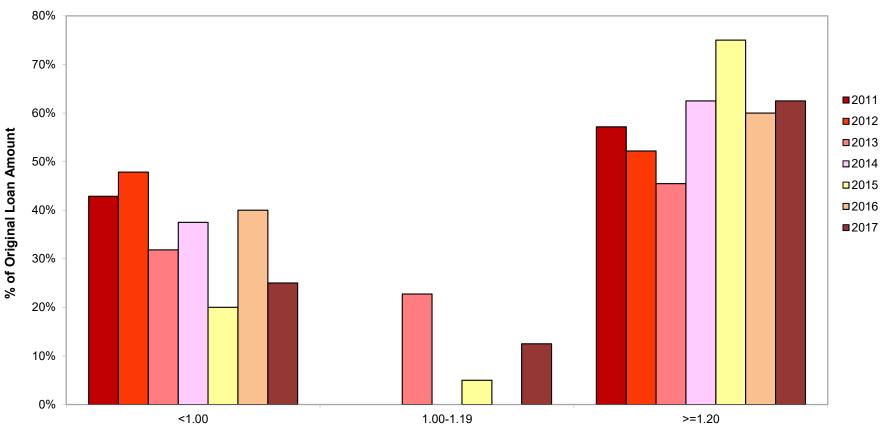


#### **MULTI-LEVELS**

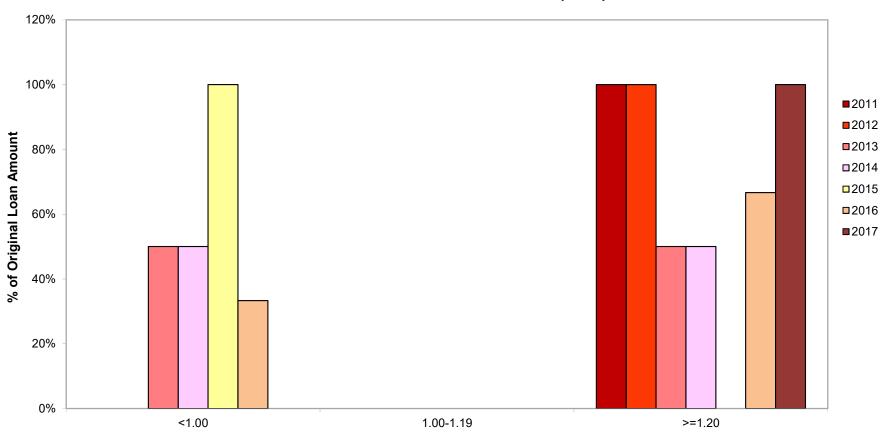


**Total Income Debt Service Coverage Ratio** 

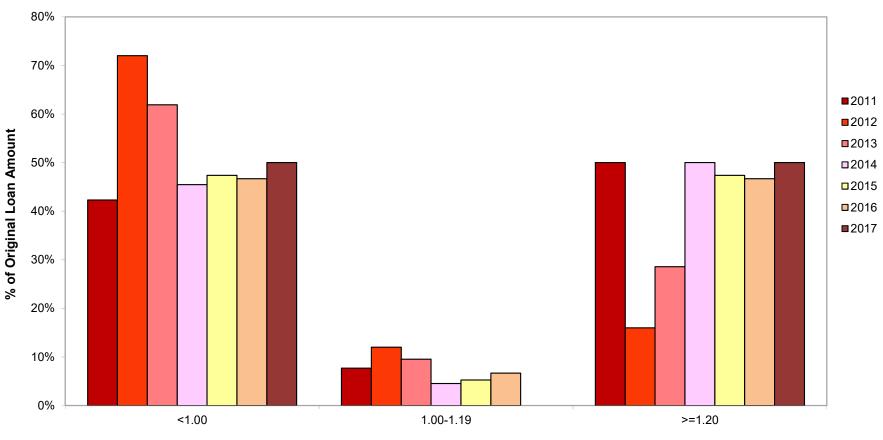
#### **CLINICS**



### **SKILLED NURSING FACILITIES (SNF)**



#### **OTHER**



#### Cash Flow Analysis at 6.40% Default Rate - New Loans Insured (Expected Scenario) Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
		Income from	om Annual Pre	mium Loans		Incon	e from Up-Fro	nt Premium Loa	ans								
Year	Scheduled Amortized Balance	Estimated Default Amount	Percent Terminated & Refinance	Balance Net of Default and Termination	Premium Income	Issued Amount	Estimated Premium as Percent of Insured Amount	Premium Income	Certification and Inspection Fee Income	Cash Inflow from Resolved Loans	Payment on Current Defaults	Payment on Future Default (Including Pipeline)	Administrative Expenses	Investment Yield	Investment Income	Net Cash Flow	Cash Balance
7/1/2017-6/30/2018 7/1/2018-6/30/2019	2,724,509	0	7.0%	3,460,000 2,533,794	29,390 14,984	238,740,000 225,000,000	4.62%	10,687,148 10,400,962	1,081,964 860,358	1,217,452	12,035,835	1,893,710	4,425,158	2.6%	4,259,573	(1,601,375)	169,757,738 168,156,363
7/1/2019-6/30/2020	1,949,709	0	7.0%	1,813,229	10,868	225,000,000	4.62%	10,400,962	860,358	1,230,244	12,571,050	4,136,756	4,575,613	2.0%	3,310,557	(5,470,431)	162,685,932
7/1/2020-6/30/2021	1,257,685	0	7.0%	1,169,647	7,457	225,000,000	4.62%	10,400,962	860,358	774,726	12,593,318	7,001,797	4,731,184	2.0%	3,055,401	(9,227,396)	153,458,536
7/1/2021-6/30/2022	580,965	0	7.0%	540,298	4,275	225,000,000	4.62%	10,400,962	860,358	801,411	8,806,093	8,365,572	4,892,044	2.0%	3,000,125	(6,996,579)	146,461,957
7/1/2022-6/30/2023	48,945	0	7.0%	45,519	1,465	225,000,000	4.62%	10,400,962	860,358	1,115,115	0	9,465,523	5,058,374	2.0%	2,893,323	747,324	147,209,281
7/1/2023-6/30/2024	0	0	7.0%	0	114	250,000,000	4.62%	11,556,624	955,953	1,095,052	0	9,823,413	5,230,359	2.2%	3,244,765	1,798,736	149,008,017
7/1/2024-6/30/2025	0	0	7.0% 7.0%	0	0	250,000,000	4.62%	11,556,624	955,953	1,070,865	0	9,935,561	5,408,191	2.3%	3,374,266	1,613,956	150,621,972
7/1/2025-6/30/2026	0	0	7.0%	0	0	250,000,000	4.62% 4.62%	11,556,624 11,556,624	955,953	1,061,490	0	9,956,423	5,592,069	2.2% 2.3%	3,345,877	1,371,451	151,993,423
7/1/2026-6/30/2027	0	0		0	-	250,000,000			955,953	1,051,177	0	9,961,045	5,782,200		3,427,862	1,248,371	153,241,794
7/1/2027-6/30/2028 7/1/2028-6/30/2029	0	0	7.0% 7.0%	0	0	250,000,000 275,000,000	4.62% 4.62%	11,556,624 12,712,286	955,953 1,051,548	999,404 954,467	0	9,951,900 9,964,086	5,978,795 6,182,074	2.3% 2.5%	3,508,063 3,798,444	1,089,349 2,370,586	154,331,143 156,701,728
7/1/2029-6/30/2029	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1,051,548	954,467	0		6,182,074	2.5%			158,925,542
7/1/2029-6/30/2030	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1,051,548	252,962	0	10,025,584 10.113.514	6,392,264	2.5%	3,950,139 4,093,297	2,223,813 1,386,979	160,312,520
7/1/2030-6/30/2031	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1,051,548	252,962	0	10,113,514	6.834.327	2.6%	4,226,380	1,386,979	161,493,695
7/1/2031-6/30/2032	0	0	7.0%	0	0	300.000.000	4.62%	13.867.949	1.147.143	252,962	0	10,362,959	7,066,695	2.7%	4,373,671	2,212,073	163,705,768
7/1/2032-6/30/2034	0	0	7.0%	0	0	300,000,000	4.62%	13,867,949	1,147,143	252,962	0	10,528,401	7,306,962	2.8%	4,535,593	1,968,284	165,674,052
7/1/2034-6/30/2035	0	0	7.0%	0	0	300,000,000	4.62%	13,867,949	1.147.143	252,962	0	10,714,066	7,555,399	2.9%	4,694,680	1,693,270	167,367,322
7/1/2035-6/30/2036	0	0	7.0%	0	0	325.000.000	4.62%	15.023.611	1,242,739	252,962	0	10,926,315	7,812,283	2.9%	4,867,920	2,648,634	170,015,956
7/1/2036-6/30/2037	0	0	7.0%	0	0	325,000,000	4.62%	15.023.611	1,242,739	252,962	0	11,155,476	8.077.900	3.0%	5.055.740	2,341,676	172,357,632
7/1/2037-6/30/2038	0	0	7.0%	0	0	325,000,000	4.62%	15.023.611	1,242,739	252,962	0	11,409,997	8.352.549	3.1%	5,239,393	1.996.160	174,353,793
7/1/2038-6/30/2039	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	11,677,093	8,636,535	2.9%	4,981,045	1,186,729	175,540,522
7/1/2039-6/30/2040	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	n n	11,953,814	8,930,178	2.9%	5,087,626	722,947	176,263,469
7/1/2040-6/30/2041	n n	0	7.0%	0	Ö	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	12,218,666	9,233,804	3.0%	5,182,778	249,621	176,513,090
7/1/2041-6/30/2042	l n	n	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	12,461,850	9.547.753	3.0%	5,265,802	(224,489)	176,288,601
7/1/2042-6/30/2043	l ő	Ö	7.0%	Ö	ő	325.000.000	4.62%	15,023,611	1,242,739	252,962	Ö	12,676,229	9,872,377	3.1%	5,336,197	(693,096)	175,595,504
7/1/2043-6/30/2044	Ō	0	7.0%	0	0	325.000.000	4.62%	15.023.611	1,242,739	252,962	0	12.854.483	10.208.037	3.1%	5,393,649	(1,149,559)	174,445,945
7/1/2044-6/30/2045	Ō	Ō	7.0%	Ō	Ō	325,000,000	4.62%	15,023,611	1,242,739	0	0	12,999,223	10,555,111	3.2%	5,433,864	(1,854,120)	172,591,825
7/1/2045-6/30/2046	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	13,112,532	10,913,984	3.2%	5,456,144	(2,304,022)	170,287,803
7/1/2046-6/30/2047	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	13,199,333	11,285,060	3.3%	5,463,771	(2,754,272)	167,533,531
7/1/2047-6/30/2048	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	13,264,998	11,668,752	3.3%	5,455,957	(3,211,443)	164,322,088

- Notes:

  (1) Based on active loan information from Cal-Mortgage
  (2) From Section III, Appendix, Page 9
  (3) Selected
  (4) =  $[(1) (2)] \times [1 (3)]$ (5) Average of  $[Current \ and \ Prior \ Column(4)] \times 0.5\%$ (6) Provided by Cal-Mortgage
  (7) From Section III, Exhibit 6
  (8) =  $(6) \times (7)$

- (9) Issued amount x (1 % refinanced) x 0.4%(10) From Section I, Exhibit 5
- (11) From Section I, Exhibit 3 (12) From Section III, Appendix, Page 2
- (13) Administrative expenses increase @ 3.40% per year
- (14) Selected investment yield
- (17) Selected investinent yield (15) = [0.5 x [(5) + (8) + (9) + (10) (11) (12) (13)] + prior cash balance] x (14) (16) = (5) + (8) + (9) + (10) (11) (12) (13) + (15) (17) = (16) + (17) prior

#### Cash Flow Analysis at 6.40% Default Rate - No New Loans Insured (Run-Off Scenario) Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		Income	for Annual Prem	ium Loans									
Year	Scheduled Amortized Balance	Estimated Default Amount	Percent Terminated & Refinance	Balance Net of Default and Termination	Premium Income	Cash Inflow from Resolved Loans	Payment on Current Default	Payment on Future Default (Including Pipeline)	Administrative Expenses	Investment Yield	Investment Income	Net Cash Flow	Cash Balance
7/1/2017-6/30/2018				3,460,000	29,390								169,757,738
7/1/2018-6/30/2019	2,724,509	0	7.0%	2,533,794	14,984	1.217.452	12,035,835	1,872,046	4,425,158	2.6%	4,116,083	(12,984,520)	156,773,218
7/1/2019-6/30/2020	1,949,709	Ö	7.0%	1,813,229	10,868	1,230,244	12.571.050	4,007,047	4,425,158	2.0%	2,969,452	(16,792,691)	139,980,527
7/1/2020-6/30/2021	1,257,685	0	7.0%	1,169,647	7,457	774,726	12,593,318	6,518,838	4,425,158	2.0%	2,510,043	(20,245,087)	119,735,439
7/1/2021-6/30/2022	580,965	0	7.0%	540,298	4,275	801,411	8,806,093	7,268,996	4,425,158	2.0%	2,220,651	(17,473,910)	102,261,529
7/1/2022-6/30/2023	48,945	0	7.0%	45,519	1,465	1,115,115	0	7,508,570	4,425,158	2.0%	1,927,429	(8,889,720)	93,371,809
7/1/2023-6/30/2024	0	0	7.0%	0	114	1,095,052	0	6,869,162	4,425,158	2.2%	1,955,287	(8,243,867)	85,127,942
7/1/2024-6/30/2025	0	0	7.0%	0	0	1,070,865	0	5,921,284	4,425,158	2.3%	1,833,519	(7,442,058)	77,685,883
7/1/2025-6/30/2026	0	0	7.0%	0	0	1,061,490	0	4,861,077	4,425,158	2.2%	1,645,125	(6,579,620)	71,106,263
7/1/2026-6/30/2027	0	0	7.0%	0	0	1,051,177	0	3,873,619	4,425,158	2.3%	1,532,902	(5,714,698)	65,391,565
7/1/2027-6/30/2028	0	0	7.0%	0	0	999,404	0	2,977,271	4,425,158	2.3%	1,435,000	(4,968,024)	60,423,541
7/1/2028-6/30/2029	Ō	0	7.0%	0	0	954,467	0	2,242,305	4.425.158	2.5%	1,423,442	(4,289,554)	56,133,987
7/1/2029-6/30/2030	0	0	7.0%	0	0	927,688	0	1,671,625	4,425,158	2.5%	1,357,352	(3,811,743)	52,322,244
7/1/2030-6/30/2031	0	0	7.0%	0	0	252,962	0	1,209,506	4,425,158	2.6%	1,289,287	(4,092,414)	48,229,830
7/1/2031-6/30/2032	0	0	7.0%	0	0	252,962	0	851,787	4,425,158	2.7%	1,216,834	(3,807,149)	44,422,682
7/1/2032-6/30/2033	0	0	7.0%	0	0	252,962	0	580,075	4,425,158	2.7%	1,146,403	(3,605,868)	40,816,813
7/1/2033-6/30/2034	0	0	7.0%	0	0	252,962	0	394,258	4,425,158	2.8%	1,076,040	(3,490,414)	37,326,400
7/1/2034-6/30/2035	0	0	7.0%	0	0	252,962	0	263,108	4,425,158	2.9%	1,003,965	(3,431,339)	33,895,061
7/1/2035-6/30/2036	0	0	7.0%	0	0	252,962	0	165,092	4,425,158	2.9%	928,929	(3,408,358)	30,486,703
7/1/2036-6/30/2037	0	0	7.0%	0	0	252,962	0	96,538	4,425,158	3.0%	849,893	(3,418,841)	27,067,862
7/1/2037-6/30/2038	0	0	7.0%	0	0	252,962	0	52,536	4,425,158	3.1%	765,812	(3,458,920)	23,608,942
7/1/2038-6/30/2039	0	0	7.0%	0	0	252,962	0	27,473	4,425,158	2.9%	621,245	(3,578,423)	20,030,519
7/1/2039-6/30/2040	0	0	7.0%	0	0	252,962	0	13,547	4,425,158	2.9%	526,425	(3,659,318)	16,371,201
7/1/2040-6/30/2041	0	0	7.0%	0	0	252,962	0	7,237	4,425,158	3.0%	425,887	(3,753,546)	12,617,655
7/1/2041-6/30/2042	0	0	7.0%	0	0	252,962	0	3,798	4,425,158	3.0%	319,087	(3,856,907)	8,760,748
7/1/2042-6/30/2043	0	0	7.0%	0	0	252,962	0	1,860	4,425,158	3.1%	205,526	(3,968,530)	4,792,218
7/1/2043-6/30/2044	0	0	7.0%	0	0	252,962	0	936	4,425,158	3.1%	84,686	(4,088,446)	703,772
7/1/2044-6/30/2045	0	0	7.0%	0	0	0	0	529	4,425,158	3.2%	(48,009)	(4,473,696)	(3,769,924)
7/1/2045-6/30/2046	0	0	7.0%	0	0	0	0	224	4,425,158	3.2%	(193,478)	(4,618,860)	(8,388,784)
7/1/2046-6/30/2047	0	0	7.0%	0	0	0	0	49	4,425,158	3.3%	(348,562)	(4,773,769)	(13,162,552)
7/1/2047-6/30/2048	0	0	7.0%	0	0	0	0	0	4,425,158	3.3%	(514,008)	(4,939,166)	(18,101,719)

- (1) Based on active loan information from Cal-Mortgage
- (2) From Section III, Appendix, Page 9
- (3) Selected
- (4) = [(1) (2)] x [1 (3)] (5) Average of [current and prior column(4)] x 0.5%
- (6) From Section I, Exhibit 5

- (7) From Section I, Exhibit 3
- (8) From Section III, Appendix, Page 4
- (9) Administration expense increase @ 0.0% per year
- (10) Selected investment yield
- (11) =  $[0.5 \times [(5) + (6) (7) (8) (9)] + \text{prior cash balance }] \times (10)$ (12) = (5) + (6) (7) (8) (9) + (11)
- (13) = (12) + (13) prior

### Cash Flow Analysis at 8.00% Default Rate - New Loans Insured Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
		Income f	or Annual Premit	ım Loans		Inc	ome from Up-Front	Premium Loan:	S								
Year	Scheduled Amortized Balance	Estimated Default Amount	Percent Terminated & Refinance	Balance Net of Default and Termination	Premium Income	Issued Amount	Estimated Premium as Percent of Insured Amount	Premium Income	Certification and Inspection Fee Income	Cash Inflow from Resolved Loans	Payment on Current Default	Payment on Future Default (Including Pipeline)	Administrative Expenses	Investment Yield	Investment Income	Net Cash Flow	Cash Balance
7/1/2017-6/30/2018				3.460.000	29.390	238,740,000		10.687.148	1.081.964								169.757.738
7/1/2018-6/30/2019	2.724.509	0	7.0%	2,533,794	14.984	225.000.000	4.62%	10,400,962	860,358	1.217.452	12.035.835	2.367.138	4.425.158	2.6%	4.253.529	(2.080.847)	167.676.891
7/1/2019-6/30/2020	1,949,709	0	7.0%	1,813,229	10.868	225,000,000	4.62%	10,400,962	860,358	1,230,244	12,571,050	5.170.944	4,575,613	2.0%	3.290.411	(6,524,765)	161,152,126
7/1/2020-6/30/2021	1,257,685	0	7.0%	1.169.647	7.457	225,000,000	4.62%	10,400,962	860.358	774.726	12,593,318	8.752.246	4,731,184	2.0%	3.008.382	(11,024,864)	150.127.262
7/1/2021-6/30/2022	580.965	0	7.0%	540.298	4.275	225,000,000	4.62%	10,400,962	860.358	801,411	8.806.093	10.456.966	4.892.044	2.0%	2.911.674	(9,176,424)	140.950.838
7/1/2022-6/30/2023	48.945	0	7.0%	45.519	1,465	225,000,000	4.62%	10,400,962	860.358	1.115.115	0,000,000	11.831.904	5.058.374	2.0%	2,760,102	(1,752,277)	139,198,561
7/1/2023-6/30/2024	0.0,0.0	0	7.0%	0,0,0	114	250,000,000	4.62%	11.556.624	955.953	1.095.052	0	12.279.266	5.230.359	2.2%	3.040.123	(861,759)	138.336.801
7/1/2024-6/30/2025	0	0	7.0%	0	0	250,000,000	4.62%	11.556.624	955.953	1.070.865	0	12.419.452	5.408.191	2.3%	3.102.891	(1,141,310)	137,195,492
7/1/2025-6/30/2026	0	0	7.0%	0	0	250,000,000	4.62%	11.556.624	955.953	1.061.490	0	12.445.529	5.592.069	2.2%	3.017.828	(1,445,704)	135,749,788
7/1/2026-6/30/2027	ō	ō	7.0%	ō	ō	250,000,000	4.62%	11,556,624	955,953	1,051,177	Ō	12,451,307	5,782,200	2.3%	3,030,595	(1,639,158)	134,110,630
7/1/2027-6/30/2028	0	0	7.0%	0	0	250,000,000	4.62%	11,556,624	955,953	999,404	0	12,439,874	5.978.795	2.3%	3,037,917	(1,868,771)	132,241,860
7/1/2028-6/30/2029	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1,051,548	954,467	0	12,455,108	6,182,074	2.5%	3,221,452	(697,428)	131,544,432
7/1/2029-6/30/2030	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1,051,548	927,688	0	12,531,980	6,392,264	2.5%	3,280,695	(952,026)	130,592,406
7/1/2030-6/30/2031	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1,051,548	252,962	0	12,641,893	6,609,601	2.6%	3,324,440	(1,910,257)	128,682,149
7/1/2031-6/30/2032	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1,051,548	252,962	0	12,784,593	6,834,327	2.7%	3,350,473	(2,251,651)	126,430,498
7/1/2032-6/30/2033	0	0	7.0%	0	0	300,000,000	4.62%	13,867,949	1,147,143	252,962	0	12,953,699	7,066,695	2.7%	3,382,352	(1,369,987)	125,060,511
7/1/2033-6/30/2034	0	0	7.0%	0	0	300,000,000	4.62%	13,867,949	1,147,143	252,962	0	13,160,501	7,306,962	2.8%	3,419,684	(1,779,725)	123,280,786
7/1/2034-6/30/2035	0	0	7.0%	0	0	300,000,000	4.62%	13,867,949	1,147,143	252,962	0	13,392,582	7,555,399	2.9%	3,444,110	(2,235,816)	121,044,970
7/1/2035-6/30/2036	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	13,657,894	7,812,283	2.9%	3,471,641	(1,479,223)	119,565,747
7/1/2036-6/30/2037	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	13,944,345	8,077,900	3.0%	3,501,639	(2,001,294)	117,564,453
7/1/2037-6/30/2038	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	14,262,496	8,352,549	3.1%	3,514,182	(2,581,550)	114,982,903
7/1/2038-6/30/2039	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	14,596,366	8,636,535	2.9%	3,224,084	(3,489,505)	111,493,398
7/1/2039-6/30/2040	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	14,942,267	8,930,178	2.9%	3,164,153	(4,188,980)	107,304,418
7/1/2040-6/30/2041	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	15,273,333	9,233,804	3.0%	3,080,811	(4,907,013)	102,397,405
7/1/2041-6/30/2042	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	15,577,312	9,547,753	3.0%	2,972,621	(5,633,132)	96,764,274
7/1/2042-6/30/2043	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	15,845,287	9,872,377	3.1%	2,838,344	(6,360,007)	90,404,267
7/1/2043-6/30/2044	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	16,068,103	10,208,037	3.1%	2,676,915	(7,079,914)	83,324,354
7/1/2044-6/30/2045	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	16,249,029	10,555,111	3.2%	2,483,243	(8,054,547)	75,269,807
7/1/2045-6/30/2046	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	16,351,548	10,913,984	3.2%	2,256,371	(8,742,811)	66,526,996
7/1/2046-6/30/2047	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	16,264,970	11,285,060	3.3%	2,001,835	(9,281,845)	57,245,151
7/1/2047-6/30/2048	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	15,709,238	11,668,752	3.3%	1,728,033	(9,383,607)	47,861,544

- Notes:

  (1) Based on active loan information from Cal-Mortgage
  (2) From Section III, Appendix, Page 9 (based on a 6.4% default rate)
  (3) Selected
  (4) = [(1) (2)] x [1 (3)]
  (5) Average of [Current and Prior Column(4)] x 0.5%
  (6) Provided by Cal-Mortgage
  (7) From Section III, Exhibit 6
  (8) = (6) x (7)

- (9) Issued Amount x (1 % Refinanced) x 0.4%
   (10) From Section I, Exhibit 5
   (11) From Section I, Exhibit 3

- (11) From Section II, Exhibit 3
  (12) From Section III, Appendix, Page 6
  (13) Administration expense increase @ 3.4% per year
  (14) Selected Investment Yield
  (15) = [0.5 x | (5) + (8) + (9) + (10) (11) (12) (13) ] + prior cash balance ] x (14)
  (16) = (5) + (8) + (9) + (10) (11) (12) (13) + (15)
  (17) = (16) + (17) prior

### Cash Flow Analysis at 10.00% Default Rate - New Loans Insured Based on Data as of June 30, 2018

_	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
		Income	for Annual Premi	ium Loans		In		ont Premium Loan	S								
Year	Scheduled Amortized Balance	Estimated Default Amount	Percent Terminated & Refinance	Balance Net of Default and Termination	Premium Income	Issued Amount	Estimated Premium as Percent of Insured Amount	Premium Income	Certification and Inspection Fee Income	Cash Inflow from Resolved Loans	Payment on Current Default	Payment on Future Default (Including Pipeline)	Administrative Expenses	Investment Yield	Investment Income	Net Cash Flow	Cash Balance
7/1/2017-6/30/2018				3.460.000	29,390	238.740.000		10.687.148	1,081,964								169,757,738
7/1/2018-6/30/2019	2,724,509	0	7.0%	2,533,794	14,984	225,000,000	4.62%	10,400,962	860,358	1.217.452	12,035,835	2,958,923	4,425,158	2.6%	4,245,974	(2,680,186)	167,077,552
7/1/2019-6/30/2020	1,949,709	0	7.0%	1,813,229	10,868	225,000,000	4.62%	10,400,962	860,358	1,230,244	12,571,050	6,463,681	4,575,613	2.0%	3,265,229	(7,842,684)	159,234,868
7/1/2020-6/30/2021	1,257,685	0	7.0%	1,169,647	7.457	225.000,000	4.62%	10,400,962	860.358	774.726	12,593,318	10.940.308	4.731.184	2.0%	2.949.608	(13.271.699)	145.963.169
7/1/2021-6/30/2022	580.965	ñ	7.0%	540.298	4.275	225.000.000	4.62%	10.400.962	860.358	801.411	8.806.093	13.071.207	4.892.044	2.0%	2.801.110	(11,901,229)	134.061.940
7/1/2022-6/30/2023	48.945	ñ	7.0%	45.519	1.465	225.000.000	4.62%	10.400.962	860.358	1.115.115	0,000,000	14.789.880	5.058.374	2.0%	2.593.576	(4,876,779)	129,185,161
7/1/2023-6/30/2024	0.0,0.0	0	7.0%	0	114	250.000.000	4.62%	11.556.624	955.953	1.095.052	0	15.349.083	5.230.359	2.2%	2,784,320	(4,187,378)	124,997,783
7/1/2024-6/30/2025	0	0	7.0%	0	0	250,000,000	4.62%	11,556,624	955.953	1.070.865	0	15,524,314	5.408.191	2.3%	2,763,673	(4,585,391)	120,412,392
7/1/2025-6/30/2026	0	0	7.0%	0	0	250,000,000	4.62%	11,556,624	955.953	1.061.490	0	15,556,912	5.592.069	2.2%	2,607,768	(4,967,147)	115,445,245
7/1/2026-6/30/2027	0	0	7.0%	0	0	250,000,000	4.62%	11,556,624	955,953	1,051,177	0	15,564,133	5,782,200	2.3%	2,534,011	(5,248,568)	110,196,676
7/1/2027-6/30/2028	ō	ō	7.0%	Ō	ō	250,000,000	4.62%	11,556,624	955.953	999.404	ō	15,549,843	5.978.795	2.3%	2,450,236	(5,566,421)	104,630,256
7/1/2028-6/30/2029	ō	ō	7.0%	Ō	ō	275.000.000	4.62%	12.712.286	1.051.548	954.467	ō	15,568,884	6.182.074	2.5%	2.500.212	(4,532,445)	100.097.811
7/1/2029-6/30/2030	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1.051.548	927.688	0	15.664.975	6.392.264	2.5%	2.443.891	(4.921.826)	95,175,985
7/1/2030-6/30/2031	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1.051.548	252,962	0	15.802.366	6.609.601	2.6%	2,363,369	(6,031,802)	89.144.184
7/1/2031-6/30/2032	0	0	7.0%	0	0	275,000,000	4.62%	12,712,286	1.051.548	252,962	0	15,980,742	6.834.327	2.7%	2,255,589	(6,542,683)	82,601,501
7/1/2032-6/30/2033	0	0	7.0%	0	0	300,000,000	4.62%	13,867,949	1,147,143	252,962	0	16,192,123	7,066,695	2.7%	2,143,203	(5,847,561)	76,753,940
7/1/2033-6/30/2034	0	0	7.0%	0	0	300,000,000	4.62%	13,867,949	1,147,143	252,962	0	16,450,627	7,306,962	2.8%	2,024,799	(6,464,736)	70,289,204
7/1/2034-6/30/2035	0	0	7.0%	0	0	300,000,000	4.62%	13,867,949	1,147,143	252,962	0	16,740,728	7,555,399	2.9%	1,880,898	(7,147,174)	63,142,030
7/1/2035-6/30/2036	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	17,072,367	7,812,283	2.9%	1,726,293	(6,639,045)	56,502,985
7/1/2036-6/30/2037	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	17,430,431	8,077,900	3.0%	1,559,012	(7,430,006)	49,072,979
7/1/2037-6/30/2038	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	17,828,120	8,352,549	3.1%	1,357,668	(8,303,688)	40,769,291
7/1/2038-6/30/2039	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	18,245,458	8,636,535	2.9%	1,027,883	(9,334,798)	31,434,493
7/1/2039-6/30/2040	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	18,677,834	8,930,178	2.9%	759,811	(10,328,889)	21,105,604
7/1/2040-6/30/2041	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	19,091,666	9,233,804	3.0%	453,353	(11,352,804)	9,752,800
7/1/2041-6/30/2042	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	19,471,640	9,547,753	3.0%	106,146	(12,393,935)	(2,641,135)
7/1/2042-6/30/2043	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	19,806,608	9,872,377	3.1%	(283,972)	(13,443,644)	(16,084,779)
7/1/2043-6/30/2044	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	252,962	0	20,085,129	10,208,037	3.1%	(719,002)	(14,492,857)	(30,577,636)
7/1/2044-6/30/2045	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	20,311,286	10,555,111	3.2%	(1,205,033)	(15,805,080)	(46,382,716)
7/1/2045-6/30/2046	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	20,488,331	10,913,984	3.2%	(1,744,768)	(16,880,733)	(63,263,449)
7/1/2046-6/30/2047	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	20,623,958	11,285,060	3.3%	(2,337,188)	(17,979,855)	(81,243,304)
7/1/2047-6/30/2048	0	0	7.0%	0	0	325,000,000	4.62%	15,023,611	1,242,739	0	0	20,726,559	11,668,752	3.3%	(2,985,661)	(19,114,622)	(100,357,926)

- Notes:
  (1) Based on active loan information from Cal-Mortgage
  (2) From Section III, Appendix, Page 9 (based on a 6.4% default rate)
  (3) Selected
  (4) = [(1) (2)] x [1 (3)]
  (5) Average of [Current and Prior Column(4)] x 0.5%
  (6) Provided by Cal-Mortgage
  (7) From Section III, Exhibit 6
  (8) = (6) x (7)

- (9) Issued Amount x ( 1 % Refinanced) x 0.4%
  (10) From Section I, Exhibit 5
  (11) From Section II, Exhibit 3
  (12) From Section III, Appendix, Page 8
  (13) Administration expense increase @ 3.4% per year
  (14) Selected Investment Yield
  (15) = [0.5 x [ (5) + (8) + (9) + (10) (11) (12) (13) ] + prior cash balance ] x (14)
  (16) = (5) + (8) + (9) + (10) (11) (12) (13) + (15)
  (17) = (16) + (17) prior

### Estimate of Cal-Mortgage's Default Rate Based on Data as of June 30, 2018

		_	Cal-Mor	tgage
		Based on Industry Loss Experience	Including Triad	Excluding Triad
(1)	Selected Hospitals Default Rate	1.15%		
(2)	Cal-Mortgage's Hospitals In-Force Current Principal Balance	510,799,680		
(3)	Selected Nursing Homes Default Rate	12.10%		
(4)	Cal-Mortgage's Nursing Homes In-Force Current Principal Balance	1,168,791,705		
(5)	Combined Cal-Mortgage's Hospitals and Nursing Homes Default Rate	8.77%	4.39%	2.01%
(6)	2016 Selected Default Rate	6.10%		
(7)	New Selected Default Rate	6.40%		
(8)	Original Loan Amount Default as of 6/30/2018 - Expected vs. Actual	306,493,674	336,500,000	154,270,000

- (1) From Section III, Exhibit 2, Page 2, Row (6)
- (2) Provided by Cal-Mortgage
- (3) From Section III, Exhibit 2, Page 5, Row (6)
- (4) Provided by Cal-Mortgage
- (5) =  $[(1) \times (2) + (3) \times (4)]/[(2) + (4)]$
- (6) From Cal-Mortgage Analysis at 6/30/2016
- (7) Selected
- (8) Based on (7) and Cal-Mortgage Data

## Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Hospitals Selection of Ultimate Default Rate Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)
Issue	Exposure	Actual Original	Development	Bornhuetter-	Selected
Year	Base	Loan Balance	Method	Ferguson	Ultimate
real	base	Default Rate*	Ultimate*	Method Ultimate	Default Rate
1981	4,606,300	1.94%	1.94%	1.94%	1.94%
1982	8,153,200	1.13%	1.13%	1.13%	1.13%
1983	8,817,100	0.28%	0.28%	0.28%	0.28%
1984	7,589,500	0.23%	0.23%	0.23%	0.23%
1985	23,821,200	0.91%	0.91%	0.91%	0.91%
1986	7,184,300	3.88%	3.88%	3.88%	3.88%
1987	11,121,100	1.92%	1.92%	1.92%	1.92%
1988	10,757,500	0.45%	0.45%	0.45%	0.45%
1989	13,397,300	0.61%	0.61%	0.61%	0.61%
1990	12,003,000	0.82%	0.82%	0.82%	0.82%
1991	15,968,000	2.77%	2.77%	2.77%	2.77%
1992	20,414,100	2.70%	2.70%	2.70%	2.70%
1993	29,001,500	1.93%	1.93%	1.93%	1.93%
1994	13,536,700	1.14%	1.14%	1.14%	1.14%
1995	11,442,100	0.29%	0.29%	0.29%	0.29%
1996	16,356,200	3.30%	3.30%	3.30%	3.30%
1997	22,036,300	1.07%	1.07%	1.07%	1.07%
1998	33,623,500	0.83%	0.83%	0.83%	0.83%
1999	21,678,800	0.45%	0.45%	0.45%	0.45%
2000	14,147,100	0.05%	0.05%	0.05%	0.05%
2001	20,232,300	0.05%	0.05%	0.05%	0.05%
2002	21,982,400	0.44%	0.45%	0.45%	0.45%
2003	25,228,700	2.36%	2.40%	2.38%	2.39%
2004	25,692,900	0.13%	0.13%	0.15%	0.14%
2005	34,117,000	0.42%	0.44%	0.46%	0.45%
2006	32,708,000	0.15%	0.16%	0.21%	0.19%
2007	40,993,900	2.62%	2.85%	2.71%	2.78%
2008	58,165,000	0.29%	0.33%	0.43%	0.38%
2009	43,923,200	0.02%	0.02%	0.20%	0.11%
2010	28,106,300	0.21%	0.28%	0.47%	0.37%
2011	22,644,500	0.23%	0.34%	0.59%	0.46%
2012	27,202,400	0.45%	0.79%	0.92%	0.86%
2013	18,424,500	0.08%	0.19%	0.70%	0.70%
2014	16,235,800			0.75%	0.75%
2015	23,157,400			0.89%	0.89%
2016	37,247,500			1.03%	1.03%
2017	34,727,700			1.09%	1.10%

 Weighted Average All Years
 0.99%

 Weighted Average 1981-2008
 1.13%

 Weighted Average 1992-2014
 0.92%

 Arithmetic Average All Years
 1.08%

 Arithmetic Average 1981-2008
 1.20%

 Arithmetic Average 1992-2014
 0.95%

 Prior Selection
 1.20%

(6) Selected Default Rate 1.15%

- (1) From Alacra, Inc.
- (2) Section III, Exhibit 2, Page 3, Column (2) / (1)
- (3) From Section III, Exhibit 2, Page 3, Column (5)
- (4) From Section III, Exhibit 2, Page 4, Column (9)
- (5) Selected
- (6) Selected
  - \* Note blanks indicate a current default original loan balance of zero (no default rate)

## Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Hospitals Loss Development Method Based on Data as of June 30, 2018

		(1)	(2)	(3)	(4)	(5)
Issue Year	Age	Exposure Base	Default Original Loan Balance To Date	Cumulative Reported Development Factor	Estimated Ultimate	Indicated Default Rate*
1981	444	4,606,300	89.265	1.000	89,265	1.94%
1982	432	8,153,200	92,275	1.000	92,275	1.13%
1983	420	8,817,100	24,345	1.000	24,345	0.28%
1984	408	7,589,500	17,445	1.000	17,445	0.23%
1985	396	23,821,200	217,640	1.000	217,640	0.91%
1986	384	7,184,300	278,965	1.000	278,965	3.88%
1987	372	11,121,100	213,773	1.000	213,773	1.92%
1988	360	10,757,500	48,167	1.000	48,167	0.45%
1989	348	13,397,300	81,805	1.000	81,805	0.61%
1990	336	12,003,000	98,575	1.000	98,575	0.82%
1991	324	15,968,000	442,310	1.000	442,310	2.77%
1992	312	20,414,100	550,989	1.000	550,989	2.70%
1993	300	29,001,500	559,940	1.000	559,940	1.93%
1994	288	13,536,700	154,750	1.000	154,750	1.14%
1995	276	11,442,100	33,370	1.000	33,370	0.29%
1996	264	16,356,200	539,105	1.000	539,105	3.30%
1997	252	22,036,300	236,875	1.000	236,875	1.07%
1998	240	33,623,500	280,025	1.000	280,025	0.83%
1999	228	21,678,800	98,585	1.000	98,585	0.45%
2000	216	14,147,100	6,975	1.000	6,975	0.05%
2001	204	20,232,300	9,110	1.005	9,156	0.05%
2002	192	21,982,400	97,560	1.010	98,538	0.45%
2003	180	25,228,700	595,995	1.015	604,980	2.40%
2004	168	25,692,900	32,680	1.020	33,339	0.13%
2005	156	34,117,000	143,075	1.039	148,585	0.44%
2006	144	32,708,000	49,575	1.059	52,514	0.16%
2007	132	40,993,900	1,072,319	1.091	1,169,966	2.85%
2008	120	58,165,000	166,350	1.146	190,573	0.33%
2009	108	43,923,200	7,875	1.203	9,473	0.02%
2010	96	28,106,300	60,220	1.299	78,233	0.28%
2011	84	22,644,500	51,135	1.494	76,396	0.34%
2012	72	27,202,400	122,049	1.763	215,162	0.79%
2013	60	18,424,500	15,290	2.292	35,041	0.19%
2014	48	16,235,800	0	3.163	0	
2015	36	23,157,400	0	5.218	0	
2016	24	37,247,500	0	16.438	0	
2017	12	34,727,700	0	79.313	0	

 Weighted Average 1981-2014
 0.94%

 Weighted Average 1981-2008
 1.13%

 Weighted Average 1992-2014
 0.87%

 Arithmetic Average 1990-2014
 1.06%

 Arithmetic Average 1992-2008
 1.20%

 Arithmetic Average 1992-2014
 0.99%

 Prior Selected
 1.20%

(6) Selected A Priori Default Rate 1.10%

- (1) From Alacra, Inc.
- (2) From Income Securities Advisors
- (3) Based on the selected development factors
- $(4) = (2) \times (3)$ (5) = (4) / (1)
- (6) Selected
- \* Note blanks indicate a current default original loan balance of zero (no default rate)

## Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Hospitals Bornhuetter-Ferguson Method Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
lssue Year	Exposure Base	A Priori Default Rate	A Priori Defaulting Loan Balance	Expected Percent Unreported	Expected Unreported Defaulted Loan Balance	Expected Reported Defaulted Loan Balance	Default Original Loan Balance To Date	Estimated Ultimate	Indicated Default Rate
1981	4,606,300	1.10%	50,669	0.0%	0	50,669	89,265	89,265	1.94%
1982	8,153,200	1.10%	89.685	0.0%	0	89.685	92,275	92,275	1.13%
1983	8,817,100	1.10%	96,988	0.0%	0	96,988	24,345	24,345	0.28%
1984	7,589,500	1.10%	83,485	0.0%	0	83,485	17,445	17,445	0.23%
1985	23,821,200	1.10%	262,033	0.0%	0	262,033	217,640	217,640	0.91%
1986	7,184,300	1.10%	79,027	0.0%	0	79,027	278,965	278,965	3.88%
1987	11,121,100	1.10%	122,332	0.0%	0	122,332	213,773	213,773	1.92%
1988	10,757,500	1.10%	118,333	0.0%	0	118,333	48,167	48,167	0.45%
1989	13,397,300	1.10%	147,370	0.0%	0	147,370	81,805	81,805	0.61%
1990	12,003,000	1.10%	132,033	0.0%	0	132,033	98,575	98,575	0.82%
1991	15,968,000	1.10%	175,648	0.0%	0	175,648	442,310	442,310	2.77%
1992	20,414,100	1.10%	224,555	0.0%	0	224,555	550,989	550,989	2.70%
1993	29,001,500	1.10%	319,017	0.0%	0	319,017	559,940	559.940	1.93%
1994	13,536,700	1.10%	148,904	0.0%	0	148,904	154,750	154,750	1.14%
1995	11,442,100	1.10%	125,863	0.0%	0	125,863	33,370	33,370	0.29%
1996	16,356,200	1.10%	179,918	0.0%	0	179,918	539,105	539,105	3.30%
1997	22,036,300	1.10%	242,399	0.0%	0	242,399	236,875	236,875	1.07%
1998	33,623,500	1.10%	369,859	0.0%	0	369,859	280,025	280,025	0.83%
1999	21,678,800	1.10%	238,467	0.0%	0	238,467	98,585	98,585	0.45%
2000	14,147,100	1.10%	155,618	0.0%	0	155,618	6,975	6,975	0.05%
2001	20,232,300	1.10%	222,555	0.5%	1,107	221,448	9,110	10,217	0.05%
2002	21,982,400	1.10%	241,806	1.0%	2,400	239,406	97,560	99,960	0.45%
2003	25,228,700	1.10%	277,516	1.5%	4,121	273,394	595,995	600,116	2.38%
2004	25,692,900	1.10%	282,622	2.0%	5,582	277,039	32,680	38,262	0.15%
2005	34,117,000	1.10%	375,287	3.7%	13,917	361,370	143,075	156,992	0.46%
2006	32,708,000	1.10%	359,788	5.6%	20,136	339,652	49,575	69,711	0.21%
2007	40,993,900	1.10%	450,933	8.3%	37,636	413,297	1,072,319	1,109,955	2.71%
2008	58,165,000	1.10%	639,815	12.7%	81,325	558,490	166,350	247,675	0.43%
2009	43,923,200	1.10%	483,155	16.9%	81,495	401,660	7,875	89,370	0.20%
2010	28,106,300	1.10%	309,169	23.0%	71,187	237,982	60,220	131,407	0.47%
2011	22,644,500	1.10%	249,090	33.1%	82,363	166,727	51,135	133,498	0.59%
2012	27,202,400	1.10%	299,226	43.3%	129,493	169,734	122,049	251,542	0.92%
2013	18,424,500	1.10%	202,670	56.4%	114,237	88,433	15,290	129,527	0.70%
2014	16,235,800	1.10%	178,594	68.4%	122,125	56,469	0	122,125	0.75%
2015	23,157,400	1.10%	254,731	80.8%	205,917	48,814	0	205,917	0.89%
2016	37,247,500	1.10%	409,723	93.9%	384,797	24,925	0	384,797	1.03%
2017	34,727,700	1.10%	382,005	98.7%	377,188	4,816	0	377,188	1.09%
TOTALS	816,444,300		8,980,887		1,735,026	7,245,861	6,488,412	8,223,438	1.01%

- (1) From Alacra, Inc.
- (2) Section III, Exhibit 2, Page 3, Row (6)
- (3) = (1) x (2)
- (4) Based on the selected development factors
- $(5) = (3) \times (4)$
- (6) = (3) (5)
- (7) From Income Security Advisors
- (8) = (5) + (7)
- (9) = (8)/(1)

## Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Nursing Homes Selection of Ultimate Default Rate Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)
Issue Year	Exposure Base	Actual Original Loan Balance Default Rate	Development Method Ultimate	Bornhuetter- Ferguson Method Ultimate	Selected Ultimate Default Rate
1981	392,300	37.09%	37.09%	37.09%	37.09%
1982	838,700	40.17%	40.17%	40.17%	40.17%
1983	795,000	54.32%	54.32%	54.32%	54.32%
1984	739,700	40.39%	40.39%	40.39%	40.39%
1985	1,160,300	26.26%	26.26%	26.26%	26.26%
1986	772,800	24.40%	24.40%	24.40%	24.40%
1987	914,300	13.44%	13.44%	13.44%	13.44%
1988	1,451,700	8.57%	8.57%	8.57%	8.57%
1989	1,561,600	4.76%	4.76%	4.76%	4.76%
1990	1,678,600	9.77%	9.77%	9.77%	9.77%
1991	1,538,500	2.23%	2.23%	2.23%	2.23%
1992	2,429,300	5.22%	5.22%	5.22%	5.22%
1993	2,515,600	9.04%	9.04%	9.04%	9.04%
1994	2,427,400	11.41%	11.41%	11.41%	11.41%
1995	1,986,300	14.60%	14.60%	14.60%	14.60%
1996	3,040,500	10.33%	10.33%	10.33%	10.33%
1997	3,523,600	9.03%	9.03%	9.03%	9.03%
1998	5,077,800	9.28%	9.28%	9.28%	9.28%
1999	4,981,900	8.50%	8.50%	8.50%	8.50%
2000	2,876,400	5.74%	5.74%	5.74%	5.74%
2001	2,919,300	6.06%	6.09%	6.12%	6.11%
2002	3,787,200	3.70%	3.74%	3.82%	3.78%
2003	3,228,400	3.27%	3.32%	3.44%	3.38%
2004	3,222,300	6.48%	6.61%	6.71%	6.66%
2005	4,276,300	1.40%	1.45%	1.83%	1.64%
2006	6,010,800	3.15%	3.34%	3.81%	3.57%
2007	7,837,300	3.92%	4.27%	4.90%	4.90%
2008	2,498,700	5.34%	6.12%	6.84%	6.84%
2009	1,953,000	13.67%	16.44%	15.65%	15.65%
2010	2,729,100	14.39%	18.69%	17.09%	17.09%
2011	1,217,200	6.20%	9.26%	10.08%	10.08%
2012	3,680,200	8.48%	14.96%	13.57%	13.57%
2013	2,804,900	3.81%	8.72%	10.43%	10.43%
2014	2,718,000	1.98%	6.26%	10.01%	10.01%
2015	3,797,800	7.67%	40.01%	17.17%	17.17%
2016	5,690,600	2.41%	39.61%	13.44%	13.44%
2017	6,196,000	1.14%	90.16%	12.74%	11.75%

Notes:

(1) From Alacra, Inc.

- (2) Section III, Exhibit 2, Page 6, Column (2) / (1)
- (3) From Section III, Exhibit 2, Page 6, Column (5)
- (4) From Section III, Exhibit 2, Page 7, Column (9)
- (5) Selected
- (6) Selected

 Weighted Average All Years
 9.91%

 Weighted Average 1981-2008
 8.49%

 Weighted Average 1992-2014
 7.79%

 Arithmetic Average All Years
 13.53%

 Arithmetic Average 1981-2008
 13.62%

 Arithmetic Average 1992-2014
 8.56%

 Prior Selection
 12.00%

(6) Selected Default Rate 12.10%

## Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Nursing Homes Loss Development Method Based on Data as of June 30, 2018

-		(1)	(2)	(3)	(4)	
Issue Year	Age	Exposure Base	Default Original Loan Balance To Date	Cumulative Reported Development	Estimated Ultimate	Indicat Default Ra
			10 Bato	Factor		
1981	444	392,300	145,510	1.000	145,510	37.09
1982	432	838,700	336,905	1.000	336,905	40.17
1983	420	795,000	431,865	1.000	431,865	54.32
1984	408	739,700	298,747	1.000	298,747	40.39
1985	396	1,160,300	304,695	1.000	304,695	26.26
1986	384	772,800	188,525	1.000	188,525	24.40
1987	372	914,300	122,905	1.000	122,905	13.44
1988	360	1,451,700	124,475	1.000	124,475	8.57
1989	348	1,561,600	74,310	1.000	74,310	4.76
1990	336	1,678,600	163,945	1.000	163,945	9.77
1991	324	1,538,500	34,275	1.000	34,275	2.23
1992	312	2,429,300	126,700	1.000	126,700	5.22
1993	300	2,515,600	227,486	1.000	227,486	9.04
1994	288	2,427,400	277,035	1.000	277,035	11.41
1995	276	1,986,300	290,080	1.000	290,080	14.60
1996	264	3,040,500	314,154	1.000	314,154	10.33
1997	252	3,523,600	318,025	1.000	318,025	9.03
1998	240	5,077,800	471,121	1.000	471,121	9.28
1999	228	4,981,900	423,565	1.000	423,565	8.50
2000	216	2,876,400	165,080	1.000	165,080	5.74
2001	204	2,919,300	176,945	1.005	177,830	6.09
2002	192	3,787,200	140,298	1.010	141,704	3.74
2003	180	3,228,400	105,570	1.015	107,161	3.32
2004	168	3,222,300	208,825	1.020	213,033	6.61
2005	156	4,276,300	59,790	1.039	62,093	1.45
2006	144	6,010,800	189,275	1.059	200,496	3.34
2007	132	7,837,300	306,983	1.091	334,937	4.27
2008	120	2,498,700	133,472	1.146	152,908	6.12
2009	108	1,953,000	266,885	1.203	321,035	16.44
2010	96	2,729,100	392,680	1.299	510,141	18.69
2011	84	1,217,200	75,460	1.494	112,737	9.26
2012	72	3,680,200	312,239	1.763	550,451	14.96
2013	60	2,804,900	106,750	2.292	244,649	8.72
2014	48	2,718,000	53,769	3.163	170,054	6.26
2015	36	3,797,800	291,211	5.218	1,519,658	40.01
2016	24	5,690,600	137,107	16.438	2,253,763	39.61
2017	12	6,196,000	70,435	79.313	5,586,430	90.16

 Weighted Average 1981-2014
 9.08%

 Weighted Average 1981-2008
 8.36%

 Weighted Average 1992-2014
 7.61%

 Arithmetic Average 1981-2014
 13.35%

 Arithmetic Average 1981-2008
 13.55%

 Arithmetic Average 1992-2014
 8.37%

 Prior Selected
 11.50%

(6) Selected A Priori Default Rate 11.75%

- (1) From Alacra, Inc.
- (2) From Income Securities Advisors
- (3) Based on the selected development factors
- $(4) = (2) \times (3)$
- (5) = (4)/(1)
- (6) Selected

## Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Nursing Homes Bornhuetter-Ferguson Method Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Issue Year	Exposure Base	A Priori Default Rate	A Priori Defaulting Loan Balance	Expected Percent Unreported	Expected Unreported Defaulted Loan Balance	Expected Reported Defaulted Loan Balance	Default Original Loan Balance To Date	Estimated Ultimate	Indicated Default Rate
1981	392,300	11.75%	46,095	0.0%	0	46,095	145,510	145,510	37.09%
1982	838.700	11.75%	98,547	0.0%	0	98,547	336,905	336,905	40.17%
1983	795,000	11.75%	93,413	0.0%	0	93,413	431,865	431,865	54.32%
1984	739,700	11.75%	86,915	0.0%	0	86,915	298,747	298,747	40.39%
1985	1,160,300	11.75%	136,335	0.0%	0	136,335	304,695	304,695	26.26%
1986	772,800	11.75%	90,804	0.0%	0	90,804	188,525	188,525	24.40%
1987	914,300	11.75%	107,430	0.0%	0	107,430	122,905	122,905	13.44%
1988	1,451,700	11.75%	170,575	0.0%	0	170,575	124,475	124,475	8.57%
1989	1,561,600	11.75%	183,488	0.0%	0	183,488	74,310	74,310	4.76%
1990	1,678,600	11.75%	197,236	0.0%	0	197,236	163,945	163,945	9.77%
1991	1,538,500	11.75%	180,774	0.0%	0	180,774	34,275	34,275	2.23%
1992	2,429,300	11.75%	285,443	0.0%	0	285,443	126,700	126,700	5.22%
1993	2,515,600	11.75%	295,583	0.0%	0	295,583	227,486	227,486	9.04%
1994	2,427,400	11.75%	285,220	0.0%	0	285,220	277,035	277,035	11.41%
1995	1,986,300	11.75%	233,390	0.0%	0	233,390	290,080	290,080	14.60%
1996	3,040,500	11.75%	357,259	0.0%	0	357,259	314,154	314,154	10.33%
1997	3,523,600	11.75%	414,023	0.0%	0	414,023	318,025	318,025	9.03%
1998	5,077,800	11.75%	596,642	0.0%	0	596,642	471,121	471,121	9.28%
1999	4,981,900	11.75%	585,373	0.0%	0	585,373	423,565	423,565	8.50%
2000	2,876,400	11.75%	337,977	0.0%	0	337,977	165,080	165,080	5.74%
2001	2,919,300	11.75%	343,018	0.5%	1,707	341,311	176,945	178,652	6.12%
2002	3,787,200	11.75%	444,996	1.0%	4,417	440,579	140,298	144,715	3.82%
2003	3,228,400	11.75%	379,337	1.5%	5,634	373,703	105,570	111,204	3.44%
2004	3,222,300	11.75%	378,620	2.0%	7,479	371,142	208,825	216,304	6.71%
2005	4,276,300	11.75%	502,465	3.7%	18,634	483,831	59,790	78,424	1.83%
2006	6,010,800	11.75%	706,269	5.6%	39,527	666,742	189,275	228,802	3.81%
2007	7,837,300	11.75%	920,883	8.3%	76,859	844,024	306,983	383,842	4.90%
2008	2,498,700	11.75%	293,597	12.7%	37,318	256,279	133,472	170,790	6.84%
2009	1,953,000	11.75%	229,478	16.9%	38,707	190,771	266,885	305,592	15.65%
2010	2,729,100	11.75%	320,669	23.0%	73,835	246,834	392,680	466,515	17.09%
2011	1,217,200	11.75%	143,021	33.1%	47,291	95,730	75,460	122,751	10.08%
2012	3,680,200	11.75%	432,424	43.3%	187,135	245,289	312,239	499,374	13.57%
2013	2,804,900	11.75%	329,576	56.4%	185,769	143,807	106,750	292,519	10.43%
2014	2,718,000	11.75%	319,365	68.4%	218,385	100,980	53,769	272,154	10.01%
2015	3,797,800	11.75%	446,242	80.8%	360,729	85,513	291,211	651,940	17.17%
2016	5,690,600	11.75%	668,646	93.9%	627,969	40,677	137,107	765,076	13.44%
2017	6,196,000	11.75%	728,030	98.7%	718,851	9,179	70,435	789,286	12.74%
TOTALS	105,269,400		12,369,155		2,650,242	9,718,913	7,867,097	10,517,339	9.99%

- (1) From Alacra, Inc.
- (2) From Section III, Exhibit 2, Page 6, Row (6)
- (3) = (1) x (2)
- (4) Based on the selected development factors
- $(5) = (3) \times (4)$
- (6) = (3) (5)
- (7) From Income Security Advisors
- (8) = (5) + (7)
- (9) = (8)/(1)

## Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Hospital and Nursing Homes Combined Analysis of Default Pattern Based on Original Loan Balance (\$000s) Based on Data as of June 30, 2018

Issue Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	396 408
1985 1986 1986 1988 1989 1989 1989 1990 1992 1993 1994 1995 1996 2001 2001 2004 2004 2004 2006 2007 2008 2007 2008 2011 2012 2011 2011 2012 2011 2011	(months) 29,500 0 0,815 0 0 0,815 0 0 0 0 0,825 0 102,385 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	66,855 16,785 22,270 14,785 22,270 14,785 0 29,800 0 187,354 0 6,250 7,795 7,795 41,075 0 0 0 156,700 0 156,700 0 156,700 0 156,700 0 156,700 0 156,70	193,580 73,420 36,770 62,205 79,615 50,605 0 171,054 3,400 49,435 322,585 322,585 322,585 57,530 67,530 67,530 67,530 67,530 9,800 29,115 574,351 38,560 29,115 574,351 38,560 49,345 68,769 49,345 68,769 68	298,340 110,330 48,120 97,730 95,575 142,595 114,175 171,054 3,400 49,435 80,215 150,250 114,810 165,510 8,715 163,565 57,106 114,810 161,510 8,715 163,565 57,106 1730 190,958 125,140 58,265 125,140	430,560 115,670 71,895 120,230 98,470 153,670 1110,940 171,054 17,972 49,435 507,075 211,975 184,315 214,770 57,360 143,935 151,850 789,516 135,687 125,140 143,975 125,140 15	179,722 174,485 335,665 126,595 368,896 122,040	480,270 126,470 140,900 161,397 116,530 221,730 215,440 215,440 216,44	504,270 132,170 184,215 161,397 117,245 217,730 339,594 488,447 230,705 783,391 503,594 488,447 250,705 783,391 503,593 327,040 162,955 167,970 96,710 585,090 238,505 161,435 229,000 1,157,626 299,822 174,485 452,905 126,595	509,170 149,100 333,178 161,397 117,245 217,730 362,775 401,449 467,407 370,410 580,2210 580,2210 580,2210 580,2210 580,2210 580,2210 580,230,605 182,955 157,970 180,725 585,090 241,505 188,915 229,007 1,171,626 299,822 274,760 452,900	518,420 416,735 333,178 168,197 1170,246 2362,775 414,234 490,596 380,910 316,670 800,264 413,425 133,991 207,970 217,190 683,795 241,505 129,955 241,505 129,957 241,505	299,822	518,420 416,735 333,178 172,642 156,115 250,720 476,585 668,639 585,586 392,130 323,450 846,685 532,140 846,885 531,081 407,095 162,955 176,945 225,890 701,585 248,715 238,850 1,379,302	518.420 459,515 336,678 172,642 158,116 256,085 672,889 596,566 392,130 323,450 853,259 437,630 437,63	518.420 459,515 336,678 172,642 156,115 262,520 476,585 672,889 596,596 431,785 596,596 591,520 680,921 439,785 167,500 701,555 241,500 701,555 241,500 701,555 241,500 701,555 241,500 241,500 701,555 241,500	522,335 443,205 336,678 172,642 156,115 162,520 476,585 672,889 662,866 6431,785 681,520 680,921 439,785 167,500 701,565 241,505	522,335 463,205 336,678 172,642 166,116 246,585 672,889 714,676 431,785 503,259 501,520 701,676 431,785 503,259 701,676 701,676 701,676 701,676 701,676 701,676 701,676 701,676 701,676 701,676 701,676 701,676 701,676 701,676	522, 335 463, 205 336, 678 172, 642 156, 115 262, 520 476, 585 672, 889 787, 426 431, 785 232, 450 701, 676 450, 785 172, 055 186, 055 237, 858	522, 335 463, 205 336, 678 172, 642 156, 115 262, 520 476, 585 672, 889 787, 426 431, 787 431, 787 431	522, 335 463, 205 336, 678 172, 642 156, 115 262, 520 476, 585 672, 889 787, 426 431, 783 233, 450 700, 1676 522, 150 172, 055	522,335 483,205 336,678 172,642 156,115 162,520 476,585 672,889 787,426 431,787 431,787 451,000 751,146 522,150	522,335 463,205 336,678 172,642 156,115 262,520 476,585 672,889 7787,426 431,785 983,900 781,146	522, 335 443, 205 336, 678 172, 642 156, 115 262, 520 476, 585 672, 889 787, 426 431, 785 853, 259 554, 900	522,335 483,205 336,678 172,642 156,115 262,520 476,585 672,889 787,426 431,785 323,450 853,299	522,335 483,205 336,678 172,642 156,115 262,520 476,585 677,689 787,426 431,785 323,450	522,335 467,490 336,678 172,642 156,115 262,520 476,585 677,689 787,426 431,785	467,490 336,678 172,642 156,115 262,520 476,585 677,689 787,426	467,490 336,678 172,642 156,115 262,526 476,585 677,689	467,490 4336,678 172,642 156,115 262,520 2476,585	187.490 4 187.49	487,490 4 487,490 4 172,642 1 156,115	467,490 336,676 172,642	467,490 · 336,676	
Issue Year	12-24 (months) 2.266	24-36	36-48	48-60	1.032	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	1 000	348-360	1 000	1 000	1.000	396-408 408-Ult
1986 1987 1988 1989 1989 1999 1999 2000 2001 2005 2006 2006 2007 2008 2011 2012 2011 2012 2013 2014 2015 2017 2016 2017	2.169 1.000 2.322 1.384 9.600 1.000	4.374 1.651 4.207 1.698 1.022 7.910 4.839 41.509 1.355 2.037 1.639 1.000 13.368 1.296 1.355 1.000 4.756 1.573 4.662 32.962	1.503 1.309 1.571 1.200 2.818 1.000 1.000 1.000 1.000 1.000 1.000 1.007 1.561 1.662 1.225 14.078 1.000 1.044 6.299 4.700 1.324 2.325 1.324 2.325 1.324	1.048 1.494 1.230 1.030 1.078 7.826 1.000 1.078 7.826 1.000 1.170 1.045 1.297 1.071 1.297 1.071 1.356 1.356 1.356 1.300 1.313 1.000 2.332 1.110 1.038 1.492 1.000 2.704 1.557 1.200 1.577 1.200 1.200 1.577 1.200	1,041 1,800 1,342 1,000 1,324 1,410 1,029 1,1529 1,167 1,179 1,184 1,120 1,100	1.050 1.089 1.009 1.183 1.071 1.000 1.247 4.511 1.072 1.072 1.073	1,045 1,307 1,000 1,006 1,006 1,006 1,006 1,007 1,176 1,277 1,028 1,217 1,028 1,217 1,028 1,021 1,025 1,035 1,045	1.128 1.809 1.000 1.000 1.000 1.000 1.008 1.030 1.020 1.275 1.130 1.002 1.275 1.140 1.000	2.795 1.000 1.042 1.000 1.152 1.000 1.032 1.055 1.028 1.085 1.184 1.000 1.000 1.000 1.351 1.169 1.000 1.000 1.052 1.000	1,000 1,000 1,000 1,332 1,000 1,331 1,288 1,281 1,022 1,020	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.103 1.011 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.008 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.009 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000	1.000	1.000	
Ξ	12-24 (months)	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396	396-408 408-Ult
Arithmetic Averages All Years 5 Year 3 Year 2 Year	2.817 3.057 3.988 5.300	6.663 8.995 13.072 18.822	2.541 1.224 1.138 1.084	1.625 1.499 1.079 1.000	1.810 1.454 1.256 1.235	1.373 1.046 1.076 1.089	1.272 1.192 1.095 1.142	1.115 1.117 1.192 1.287	1.120 1.012 1.003 1.000	1.059 1.042 1.070 1.084	1.034 1.005 1.000 1.000	1.023 1.004 1.007 1.010	1.015 1.005 1.000 1.000	1.006 1.000 1.000 1.000	1.011 1.016 1.009 1.013	1.009 1.010 1.017 1.026	1.000 1.000 1.000 1.000	1.010 1.033 1.053 1.079	1.011 1.034 1.057 1.035	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.001 1.001 1.000 1.000	1.001 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000	1.000
§ Weighted Averages All Years 5 Year 3 Year 2 Year	4.652 2.372 1.685 1.059	3.285 6.217 4.794 6.705	1.568 1.242 1.162 1.138	1.215 1.372 1.138 1.000	1.288 1.471 1.280 1.276	1.136 1.070 1.099 1.132	1.206 1.115 1.153 1.209	1.065 1.049 1.108 1.160	1.072 1.009 1.006 1.000	1.061 1.097 1.121 1.134	1.039 1.006 1.000 1.000	1.025 1.003 1.006 1.009	1.016 1.004 1.000 1.000	1.009 1.000 1.000 1.000	1.014 1.013 1.005 1.007	1.011 1.005 1.016 1.022	1.000 1.000 1.000 1.000	1.010 1.027 1.054 1.115	1.014 1.035 1.058 1.040	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.001 1.002 1.000 1.000	1.001 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000	1.000
Selected Age To Age Age to Ult	<b>4.825</b> 79.313	3.150 16.438	1.650 5.218	1.380 3.163	1.300 2.292	1.180 1.763	1.150 1.494	1.080 1.299	1.050 1.203	1.050 1.146	1.030 1.091	1.020 1.059	1.018 1.039	1.005 1.020	1.005 1.015	1.005 1.010	1.005 1.005	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000 1.000 1.000
Prior Age To Age Age to Ult	5.000 89.055	3.000 17.811	1.860 5.937	1.400 3.192	1.300	1.180	1.150 1.486	1.070	1.070	1.045 1.129	1.030	1.020	1.018	1.005	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

#### Estimate of Cal-Mortgage's Loss Severity Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)
Facility Type	Income Securities Advisors Data	Actual Cal-Mortgage Experience (Including Triad)	Prior Selected	Selected
Hospitals	70.5%	N/A	N/A	N/A
Nursing Home	64.7%	N/A	N/A	N/A
TOTALS	67.5%	64.6%	64.5%	64.5%

- (1) From Income Securities Advisors
- (2) From Section I, Exhibit 1
- (3) From Cal-Mortgage Analysis at 6/30/2016
- (4) Selected

### Estimate of Cal-Mortgage's Cumulative Loss Payment Pattern Based on Data as of June 30, 2018

	(1)	(2)	(3)
Years From Default	Income Securities Advisors Data	Previous Selection	Selected
0	19.4%	17.8%	18.5%
1 2	40.8% 67.9%	39.2% 67.1%	40.0% 67.5%
3	80.7%	80.5%	80.5%
4	91.2%	91.3%	91.5%
5	95.3%	95.4%	95.5%
6	97.2%	97.3%	97.5%
7	98.6%	98.8%	98.5%
8	99.3%	99.3%	99.3%
9	99.5%	99.5%	99.5%
10	99.7%	99.7%	99.7%
11	99.9%	99.9%	99.9%
12	100.0%	100.0%	100.0%
13	100.0%	100.0%	100.0%

- (1) From Income Securities Advisors; based on selections in Section III, Exhibit 4, Page 2
- (2) From Cal-Mortgage Analysis at 6/30/2016
- (3) Selected

#### Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Hospitals and Nursing Homes Combined Analysis of Settlement Pattern after Loan Default (\$000s)

Default Year	12 (months)	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	396 408
1985 1989 1989 1989 1990 1991 1992 1992 1993 1994 1995 1996 1997 1996 1997 1998 2000 2001 2002 2003 2004 2006 2006 2007 2008 2009 2011 2012 2013 2014 2015 2017 2018	6,550 79,145 68,751 28,000 15,680 6,259 13,895 9,480 25,349 12,009 12,799 12,009 12,799 178,485 98,000 15,440 0 0 15,440 0 0 15,440 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,650 143,6650 143,6650 143,6650 109,7713 21,379 21,379 23,30,088 29,7710 49,763 30,5714 88,763 30,5714 89,500 123,525 159,553 31,560 110,094 05,162 58,296 110,094 05,162 58,296 180,018 434,961 434,961	41,351 188,397 121,212 132,553 128,553 28,620 28,62	54.391 176,877 135,431 135,431 139,884 63,123 36,885 56,205 190,884 32,821 30,884 32,821 110,427 225,984 91,517 212,687 30,440 482,073 178,533 30,440 482,073 178,533 30,440 482,073 178,533 30,440 482,073 483,073 48	91,569 191,273 143,467 39,864 126,868 36,761 212,120 56,205 194,358 33,276 214,120 56,205 194,358 33,276 214,120 48,968 275,074 109,445 234,598 486,423 198,687 30,440 496,423 198,681 495 196,038 112,186	115,032 200,787 199,540 151,979 151,979 139,884 132,815 36,781 269,120 278,721 133,413 244,217 486,423 214,029 218,721 133,413 244,217 486,423 214,029 31,004 31,00	115,032 200,340 153,386 149,889 149,889 149,889 152,815 75,790 59,142 144,521 144,521 143,511 280,089 486,423 214,020	115,032 206,320 161,762 206,220 161,762 30,584 132,815 75,780 275,780	118,398 206,390 215,450 164,819 39,370 39,370 39,370 39,370 39,370 372,815 772,815 772,815 772,815 772,815 772,815 772,815 772,790 98,142 195,370 170,719 985,113 143,231 291,889 486,423 214,029 214,	118,398 207,655 215,450 169,045 30,507 30,50	118,398 209,413 215,450 169,044 39,884 132,815 77,790 59,142 195,370 37,531 31,987 170,762 386,923 150,381 291,889 486,423 220,163 43,491 43,491 138,403 138,981	118,398 209,413 215,450 169,045 30,387 132,815 77,790 59,142 195,370 31,987 170,762 390,609 150,381 201,889 486,764 202,163 486,764 203,403	118,398 209,413 215,450 169,045 139,364 139,364 132,815 82,915 82,750 99,142 195,370 170,762 391,051 150,381 120,2713 486,744 200,163 467,303	118.398 209.413 215.450 169.545 169.545 139.391 39.391 132.815 83.815 83	118,398 217,153 217,450 169,246 39,884 132,2815 82,239 275,790 59,142 195,370 37,531 31,880 91,70 170,762 391,051 150,381 150,	118,398 217,153 215,450 169,546 39,884 132,815 82,239 275,790 59,142 195,370 37,531 39,860 178,881 399,765 164,186 202,713 486,764	118,398 217,153 217,450 180,295 39,884 132,2815 82,239 275,790 59,142 195,370 37,531 31,880 117,881 39,765 164,186 292,713	118,398 217,153 215,450 180,298 39,884 132,815 82,239 275,790 59,142 195,370 31,886 39,765 164,186	118,398 217,153 217,450 180,295 39,884 132,2815 82,239 275,790 59,142 195,370 37,531 31,864 0178,881 399,765	118,398 217,153 215,450 180,295 33,984 132,815 82,987 132,815 82,77,90 59,142 195,370 37,780 196,182 197,780 198,183 1	118,398 217,153 215,450 188,234 132,815 82,239 132,815 82,239 275,790 59,142 195,370 31,964 618,800	118,398 217,153 215,450 188,234 30,884 132,815 82,215 82,815 82,815 82,815 82,815 83,2	118.398 217.153 215.450 188.234 39.884 132.815 82.239 275.790 59.142 195.370 37.531	118,398 217,153 215,450 188,234 39,884 132,215 82,239 275,790 59,142 195,370	217, 153 215, 450 188, 234 156, 370 39, 884 132, 815 82, 239 275, 790 59, 142	217,153 215,450 188,234 156,370 39,884 132,815 82,239 275,790	217,153 215,450 188,234 156,370 39,884 132,815 82,239	217.153 : 215.450 : 188.234 : 186.370 : 39.884 : 132.815	217,153 2 215,450 2 8188,234 1 36,370 1 39,884	17.153 2:17.153 2:17.153 2:17.153 2:17.153 2:17.153 2:17.1545 2:17	17.153 2 15,450 2 88,234	17,153 21 15,450	
Default Year 1986 1986 1986 1986 1988 1988 1989 1990 1991 1992 1992 1993 1994 1995 1996 1997 1998 2000 2001 2002 2003 2004 2005 2006 2007 2008 2011 2012 2011 2012 2011 2012 2011 2012 2011 2012 2013	12-24 (months) (months) (months) (months) 1.815 1.402 3.918 3.006 2.433 3.416 2.2433 1.172 4.144 1.220 5.674 1.025 1.073 1.448 1.220 1.015 1.073 1.448 2.541 1.743 1.000	24-36 6.218 1.172 1.257 1.208 2.558 2.558 1.339 1.479 6.4949 1.063 12.092 1.000 1.200	36-48  1.315 1.050 1.374 1.022 1.051 1.394 1.077 1.010 1.062 1.011 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	48-80  1.884 1.081 1.043 1.059 1.028 1.000 1.000 1.017 1.000 1.017 1.000 1.018 1.014 1.014 1.014 1.014 1.014 1.015 1.014 1.014 1.015 1.014 1.015 1.014 1.015 1.014 1.015 1.014 1.015 1.014 1.015	69-72 1.256 1.050 1.149 1.059 1.149 1.059 1.146 1.050 1.149 1.052 1.100 1.000	72-84 1.000 1.001 1.018 1.009 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	84-96  1.000 1.027 1.016 1.055 1.000	96-108  1.029 1.000 1.041 1.019 1.034 1.019 1.034 1.000	108-120 1 00	120-132 1 000 1 008 1 008 1 008 1 000 1 00	132-144  1.000	144-156  1.000	156-168  1.000 1.000 1.000 1.000 1.003 1.000	168-180 1 000 1 037 1 000 1 037 1 000	180-192 1.000	192-204 1.000 1.000 1.000 1.000 1.003 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	204-216 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1:000 1:000	228-240 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	240-252 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	252-264 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	264-276 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	276-288 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	288-300 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	300-312 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	324-336 1.000 1.000 1.000 1.000 1.000 1.000 1.000	336-348 1.000 1.000 1.000 1.000 1.000 1.000 1.000	348-360 : 1.000 1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	372-384 3 1.000 1.000 1.000		1.000
=	12-24 (months)	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	336-348	348-360	360-372	372-384	384-396 39	96-408 408-UIt
Arithmetic Averages All Years 5 Year 3 Year 2 Year	3.481 7.088 1.761 1.372	3.104 6.099 8.724 1.000	1.332 1.974 1.000 1.000	1.196 1.527 1.000 1.000	1.103 1.230 1.158 1.000	1.051 1.008 1.013 1.000	1.035 1.077 1.000 1.000	1.018 1.023 1.038 1.057	1.020 1.086 1.000 1.000	1.013 1.023 1.038 1.000	1.000 1.000 1.000 1.000	1.003 1.001 1.000 1.000	1.000 1.000 1.000 1.000	1.002 1.000 1.000 1.000	1.008 1.032 1.031 1.000	1.004 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.003 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000	1.000
§ Weighted Averages All Years 5 Year 3 Year 2 Year	1.745 1.902 1.705 1.557	1.663 1.408 1.280 1.000	1.096 1.029 1.000 1.000	1.127 1.276 1.000 1.000	1.106 1.173 1.050 1.000	1.025 1.013 1.023 1.000	1.027 1.036 1.000 1.000	1.023 1.041 1.049 1.058	1.008 1.016 1.000 1.000	1.018 1.011 1.020 1.000	1.001 1.000 1.000 1.000	1.001 1.001 1.000 1.000	1.000 1.000 1.000 1.000	1.003 1.000 1.000 1.000	1.008 1.021 1.015 1.000	1.003 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.003 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000	1.000
Selected Age To Age Age to Ult	<b>2.100</b> 5.153	1.665 2.454	1.190 1.474	1.130 1.239	1.045 1.096	<b>1.019</b> 1.049	1.015 1.029	1.007 1.014	1.002 1.007	1.002 1.005	1.002 1.003	<b>1.001</b> 1.001	1.000 1.000	1.000 1.000	1.000 1.000	<b>1.000</b> 1.000	<b>1.000</b> 1.000	<b>1.000</b> 1.000	<b>1.000</b> 1.000	1.000 1.000	1.000 1.000	1.000 1.000	<b>1.000</b> 1.000	<b>1.000</b> 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	<b>1.000</b> 1.000	<b>1.000</b> 1.000	<b>1.000</b> 1.000	<b>1.000</b> 1.000	1.000 1.000 1.000 1.000
Prior Age To Age Age to Ult	2.200 5.612	1.712 2.551	1.200 1.490	1.134 1.242	1.045 1.095	1.020 1.048	1.015 1.027	1.005 1.012	1.002 1.007	1.002 1.005	1.002 1.003	1.001 1.001	1.000 1.000	1.000 1.000	1.000	1.000 1.000	1.000	1.000 1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000		

#### Historical Termination Rate Based on Data as of June 30, 2018

	(1)	(2)	(3)	(4)	(5)
		Including Refina	anced Loans	Excluding Refin	anced Loans
Fiscal	Outstanding	Terminated	Termination	Terminated	Termination
Year End	Balance	Loans	Rate	Loans	Rate
2002	1,166,847,458	66,072,545	5.7%	no data	
2003	1,244,637,412	66,600,000	5.4%	62,425,000	5.0%
2004	1,329,588,053	112,540,000	8.5%	55,965,000	4.2%
2005	1,260,565,324	140,022,148	11.1%	83,782,148	6.6%
2006	1,254,779,406	43,985,000	3.5%	34,830,000	2.8%
2007	1,132,647,525	152,015,000	13.4%	139,530,000	12.3%
2008	1,374,064,775	67,057,777	4.9%	56,362,777	4.1%
2009	1,655,191,905	63,009,971	3.8%	63,009,971	3.8%
2010	1,735,067,632	16,220,755	0.9%	9,720,755	0.6%
2011	1,810,529,285	102,687,212	5.7%	90,762,212	5.0%
2012	1,714,993,295	151,868,952	8.9%	102,558,952	6.0%
2013	1,726,980,115	391,406,790	22.7%	142,846,790	8.3%
2014	1,671,379,249	339,040,000	20.3%	233.550.000	14.0%
2015	1,773,230,552	103,506,653	5.8%	73,506,653	4.1%
2016	1,637,990,120	328,208,594	20.0%	63,823,594	3.9%
2017	1,590,800,080	415,480,000	26.1%	206.225.000	13.0%
2018	1,679,591,385	39,350,000	2.3%	30,890,000	1.8%
TOTALS	25,758,883,571	2,599,071,397	10.1%	1,449,788,852	5.9%

#### **Estimated Termination Rate**

	(6)	(7)
Fiscal Year	Termination Rate	Termination Rate
7/1/2018-6/30/2019 and subsequent	7.0%	5.0%

- (1) Provided by Cal-Mortgage
- (2) Provided by Cal-Mortgage
- (3) = (2) / (1)
- (4) Provided by Cal-Mortgage
- (5) = (4)/(1)
- (6) Selected
- (7) Selected

#### **Estimated Premium Rate**

	(1)	(2)
Risk Category	Weight	Premium Rate
Below Investment Grade	70.0%	3.00%
Investment Grade	30.0%	1.85%
Combined		2.66%
Ratio of Principal & Interest to Principal for Currel	1.741	
Effective Premium Rate as a Percent of the Princ	ipal	4.62%

#### Notes:

(3)

(4)

(5)

- (1) Provided by Cal-Mortgage
- (2) From the Cal-Mortgage Loan Insurance Premium Fee Schedule
- (3) Sum of column (2) weighted by column (1)
- (4) Based on active loan information from Cal-Mortgage
- $(5) = (3) \times (4)$

### Estimated Amount of Loan Default by Fiscal Year at 6.40% Default Rate - New Loans Insured Based on Data as of June 30, 2018

	Total	Salaatad	Estimated				Estimated
Issue	Total Loan	Selected Default	Default	Age	Reported	Fiscal	Amount of Loan
Year	Insured	Rate	Original	Age	Factor	Year	Default by
	ilisuleu	Nate	Loan Amount				Fiscal Year
7/1/1989-6/30/1990	285,070,000	6.40%	18,244,480	348	100%	7/1/2018-6/30/2019	15,870,190
7/1/1990-6/30/1991	502,627,148	6.40%	32,168,137	336	100%	7/1/2019-6/30/2020	16,224,235
7/1/1991-6/30/1992	340,350,000	6.40%	21,782,400	324	100%	7/1/2020-6/30/2021	16,232,358
7/1/1992-6/30/1993	425,234,203	6.40%	27,214,989	312	100%	7/1/2021-6/30/2022	15,973,694
7/1/1993-6/30/1994	269,577,356	6.40%	17,252,951	300	100%	7/1/2022-6/30/2023	15,795,219
7/1/1994-6/30/1995	86,855,000	6.40%	5,558,720	288	100%	7/1/2023-6/30/2024	15,738,809
7/1/1995-6/30/1996	122,845,000	6.40%	7,862,080	276	100%	7/1/2024-6/30/2025	15,394,211
7/1/1996-6/30/1997	96,845,000	6.40%	6,198,080	264	100%	7/1/2025-6/30/2026	15,434,713
7/1/1997-6/30/1998	288,615,000	6.40%	18,471,360	252	100%	7/1/2026-6/30/2027	15,434,010
7/1/1998-6/30/1999	30,100,000	6.40%	1,926,400	240	100%	7/1/2027-6/30/2028	15,452,901
7/1/1999-6/30/2000	135,160,000	6.40%	8,650,240	228	100%	7/1/2028-6/30/2029	15,580,280
7/1/2000-6/30/2001	153,995,000	6.40%	9,855,680	216	100%	7/1/2029-6/30/2030	15,821,914
7/1/2001-6/30/2002 7/1/2002-6/30/2003	183,335,000	6.40% 6.40%	11,733,440	204 192	100% 99%	7/1/2030-6/30/2031 7/1/2031-6/30/2032	16,028,147
7/1/2002-6/30/2003	157,890,000 198,201,000	6.40%	10,104,960 12,684,864	180	99%	7/1/2031-6/30/2032	16,304,825 16,578,924
7/1/2003-6/30/2004	47,200,000	6.40%	3,020,800	168	98%	7/1/2032-6/30/2033	16,923,353
7/1/2004-0/30/2005	68,565,000	6.40%	4,388,160	156	96%	7/1/2034-6/30/2035	17,292,390
7/1/2005-6/30/2007	26,224,359	6.40%	1,678,359	144	94%	7/1/2035-6/30/2036	17,698,335
7/1/2007-6/30/2008	332,810,000	6.40%	21,299,840	132	92%	7/1/2036-6/30/2037	18,093,999
7/1/2008-6/30/2009	354,360,000	6.40%	22,679,040	120	87%	7/1/2037-6/30/2038	18,587,062
7/1/2009-6/30/2010	135,035,000	6.40%	8,642,240	108	83%	7/1/2038-6/30/2039	19,027,435
7/1/2010-6/30/2011	190,190,000	6.40%	12,172,160	96	77%	7/1/2039-6/30/2040	19,432,235
7/1/2011-6/30/2012	55,860,000	6.40%	3,575,040	84	67%	7/1/2040-6/30/2041	19,778,375
7/1/2012-6/30/2013	361,555,000	6.40%	23,139,520	72	57%	7/1/2041-6/30/2042	20,035,979
7/1/2013-6/30/2014	258,081,893	6.40%	16,517,241	60	44%	7/1/2042-6/30/2043	20,274,295
7/1/2014-6/30/2015	241,145,000	6.40%	15,433,280	48	32%	7/1/2043-6/30/2044	20,424,698
7/1/2015-6/30/2016	263,524,235	6.40%	16,865,551	36	19%	7/1/2044-6/30/2045	20,529,334
7/1/2016-6/30/2017	374,545,000	6.40%	23,970,880	24	6%	7/1/2045-6/30/2046	20,634,857
7/1/2017-6/30/2018	238,740,000	6.40%	15,279,360	12	1%	7/1/2046-6/30/2047	20,686,693
7/1/2018-6/30/2019	225,000,000	6.40% 6.40%	14,400,000	0	0% 0%	7/1/2047-6/30/2048	20,724,783
7/1/2019-6/30/2020 7/1/2020-6/30/2021	225,000,000 225,000,000	6.40%	14,400,000 14,400,000		0%		
7/1/2020-0/30/2021	225,000,000	6.40%	14,400,000		0%		
7/1/2021-0/30/2022	225,000,000	6.40%	14,400,000		0%		
7/1/2023-6/30/2024	250.000.000	6.40%	16.000.000		0%		
7/1/2024-6/30/2025	250,000,000	6.40%	16,000,000		0%		
7/1/2025-6/30/2026	250,000,000	6.40%	16,000,000		0%		
7/1/2026-6/30/2027	250,000,000	6.40%	16,000,000		0%		
7/1/2027-6/30/2028	250,000,000	6.40%	16,000,000		0%		
7/1/2028-6/30/2029	275,000,000	6.40%	17,600,000		0%		
7/1/2029-6/30/2030	275,000,000	6.40%	17,600,000		0%		
7/1/2030-6/30/2031	275,000,000	6.40%	17,600,000		0%		
7/1/2031-6/30/2032	275,000,000	6.40%	17,600,000		0%		
7/1/2032-6/30/2033	300,000,000	6.40%	19,200,000		0%		
7/1/2033-6/30/2034	300,000,000	6.40%	19,200,000		0%		
7/1/2034-6/30/2035	300,000,000	6.40% 6.40%	19,200,000		0% 0%		
7/1/2035-6/30/2036 7/1/2036-6/30/2037	325,000,000 325,000,000	6.40%	20,800,000 20.800.000		0%		
7/1/2030-6/30/2037	325,000,000	6.40%	20,800,000		0%		
7/1/2038-6/30/2039	325,000,000	6.40%	20,800,000		0%		
7/1/2039-6/30/2040	325,000,000	6.40%	20,800,000		0%		
7/1/2040-6/30/2041	325,000,000	6.40%	20,800,000		0%		
7/1/2041-6/30/2042	325,000,000	6.40%	20,800,000		0%		
7/1/2042-6/30/2043	325,000,000	6.40%	20,800,000		0%		
7/1/2043-6/30/2044	325,000,000	6.40%	20,800,000		0%		
7/1/2044-6/30/2045	325,000,000	6.40%	20,800,000		0%		
7/1/2045-6/30/2046	325,000,000	6.40%	20,800,000		0%		
7/1/2046-6/30/2047	325,000,000	6.40%	20,800,000		0%		
7/1/2047-6/30/2048	325,000,000	6.40%	20,800,000		0%		

## Estimated Loss Payment for Future Default by Fiscal Year - New Loans Insured At 6.40% Default Rate Based on Data as of June 30, 2018

Fiscal	Estimated	Estimated	Estimated	Projected
Year	Amount of Loan	Loss	Total Amount	Loss
	Default	Severity	of Loss	Payment
7/1/2018-6/30/2019	15,870,190	64.5%	10,236,273	1,893,710
7/1/2019-6/30/2020	16,224,235	64.5%	10,464,632	4,136,756
7/1/2020-6/30/2021	16,232,358	64.5%	10,469,871	7,001,797
7/1/2021-6/30/2022	15,973,694	64.5%	10,303,032	8,365,572
7/1/2022-6/30/2023	15,795,219	64.5%	10,187,916	9,465,523
7/1/2023-6/30/2024	15,738,809	64.5%	10,151,532	9,823,413
7/1/2024-6/30/2025	15,394,211	64.5%	9,929,266	9,935,561
7/1/2025-6/30/2026	15,434,713	64.5%	9,955,390	9,956,423
7/1/2026-6/30/2027	15,434,010	64.5%	9,954,936	9,961,045
7/1/2027-6/30/2028	15,452,901	64.5%	9,967,121	9,951,900
7/1/2028-6/30/2029	15,580,280	64.5%	10,049,281	9,964,086
7/1/2029-6/30/2030	15,821,914	64.5%	10,205,134	10,025,584
7/1/2030-6/30/2031	16,028,147	64.5%	10,338,155	10,113,514
7/1/2031-6/30/2032	16,304,825	64.5%	10,516,612	10,227,675
7/1/2032-6/30/2033	16,578,924	64.5%	10,693,406	10,362,959
7/1/2033-6/30/2034	16,923,353	64.5%	10,915,563	10,528,401
7/1/2034-6/30/2035	17,292,390	64.5%	11,153,591	10,714,066
7/1/2035-6/30/2036	17,698,335	64.5%	11,415,426	10,926,315
7/1/2036-6/30/2037	18,093,999	64.5%	11,670,629	11,155,476
7/1/2037-6/30/2038	18,587,062	64.5%	11,988,655	11,409,997
7/1/2038-6/30/2039	19,027,435	64.5%	12,272,695	11,677,093
7/1/2039-6/30/2040	19,432,235	64.5%	12,533,791	11,953,814
7/1/2040-6/30/2041	19,778,375	64.5%	12,757,052	12,218,666
7/1/2041-6/30/2042	20,035,979	64.5%	12,923,206	12,461,850
7/1/2042-6/30/2043	20,274,295	64.5%	13,076,920	12,676,229
7/1/2043-6/30/2044	20,424,698	64.5%	13,173,930	12,854,483
7/1/2044-6/30/2045	20,529,334	64.5%	13,241,420	12,999,223
7/1/2045-6/30/2046	20,634,857	64.5%	13,309,483	13,112,532
7/1/2046-6/30/2047	20,686,693	64.5%	13,342,917	13,199,333
7/1/2047-6/30/2048	20,724,783	64.5%	13,367,485	13,264,998

### Estimated Amount of Loan Default by Fiscal Year at 6.40% Default Rate - No New Loans Insured Based on Data as of June 30, 2018

Issue Year	Total Loan Insured	Selected Default Rate	Estimated Default Original Loan Amount	Age	Reported Factor	Fiscal Year	Estimated Amount of Loan Default by Fiscal Year
7/1/1989-6/30/1990	285,070,000	6.40%	18,244,480	348	100%	7/1/2018-6/30/2019	15,688,632
7/1/1990-6/30/1991	502,627,148	6.40%	32,168,137	336	100%	7/1/2019-6/30/2020	15,348,216
7/1/1991-6/30/1992	340,350,000	6.40%	21,782,400	324	100%	7/1/2020-6/30/2021	13,472,896
7/1/1992-6/30/1993	425,234,203	6.40%	27,214,989	312	100%	7/1/2021-6/30/2022	11,420,581
7/1/1993-6/30/1994	269,577,356	6.40%	17,252,951	300	100%	7/1/2022-6/30/2023	9,511,923
7/1/1994-6/30/1995	86,855,000	6.40%	5,558,720	288	100%	7/1/2023-6/30/2024	7,550,351
7/1/1995-6/30/1996	122,845,000	6.40%	7,862,080	276	100%	7/1/2024-6/30/2025	5,658,300
7/1/1996-6/30/1997	96,845,000	6.40%	6,198,080	264	100%	7/1/2025-6/30/2026	4,043,744
7/1/1997-6/30/1998	288,615,000	6.40%	18,471,360	252	100%	7/1/2026-6/30/2027	2,956,997
7/1/1998-6/30/1999	30,100,000	6.40%	1,926,400	240	100%	7/1/2027-6/30/2028	2,185,090
7/1/1999-6/30/2000	135,160,000	6.40%	8,650,240	228	100%	7/1/2028-6/30/2029	1,454,369
7/1/2000-6/30/2001	153,995,000	6.40%	9,855,680	216	100%	7/1/2029-6/30/2030	1,059,530
7/1/2001-6/30/2002	183,335,000	6.40%	11,733,440	204	100%	7/1/2030-6/30/2031	623,967
7/1/2002-6/30/2003	157,890,000	6.40%	10,104,960	192	99%	7/1/2031-6/30/2032	353,235
7/1/2003-6/30/2004	198,201,000	6.40%	12,684,864	180	99%	7/1/2032-6/30/2033	277,835
7/1/2004-6/30/2005	47,200,000	6.40%	3,020,800	168	98%	7/1/2033-6/30/2034	194,897
7/1/2005-6/30/2006	68,565,000	6.40%	4,388,160	156	96%	7/1/2034-6/30/2035	76,017
7/1/2006-6/30/2007	26,224,359	6.40%	1,678,359	144	94%	7/1/2035-6/30/2036	0
7/1/2007-6/30/2008	332,810,000	6.40%	21,299,840	132	92%	7/1/2036-6/30/2037	0
7/1/2008-6/30/2009	354,360,000	6.40%	22,679,040	120	87%	7/1/2037-6/30/2038	0
7/1/2009-6/30/2010	135,035,000	6.40%	8,642,240	108	83%	7/1/2038-6/30/2039	0
7/1/2010-6/30/2011	190,190,000	6.40%	12,172,160	96	77%	7/1/2039-6/30/2040	0
7/1/2011-6/30/2012	55,860,000	6.40%	3,575,040	84	67%	7/1/2040-6/30/2041	0
7/1/2012-6/30/2013	361,555,000	6.40%	23,139,520	72	57%	7/1/2041-6/30/2042	0
7/1/2013-6/30/2014	258,081,893	6.40%	16,517,241	60	44%	7/1/2042-6/30/2043	0
7/1/2014-6/30/2015	241,145,000	6.40%	15,433,280	48	32%	7/1/2043-6/30/2044	0
7/1/2015-6/30/2016	263,524,235	6.40%	16,865,551	36	19%	7/1/2044-6/30/2045	0
7/1/2016-6/30/2017	374,545,000	6.40%	23,970,880	24	6%	7/1/2045-6/30/2046	0
7/1/2017-6/30/2018	238,740,000	6.40%	15,279,360	12	1%	7/1/2046-6/30/2047	0
						7/1/2047-6/30/2048	0

## Estimated Loss Payment for Future Default by Fiscal Year - No New Loans Insured At 6.40% Default Rate Based on Data as of June 30, 2018

Fiscal	Estimated	Estimated	Estimated	Projected
Year	Amount of Loan	Loss	Total Amount	Loss
real	Default	Severity	of Loss	Payment
7/1/2018-6/30/2019	15,688,632	64.5%	10,119,167	1,872,046
7/1/2019-6/30/2020	15,348,216	64.5%	9,899,599	4,007,047
7/1/2020-6/30/2021	13,472,896	64.5%	8,690,018	6,518,838
7/1/2021-6/30/2022	11,420,581	64.5%	7,366,275	7,268,996
7/1/2022-6/30/2023	9,511,923	64.5%	6,135,190	7,508,570
7/1/2023-6/30/2024	7,550,351	64.5%	4,869,976	6,869,162
7/1/2024-6/30/2025	5,658,300	64.5%	3,649,603	5,921,284
7/1/2025-6/30/2026	4,043,744	64.5%	2,608,215	4,861,077
7/1/2026-6/30/2027	2,956,997	64.5%	1,907,263	3,873,619
7/1/2027-6/30/2028	2,185,090	64.5%	1,409,383	2,977,271
7/1/2028-6/30/2029	1,454,369	64.5%	938,068	2,242,305
7/1/2029-6/30/2030	1,059,530	64.5%	683,397	1,671,625
7/1/2030-6/30/2031	623,967	64.5%	402,459	1,209,506
7/1/2031-6/30/2032	353,235	64.5%	227,837	851,787
7/1/2032-6/30/2033	277,835	64.5%	179,204	580,075
7/1/2033-6/30/2034	194,897	64.5%	125,708	394,258
7/1/2034-6/30/2035	76,017	64.5%	49,031	263,108
7/1/2035-6/30/2036	0	64.5%	0	165,092
7/1/2036-6/30/2037	0	64.5%	0	96,538
7/1/2037-6/30/2038	0	64.5%	0	52,536
7/1/2038-6/30/2039	0	64.5%	0	27,473
7/1/2039-6/30/2040	0	64.5%	0	13,547
7/1/2040-6/30/2041	0	64.5%	0	7,237
7/1/2041-6/30/2042	0	64.5%	0	3,798
7/1/2042-6/30/2043	0	64.5%	0	1,860
7/1/2043-6/30/2044	0	64.5%	0	936
7/1/2044-6/30/2045	0	64.5%	0	529
7/1/2045-6/30/2046	0	64.5%	0	224
7/1/2046-6/30/2047	0	64.5%	0	49
7/1/2047-6/30/2048	0	64.5%	0	0

### Estimated Amount of Loan Default by Fiscal Year at 8.00% Default Rate - New Loans Insured Based on Data as of June 30, 2018

Issue	Total Loan	Selected Default	Estimated Default	Age	Reported	Fiscal	Estimate Amount of Loa
Year	Insured	Rate	Original Loan Amount	rigo	Factor	Year	Default b Fiscal Ye
7/1/1989-6/30/1990	285,070,000	8.00%	22,805,600	348	100%	7/1/2018-6/30/2019	19,837,7
7/1/1990-6/30/1991	502,627,148	8.00%	40,210,172	336	100%	7/1/2019-6/30/2020	20,280,2
7/1/1991-6/30/1992	340,350,000	8.00%	27,228,000	324	100%	7/1/2020-6/30/2021	20,290,4
7/1/1992-6/30/1993	425,234,203	8.00%	34,018,736	312	100%	7/1/2021-6/30/2022	19,967,1
7/1/1993-6/30/1994	269,577,356	8.00%	21,566,188	300	100%	7/1/2022-6/30/2023	19,744,0
7/1/1994-6/30/1995	86,855,000	8.00%	6,948,400	288	100%	7/1/2023-6/30/2024	19,673,
7/1/1995-6/30/1996	122,845,000	8.00%	9,827,600	276	100%	7/1/2024-6/30/2025	19,242,
7/1/1996-6/30/1997	96,845,000	8.00%	7,747,600	264	100%	7/1/2025-6/30/2026	19,293,
7/1/1997-6/30/1998	288,615,000	8.00%	23,089,200	252	100%	7/1/2026-6/30/2027	19,292,
7/1/1998-6/30/1999	30,100,000	8.00%	2,408,000	240	100%	7/1/2027-6/30/2028	19,316,
7/1/1999-6/30/2000	135,160,000	8.00%	10,812,800	228	100%	7/1/2028-6/30/2029	19,475,
7/1/2000-6/30/2001	153,995,000	8.00%	12,319,600	216	100%	7/1/2029-6/30/2030	19,777,
7/1/2001-6/30/2002	183,335,000	8.00%	14,666,800	204	100%	7/1/2030-6/30/2031	20,035,
7/1/2002-6/30/2003	157,890,000	8.00%	12,631,200	192	99%	7/1/2031-6/30/2032	20,381,
7/1/2003-6/30/2004	198,201,000	8.00%	15,856,080	180	99%	7/1/2032-6/30/2033	20,723,
7/1/2004-6/30/2005	47,200,000	8.00%	3,776,000	168	98%	7/1/2033-6/30/2034	21,154,
7/1/2005-6/30/2006	68,565,000	8.00%	5,485,200	156	96%	7/1/2034-6/30/2035	21,615,
7/1/2006-6/30/2007	26,224,359	8.00%	2,097,949	144	94%	7/1/2035-6/30/2036	22,122,
7/1/2007-6/30/2008	332,810,000	8.00%	26,624,800	132	92%	7/1/2036-6/30/2037	22,617,
7/1/2008-6/30/2009	354,360,000	8.00%	28,348,800	120	87%	7/1/2037-6/30/2038	23,233
7/1/2009-6/30/2010	135,035,000	8.00%	10,802,800	108	83%	7/1/2038-6/30/2039	23,784
7/1/2010-6/30/2011	190,190,000	8.00%	15,215,200	96	77%	7/1/2039-6/30/2040	24,290
7/1/2011-6/30/2012	55,860,000	8.00%	4,468,800	84	67%	7/1/2040-6/30/2041	24,722
7/1/2012-6/30/2013	361,555,000	8.00%	28,924,400	72	57%	7/1/2041-6/30/2042	25,044
7/1/2013-6/30/2014	258,081,893	8.00%	20,646,551	60	44%	7/1/2042-6/30/2043	25,342
7/1/2014-6/30/2015	241,145,000	8.00%	19,291,600	48	32%	7/1/2043-6/30/2044	25,530
7/1/2015-6/30/2016	263,524,235	8.00%	21,081,939	36	19%	7/1/2044-6/30/2045	25,661
7/1/2016-6/30/2017	374,545,000	8.00%	29,963,600	24	6%	7/1/2045-6/30/2046	25,465
7/1/2017-6/30/2018	238,740,000	8.00%	19,099,200	12	1%	7/1/2046-6/30/2047	24,276
7/1/2018-6/30/2019	225,000,000	8.00%	18,000,000	0	0%	7/1/2047-6/30/2048	20,923
7/1/2019-6/30/2020	225,000,000	8.00%	18,000,000		0%		,
7/1/2020-6/30/2021	225,000,000	8.00%	18,000,000		0%		
7/1/2021-6/30/2022	225,000,000	8.00%	18,000,000		0%		
7/1/2022-6/30/2023	225,000,000	8.00%	18,000,000		0%		
7/1/2023-6/30/2024	250,000,000	8.00%	20,000,000		0%		
7/1/2024-6/30/2025	250,000,000	8.00%	20,000,000		0%		
7/1/2025-6/30/2026	250,000,000	8.00%	20,000,000		0%		
7/1/2026-6/30/2027	250,000,000	8.00%	20,000,000		0%		
7/1/2027-6/30/2028	250,000,000	8.00%	20,000,000		0%		
7/1/2028-6/30/2029	275,000,000	8.00%	22.000.000		0%		
7/1/2029-6/30/2030	275,000,000	8.00%	22,000,000		0%		
7/1/2030-6/30/2031	275,000,000	8.00%	22,000,000		0%		
7/1/2030-6/30/2031	275,000,000	8.00%	22,000,000		0%		
7/1/2032-6/30/2032	300,000,000	8.00%	24,000,000		0%		
7/1/2032-6/30/2033	300,000,000	8.00%	24,000,000		0%		
7/1/2034-6/30/2035	300,000,000	8.00%	24,000,000		0%		
7/1/2034-6/30/2035	325,000,000	8.00%	26,000,000		0%		
7/1/2036-6/30/2037	325,000,000	8.00%	26,000,000		0%		
7/1/2030-6/30/2037	325,000,000	8.00%	26,000,000		0%		
7/1/2037-6/30/2036	325,000,000	8.00%	26,000,000		0%		
7/1/2038-6/30/2039	325,000,000	8.00%	26,000,000		0%		
					0%		
7/1/2040-6/30/2041	325,000,000	8.00%	26,000,000				
7/1/2041-6/30/2042	325,000,000	8.00%	26,000,000		0% 0%		
7/1/2042-6/30/2043	325,000,000	8.00%	26,000,000				
7/1/2043-6/30/2044	325,000,000	8.00%	26,000,000		0%		
7/1/2044-6/30/2045	325,000,000	8.00%	26,000,000		0%		
7/1/2045-6/30/2046	325,000,000	8.00%	26,000,000		0%		
7/1/2046-6/30/2047	325,000,000	8.00%	26,000,000		0%		
7/1/2047-6/30/2048	325,000,000	8.00%	26,000,000		0%		

## Estimated Loss Payment for Future Default by Fiscal Year - New Loans Insured At 8.00% Default Rate Based on Data as of June 30, 2018

Fiscal	Estimated	Estimated	Estimated	Projected
	Amount of Loan	Loss	Total Amount	Loss
Year	Default	Severity	of Loss	Payment
7/1/2018-6/30/2019	19,837,738	64.5%	12,795,341	2,367,138
7/1/2019-6/30/2020	20,280,294	64.5%	13,080,790	5,170,944
7/1/2020-6/30/2021	20,290,448	64.5%	13,087,339	8,752,246
7/1/2021-6/30/2022	19,967,117	64.5%	12,878,791	10,456,966
7/1/2022-6/30/2023	19,744,023	64.5%	12,734,895	11,831,904
7/1/2023-6/30/2024	19,673,511	64.5%	12,689,415	12,279,266
7/1/2024-6/30/2025	19,242,764	64.5%	12,411,583	12,419,452
7/1/2025-6/30/2026	19,293,391	64.5%	12,444,237	12,445,529
7/1/2026-6/30/2027	19,292,512	64.5%	12,443,670	12,451,307
7/1/2027-6/30/2028	19,316,126	64.5%	12,458,901	12,439,874
7/1/2028-6/30/2029	19,475,350	64.5%	12,561,601	12,455,108
7/1/2029-6/30/2030	19.777.392	64.5%	12.756.418	12,531,980
7/1/2030-6/30/2031	20,035,183	64.5%	12,922,693	12,641,893
7/1/2031-6/30/2032	20,381,031	64.5%	13,145,765	12,784,593
7/1/2032-6/30/2033	20.723.655	64.5%	13.366.758	12,953,699
7/1/2033-6/30/2034	21,154,192	64.5%	13,644,454	13,160,501
7/1/2034-6/30/2035	21,615,487	64.5%	13,941,989	13,392,582
7/1/2035-6/30/2036	22,122,918	64.5%	14,269,282	13,657,894
7/1/2036-6/30/2037	22,617,499	64.5%	14,588,287	13,944,345
7/1/2037-6/30/2038	23,233,827	64.5%	14,985,819	14,262,496
7/1/2038-6/30/2039	23,784,293	64.5%	15.340.869	14,596,366
7/1/2039-6/30/2040	24,290,293	64.5%	15,667,239	14,942,267
7/1/2040-6/30/2041	24,722,968	64.5%	15,946,315	15,273,333
7/1/2041-6/30/2042	25,044,973	64.5%	16,154,008	15,577,312
7/1/2042-6/30/2043	25,342,869	64.5%	16,346,150	15,845,287
7/1/2043-6/30/2044	25,530,872	64.5%	16,467,413	16,068,103
7/1/2044-6/30/2045	25,661,667	64.5%	16,551,775	16,249,029
7/1/2045-6/30/2046	25,465,757	64.5%	16,425,414	16,351,548
7/1/2046-6/30/2047	24,276,664	64.5%	15,658,448	16,264,970
7/1/2047-6/30/2048	20,923,616	64.5%	13,495,733	15,709,238

### Estimated Amount of Loan Default by Fiscal Year at 10.00% Default Rate - New Loans Insured Based on Data as of June 30, 2018

	Total	Selected	Estimated				Estimated
Issue	Loan	Default	Default	Age	Reported	Fiscal	Amount of Loan
Year	Insured	Rate	Original	, .go	Factor	Year	Default by
	ourou	11010	Loan Amount				Fiscal Year
7/1/1989-6/30/1990	285,070,000	10.00%	28,507,000	348	100%	7/1/2018-6/30/2019	24,797,172
7/1/1990-6/30/1991	502,627,148	10.00%	50,262,715	336	100%	7/1/2019-6/30/2020	25,350,368
7/1/1991-6/30/1992	340,350,000	10.00%	34,035,000	324	100%	7/1/2020-6/30/2021	25,363,060
7/1/1992-6/30/1993	425,234,203	10.00%	42,523,420	312	100%	7/1/2021-6/30/2022	24,958,896
7/1/1993-6/30/1994	269,577,356	10.00%	26,957,736	300	100%	7/1/2022-6/30/2023	24,680,029
7/1/1994-6/30/1995	86,855,000	10.00%	8,685,500	288	100%	7/1/2023-6/30/2024	24,591,889
7/1/1995-6/30/1996	122,845,000	10.00%	12,284,500	276	100%	7/1/2024-6/30/2025	24,053,45
7/1/1996-6/30/1997	96,845,000	10.00%	9,684,500	264	100%	7/1/2025-6/30/2026	24,116,739
7/1/1997-6/30/1998	288,615,000	10.00%	28,861,500	252	100%	7/1/2026-6/30/2027	24,115,640
7/1/1998-6/30/1999	30,100,000	10.00%	3,010,000	240	100%	7/1/2027-6/30/2028	24,145,15
7/1/1999-6/30/2000	135,160,000	10.00%	13,516,000	228	100%	7/1/2028-6/30/2029	24,344,18
7/1/2000-6/30/2001	153,995,000	10.00%	15,399,500	216	100%	7/1/2029-6/30/2030	24,721,74
7/1/2001-6/30/2002	183,335,000	10.00%	18,333,500	204	100%	7/1/2030-6/30/2031	25,043,97
7/1/2002-6/30/2003	157,890,000	10.00%	15,789,000	192	99%	7/1/2031-6/30/2032	25,476,28
7/1/2003-6/30/2004	198,201,000	10.00%	19,820,100	180	99%	7/1/2032-6/30/2033	25,904,56
7/1/2004-6/30/2005	47,200,000	10.00%	4,720,000	168	98%	7/1/2033-6/30/2034	26,442,74
7/1/2005-6/30/2006	68,565,000	10.00%	6,856,500	156	96%	7/1/2034-6/30/2035	27,019,35
7/1/2006-6/30/2007	26,224,359	10.00%	2,622,436	144	94%	7/1/2035-6/30/2036	27,653,64
7/1/2007-6/30/2008	332,810,000	10.00%	33,281,000	132	92%	7/1/2036-6/30/2037	28,271,87
7/1/2008-6/30/2009	354,360,000	10.00%	35,436,000	120	87%	7/1/2037-6/30/2038	29,042,28
7/1/2009-6/30/2010	135,035,000	10.00%	13,503,500	108	83%	7/1/2038-6/30/2039	29,730,36
7/1/2010-6/30/2011	190,190,000	10.00%	19,019,000	96	77%	7/1/2039-6/30/2040	30,362,86
7/1/2011-6/30/2012	55,860,000	10.00%	5,586,000	84	67%	7/1/2040-6/30/2041	30,903,71
7/1/2012-6/30/2013	361,555,000	10.00%	36,155,500	72	57%	7/1/2041-6/30/2042	31,306,21
7/1/2013-6/30/2014	258,081,893	10.00%	25,808,189	60	44%	7/1/2042-6/30/2043	31,678,58
7/1/2014-6/30/2015	241,145,000	10.00%	24,114,500	48	32%	7/1/2043-6/30/2044	31,913,59
7/1/2015-6/30/2016	263,524,235	10.00%	26,352,424	36	19%	7/1/2044-6/30/2045	32,077,08
7/1/2016-6/30/2017	374,545,000	10.00%	37,454,500	24	6%	7/1/2045-6/30/2046	32,241,96
7/1/2017-6/30/2018	238,740,000	10.00%	23,874,000	12	1%	7/1/2046-6/30/2047	32,322,95
7/1/2018-6/30/2019	225,000,000	10.00%	22,500,000	0	0%	7/1/2047-6/30/2048	32,382,47
7/1/2019-6/30/2020	225,000,000	10.00%	22,500,000		0%		
7/1/2020-6/30/2021	225,000,000	10.00%	22,500,000		0%		
7/1/2021-6/30/2022	225,000,000	10.00%	22,500,000		0%		
7/1/2022-6/30/2023	225,000,000	10.00%	22,500,000		0% 0%		
7/1/2023-6/30/2024	250,000,000	10.00%	25,000,000		0%		
7/1/2024-6/30/2025 7/1/2025-6/30/2026	250,000,000 250,000,000	10.00% 10.00%	25,000,000 25,000,000		0%		
7/1/2026-6/30/2027	250,000,000	10.00%	25,000,000		0%		
7/1/2027-6/30/2028	250,000,000	10.00%	25,000,000		0%		
7/1/2028-6/30/2029	275,000,000	10.00%	27,500,000		0%		
7/1/2029-6/30/2030	275,000,000	10.00%	27,500,000		0%		
7/1/2030-6/30/2030	275,000,000	10.00%	27,500,000		0%		
7/1/2030-6/30/2031	275,000,000	10.00%	27,500,000		0%		
7/1/2031-6/30/2032	300,000,000	10.00%	30,000,000		0%		
7/1/2032-6/30/2033	300,000,000	10.00%	30,000,000		0%		
7/1/2034-6/30/2035	300,000,000	10.00%	30,000,000		0%		
7/1/2034-0/30/2036	325,000,000	10.00%	32,500,000		0%		
7/1/2036-6/30/2037	325,000,000	10.00%	32,500,000		0%		
7/1/2037-6/30/2038	325,000,000	10.00%	32,500,000		0%		
7/1/2038-6/30/2039	325,000,000	10.00%	32,500,000		0%		
7/1/2039-6/30/2040	325,000,000	10.00%	32,500,000		0%		
7/1/2040-6/30/2041	325,000,000	10.00%	32,500,000		0%		
7/1/2041-6/30/2042	325,000,000	10.00%	32,500,000		0%		
7/1/2042-6/30/2043	325,000,000	10.00%	32,500,000		0%		
7/1/2043-6/30/2044	325,000,000	10.00%	32,500,000		0%		
7/1/2044-6/30/2045	325,000,000	10.00%	32,500,000		0%		
7/1/2045-6/30/2046	325,000,000	10.00%	32,500,000		0%		
7/1/2046-6/30/2047	325,000,000	10.00%	32,500,000		0%		
7/1/2047-6/30/2048	325,000,000	10.00%	32,500,000		0%		
	320,000,000	. 0.00 / 0	02,000,000		0.0		

## Estimated Loss Payment for Future Default by Fiscal Year - New Loans Insured At 10.00% Default Rate Based on Data as of June 30, 2018

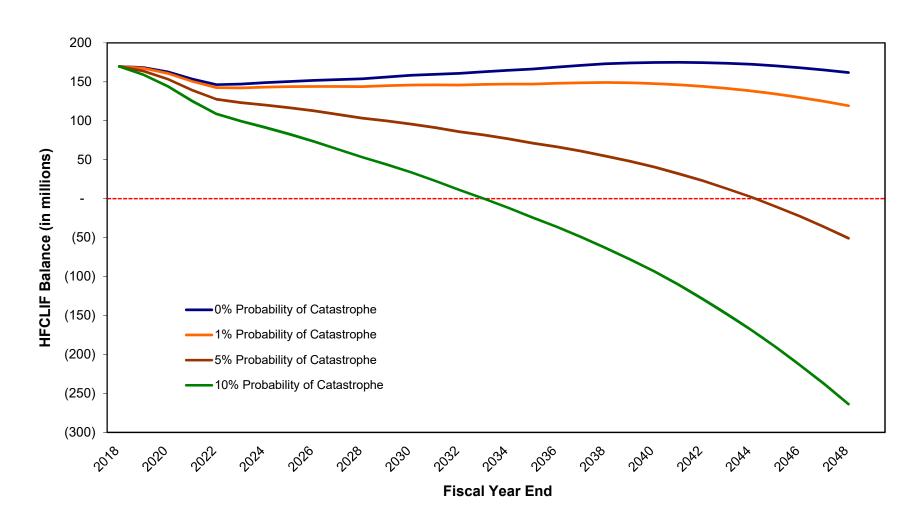
Fiscal	Estimated	Estimated	Estimated	Projected
Year	Amount of Loan	Loss	Total Amount	Loss
<u> </u>	Default	Severity	of Loss	Paymen
7/1/2018-6/30/2019	24,797,172	64.5%	15,994,176	2,958,92
7/1/2019-6/30/2020	25,350,368	64.5%	16,350,987	6,463,68
7/1/2020-6/30/2021	25,363,060	64.5%	16,359,174	10,940,3
7/1/2021-6/30/2022	24,958,896	64.5%	16,098,488	13,071,2
7/1/2022-6/30/2023	24,680,029	64.5%	15,918,619	14,789,8
7/1/2023-6/30/2024	24,591,889	64.5%	15,861,768	15,349,0
7/1/2024-6/30/2025	24,053,455	64.5%	15,514,478	15,524,3
7/1/2025-6/30/2026	24,116,739	64.5%	15,555,297	15,556,9
7/1/2026-6/30/2027	24,115,640	64.5%	15,554,588	15,564,1
7/1/2027-6/30/2028	24.145.157	64.5%	15,573,626	15,549,8
7/1/2028-6/30/2029	24,344,187	64.5%	15,702,001	15,568,8
7/1/2029-6/30/2030	24,721,740	64.5%	15,945,522	15,664,9
7/1/2030-6/30/2031	25,043,979	64.5%	16,153,367	15,802,3
7/1/2031-6/30/2032	25,476,289	64.5%	16,432,206	15,980,7
7/1/2032-6/30/2033	25,904,569	64.5%	16,708,447	16,192,1
7/1/2033-6/30/2034	26,442,740	64.5%	17,055,567	16,450,6
7/1/2034-6/30/2035	27,019,359	64.5%	17,427,487	16,740,7
7/1/2035-6/30/2036	27,653,648	64.5%	17,836,603	17,072,3
7/1/2036-6/30/2037	28,271,874	64.5%	18,235,358	17,430,4
7/1/2037-6/30/2038	29,042,284	64.5%	18,732,273	17,828,1
7/1/2038-6/30/2039	29,730,367	64.5%	19,176,087	18,245,4
7/1/2039-6/30/2040	30,362,867	64.5%	19,584,049	18,677,8
7/1/2040-6/30/2041	30,903,711	64.5%	19,932,893	19,091,6
7/1/2041-6/30/2042	31,306,217	64.5%	20,192,510	19,471,6
7/1/2042-6/30/2043	31,678,586	64.5%	20.432.688	19,806,6
7/1/2043-6/30/2044	31,913,590	64.5%	20,584,266	20,085,1
7/1/2044-6/30/2045	32,077,084	64.5%	20,689,719	20,311,2
7/1/2045-6/30/2046	32,241,964	64.5%	20,796,067	20,488,3
7/1/2046-6/30/2047	32,322,958	64.5%	20,848,308	20,623,9
7/1/2047-6/30/2048	32,382,474	64.5%	20,886,696	20,726,5

### Estimated Amount of Loan Default by Fiscal Year at 6.40% Default Rate - Annual-Premium Loans Only Based on Data as of June 30, 2018

Issue Year	Total Annual Premium Loans Insured	Selected Default Rate	Estimated Default Original Loan Amount	Age	Reported Factor	Fiscal Year	Estimated Amount of Loan Default by Fiscal Year
7/1/1983-6/30/1984	159,700,000	6.40%	10,220,800	420	100%	7/1/2018-6/30/2019	0
7/1/1984-6/30/1985	151,784,000	6.40%	9,714,176	408	100%	7/1/2019-6/30/2020	0
7/1/1985-6/30/1986	210,620,000	6.40%	13,479,680	396	100%	7/1/2020-6/30/2021	0
7/1/1986-6/30/1987	287,629,000	6.40%	18,408,256	384	100%	7/1/2021-6/30/2022	0
7/1/1987-6/30/1988	164,845,000	6.40%	10,550,080	372	100%	7/1/2022-6/30/2023	0
7/1/1988-6/30/1989	291,840,000	6.40%	18,677,760	360	100%	7/1/2023-6/30/2024	0
7/1/1989-6/30/1990	285,070,000	6.40%	18,244,480	348	100%	7/1/2024-6/30/2025	0
7/1/1990-6/30/1991	502,627,148	6.40%	32,168,137	336	100%	7/1/2025-6/30/2026	0
7/1/1991-6/30/1992	340,350,000	6.40%	21,782,400	324	100%	7/1/2026-6/30/2027	0
7/1/1992-6/30/1993	425,234,203	6.40%	27,214,989	312	100%	7/1/2027-6/30/2028	0
7/1/1993-6/30/1994	269,577,356	6.40%	17,252,951	300	100%	7/1/2028-6/30/2029	0
7/1/1994-6/30/1995	86,855,000	6.40%	5,558,720	288	100%	7/1/2029-6/30/2030	0
7/1/1995-6/30/1996	122,845,000	6.40%	7,862,080	276	100%	7/1/2030-6/30/2031	0
7/1/1996-6/30/1997	96,845,000	6.40%	6,198,080	264	100%	7/1/2031-6/30/2032	0
7/1/1997-6/30/1998	288,615,000	6.40%	18,471,360	252	100%	7/1/2032-6/30/2033	0
7/1/1998-6/30/1999	30,100,000	6.40%	1,926,400	240	100%	7/1/2033-6/30/2034	0
7/1/1999-6/30/2000	135,160,000	6.40%	8,650,240	228	100%	7/1/2034-6/30/2035	0
7/1/2000-6/30/2001	35,640,000	6.40%	2,280,960	216	100%	7/1/2035-6/30/2036	0

#### **Projected Fiscal Year End HFCLIF Balance**

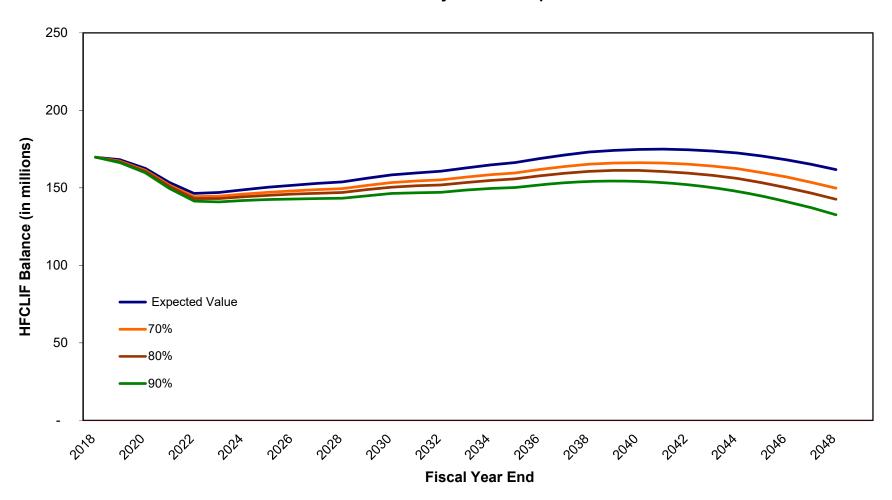
		Expected Fiscal Year I	End Fund Balance	
_	0% Probability of	1% Probability of	5% Probability of	10% Probability of
Fiscal Year	Catastrophe	Catastrophe	Catastrophe	Catastrophe
7/1/2017-6/30/2018	169,757,738	169,757,738	169,757,738	169,757,738
7/1/2018-6/30/2019	168,146,900	167,334,800	163,620,500	159,025,000
7/1/2019-6/30/2020	162,665,000	160,837,700	153,415,200	144,205,100
7/1/2020-6/30/2021	153,427,600	150,645,200	139,322,000	125,363,900
7/1/2021-6/30/2022	146,381,900	142,591,200	127,488,700	108,739,900
7/1/2022-6/30/2023	147,076,500	142,222,900	123,257,200	99,465,570
7/1/2023-6/30/2024	148,834,700	143,128,100	120,112,900	91,378,770
7/1/2024-6/30/2025	150,404,700	143,747,500	116,784,400	82,732,190
7/1/2025-6/30/2026	151,705,600	143,948,300	112,707,800	73,360,500
7/1/2026-6/30/2027	152,869,800	143,927,600	108,056,700	63,268,390
7/1/2027-6/30/2028	153,885,500	143,826,100	103,361,900	53,299,660
7/1/2028-6/30/2029	156,196,900	144,942,400	99,764,560	43,776,400
7/1/2029-6/30/2030	158,341,400	145,899,000	95,792,400	33,876,060
7/1/2030-6/30/2031	159,659,000	145,975,400	91,123,940	22,819,800
7/1/2031-6/30/2032	160,754,300	145,804,900	85,949,540	11,128,850
7/1/2032-6/30/2033	162,865,000	146,610,500	81,783,890	2,440
7/1/2033-6/30/2034	164,754,900	147,063,700	76,916,140	(11,565,890)
7/1/2034-6/30/2035	166,360,500	147,052,000	71,321,150	(24, 190, 500)
7/1/2035-6/30/2036	168,931,400	148,121,400	66,492,560	(36, 195, 340)
7/1/2036-6/30/2037	171,182,900	148,818,800	61,118,640	(49,227,150)
7/1/2037-6/30/2038	173,097,300	149,142,700	54,711,460	(63, 255, 080)
7/1/2038-6/30/2039	174,190,200	148,783,400	48,123,520	(77,731,860)
7/1/2039-6/30/2040	174,834,100	147,751,300	40,643,060	(93,220,470)
7/1/2040-6/30/2041	174,980,300	146,117,900	32,032,610	(110,271,800)
7/1/2041-6/30/2042	174,626,100	144,123,000	23,013,080	(128,653,700)
7/1/2042-6/30/2043	173,800,500	141,441,200	12,779,090	(148, 241, 200)
7/1/2043-6/30/2044	172,529,900	138,332,700	2,093,135	(168,479,500)
7/1/2044-6/30/2045	170,533,200	134,405,800	(9,929,797)	(190, 253, 300)
7/1/2045-6/30/2046	168,092,300	129,901,500	(22,591,370)	(213,580,000)
7/1/2046-6/30/2047	165,190,200	124,854,700	(36,213,090)	(237,862,700)
7/1/2047-6/30/2048	161,835,800	119,224,600	(50,798,380)	(263,744,200)



## Projected Fiscal Year End HFCLIF Balance 0% Probability of Catastrophe

Fiscal		C	onfidence Levels	
Year	Expected Value	70%	80%	90%
7/1/2017-6/30/2018	169,757,738	169,757,738	169,757,738	169,757,738
7/1/2018-6/30/2019	168,146,900	167,226,000	166,727,100	166,227,600
7/1/2019-6/30/2020	162,665,000	161,495,900	160,761,000	159,781,900
7/1/2020-6/30/2021	153,427,600	151,807,800	150,849,600	149,469,200
7/1/2021-6/30/2022	146,381,900	144,333,500	143,081,300	141,418,200
7/1/2022-6/30/2023	147,076,500	144,608,100	143,118,700	140,988,000
7/1/2023-6/30/2024	148,834,700	146,014,000	144,259,500	141,818,300
7/1/2024-6/30/2025	150,404,700	147,106,000	145,172,500	142,442,800
7/1/2025-6/30/2026	151,705,600	148,110,800	145,956,400	142,815,000
7/1/2026-6/30/2027	152,869,800	148,898,400	146,506,800	143,129,300
7/1/2027-6/30/2028	153,885,500	149,538,200	147,051,900	143,361,500
7/1/2028-6/30/2029	156,196,900	151,564,900	148,847,900	144,875,000
7/1/2029-6/30/2030	158,341,400	153,471,200	150,452,600	146,385,700
7/1/2030-6/30/2031	159,659,000	154,492,800	151,328,200	146,832,400
7/1/2031-6/30/2032	160,754,300	155,221,500	151,830,900	147,174,700
7/1/2032-6/30/2033	162,865,000	156,962,300	153,475,100	148,578,400
7/1/2033-6/30/2034	164,754,900	158,515,700	154,732,500	149,595,800
7/1/2034-6/30/2035	166,360,500	159,654,700	155,825,000	150,252,000
7/1/2035-6/30/2036	168,931,400	161,895,900	157,811,100	151,887,800
7/1/2036-6/30/2037	171,182,900	163,765,800	159,445,300	153,188,400
7/1/2037-6/30/2038	173,097,300	165,308,100	160,676,000	154,200,600
7/1/2038-6/30/2039	174,190,200	166,022,700	161,288,900	154,438,000
7/1/2039-6/30/2040	174,834,100	166,268,600	161,266,400	154,201,200
7/1/2040-6/30/2041	174,980,300	166,030,200	160,554,800	153,351,700
7/1/2041-6/30/2042	174,626,100	165,311,500	159,504,300	151,936,200
7/1/2042-6/30/2043	173,800,500	164,098,800	158,065,100	150,079,800
7/1/2043-6/30/2044	172,529,900	162,419,500	156,093,100	147,721,800
7/1/2044-6/30/2045	170,533,200	159,876,800	153,330,900	144,729,700
7/1/2045-6/30/2046	168,092,300	157,000,000	150,176,400	141,006,600
7/1/2046-6/30/2047	165,190,200	153,511,200	146,635,200	137,200,500
7/1/2047-6/30/2048	161,835,800	149,794,000	142,648,400	132,645,300

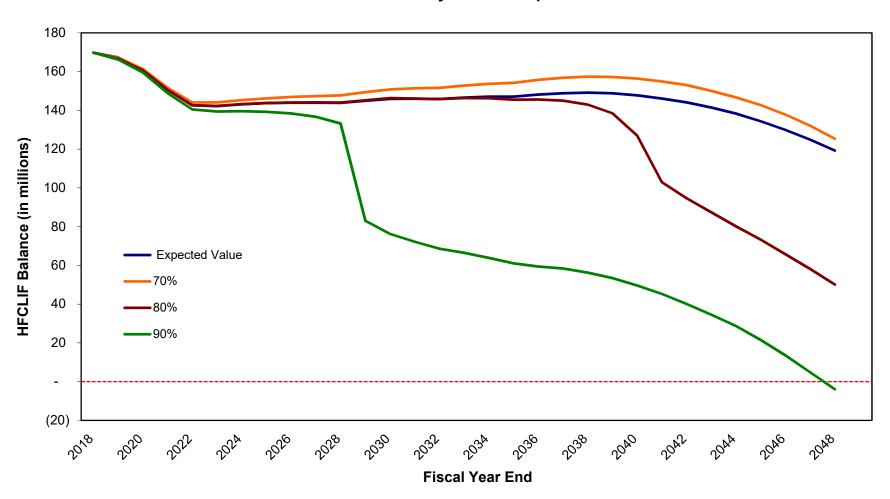
#### 0% Probability of Catastrophe



## Projected Fiscal Year End HFCLIF Balance 1% Probability of Catastrophe

Fiscal		С	onfidence Levels	
Year	Expected Value	70%	80%	90%
	•			
7/1/2017-6/30/2018	169,757,738	169,757,738	169,757,738	169,757,738
7/1/2018-6/30/2019	167,334,800	167,198,000	166,706,200	166,199,200
7/1/2019-6/30/2020	160,837,700	161,399,300	160,644,100	159,558,900
7/1/2020-6/30/2021	150,645,200	151,635,700	150,587,800	148,925,400
7/1/2021-6/30/2022	142,591,200	143,992,100	142,647,700	140,459,800
7/1/2022-6/30/2023	142,222,900	144,112,400	142,333,100	139,417,700
7/1/2023-6/30/2024	143,128,100	145,292,600	143,185,700	139,550,400
7/1/2024-6/30/2025	143,747,500	146,161,100	143,769,800	139,230,100
7/1/2025-6/30/2026	143,948,300	146,936,000	143,998,500	138,379,100
7/1/2026-6/30/2027	143,927,600	147,353,600	144,080,700	136,648,700
7/1/2027-6/30/2028	143,826,100	147,730,000	144,039,700	133,178,800
7/1/2028-6/30/2029	144,942,400	149,398,800	145,194,300	83,037,010
7/1/2029-6/30/2030	145,899,000	150,814,400	146,314,000	76,243,650
7/1/2030-6/30/2031	145,975,400	151,401,400	146,126,300	72,173,220
7/1/2031-6/30/2032	145,804,900	151,609,200	145,870,200	68,552,620
7/1/2032-6/30/2033	146,610,500	152,817,400	146,347,700	66,492,460
7/1/2033-6/30/2034	147,063,700	153,714,900	146,235,300	63,868,540
7/1/2034-6/30/2035	147,052,000	154,170,200	145,544,600	61,036,360
7/1/2035-6/30/2036	148,121,400	155,762,100	145,578,600	59,432,010
7/1/2036-6/30/2037	148,818,800	156,818,200	144,976,500	58,403,730
7/1/2037-6/30/2038	149,142,700	157,438,300	142,964,600	56,280,730
7/1/2038-6/30/2039	148,783,400	157,251,500	138,506,500	53,472,540
7/1/2039-6/30/2040	147,751,300	156,387,200	126,933,800	49,603,680
7/1/2040-6/30/2041	146,117,900	154,951,900	102,908,700	45,240,730
7/1/2041-6/30/2042	144,123,000	153,030,800	94,580,460	40,084,390
7/1/2042-6/30/2043	141,441,200	150,079,800	87,415,590	34,570,820
7/1/2043-6/30/2044	138,332,700	146,688,400	80,097,490	28,719,260
7/1/2044-6/30/2045	134,405,800	142,704,400	73,287,100	21,467,330
7/1/2045-6/30/2046	129,901,500	137,805,600	65,788,220	13,561,250
7/1/2046-6/30/2047	124,854,700	132,094,000	58,136,530	4,799,475
7/1/2047-6/30/2048	119,224,600	125,313,800	50,086,920	(3,928,120)

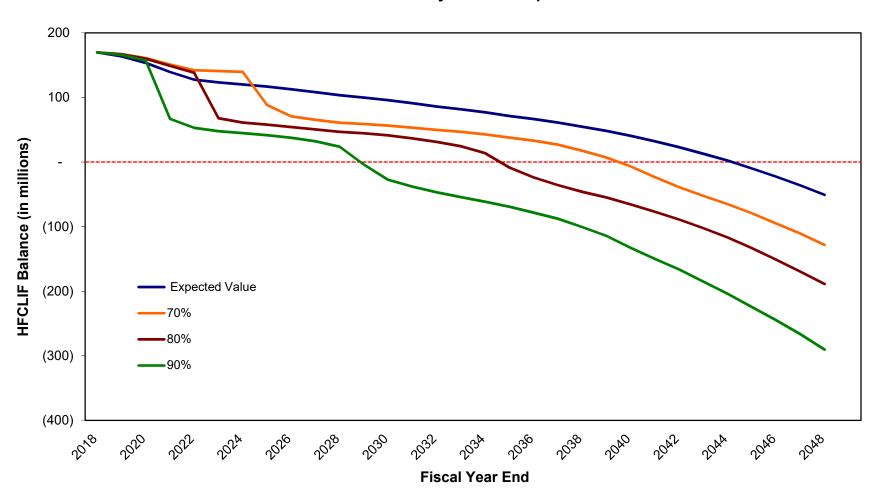
#### 1% Probability of Catastrophe



### Projected Fiscal Year End HFCLIF Balance 5% Probability of Catastrophe

Fiscal		Confidence Levels		
Year	Expected Value	70%	80%	90%
7/1/2017-6/30/2018	169,757,738	169,757,738	169,757,738	169,757,738
7/1/2018-6/30/2019	163,620,500	167,043,100	166,534,000	165,944,100
7/1/2019-6/30/2020	153,415,200	160,947,000	159,946,600	157,109,600
7/1/2020-6/30/2021	139,322,000	150,671,000	148,798,200	66,857,390
7/1/2021-6/30/2022	127,488,700	142,161,600	138,141,900	52,850,540
7/1/2022-6/30/2023	123,257,200	140,809,700	67,924,160	47,779,820
7/1/2023-6/30/2024	120,112,900	139,653,000	61,084,790	44,670,080
7/1/2024-6/30/2025	116,784,400	88,341,830	57,865,100	41,426,720
7/1/2025-6/30/2026	112,707,800	70,872,180	54,164,760	37,577,420
7/1/2026-6/30/2027	108,056,700	65,208,480	50,537,900	32,232,920
7/1/2027-6/30/2028	103,361,900	60,945,500	46,787,980	23,628,600
7/1/2028-6/30/2029	99,764,560	58,849,210	44,599,020	(4,056,467)
7/1/2029-6/30/2030	95,792,400	56,336,300	41,272,420	(27,599,240)
7/1/2030-6/30/2031	91,123,940	53,188,800	36,588,980	(38, 296, 720)
7/1/2031-6/30/2032	85,949,540	49,737,500	31,157,380	(46,901,220)
7/1/2032-6/30/2033	81,783,890	46,772,460	24,542,070	(54,344,400)
7/1/2033-6/30/2034	76,916,140	42,839,860	13,541,860	(61,520,410)
7/1/2034-6/30/2035	71,321,150	37,813,120	(8,371,763)	(69,231,300)
7/1/2035-6/30/2036	66,492,560	33,206,070	(23,852,330)	(78,340,210)
7/1/2036-6/30/2037	61,118,640	26,920,270	(35,835,490)	(87,869,400)
7/1/2037-6/30/2038	54,711,460	17,485,990	(46, 188, 480)	(100,652,700)
7/1/2038-6/30/2039	48,123,520	6,782,462	(54,901,220)	(114,294,400)
7/1/2039-6/30/2040	40,643,060	(6,840,344)	(65,610,550)	(132,850,000)
7/1/2040-6/30/2041	32,032,610	(23, 275, 570)	(77,087,340)	(149,874,200)
7/1/2041-6/30/2042	23,013,080	(38,960,720)	(89,112,140)	(166,297,200)
7/1/2042-6/30/2043	12,779,090	(52,403,340)	(102,316,600)	(185, 172, 700)
7/1/2043-6/30/2044	2,093,135	(65, 166, 800)	(116,789,200)	(203,963,000)
7/1/2044-6/30/2045	(9,929,797)	(79,418,700)	(133,365,600)	(224,421,600)
7/1/2045-6/30/2046	(22,591,370)	(95,103,540)	(151,056,700)	(244,730,400)
7/1/2046-6/30/2047	(36,213,090)	(110,848,500)	(169,781,800)	(266,718,900)
7/1/2047-6/30/2048	(50,798,380)	(128,339,400)	(188,784,900)	(290, 389, 100)

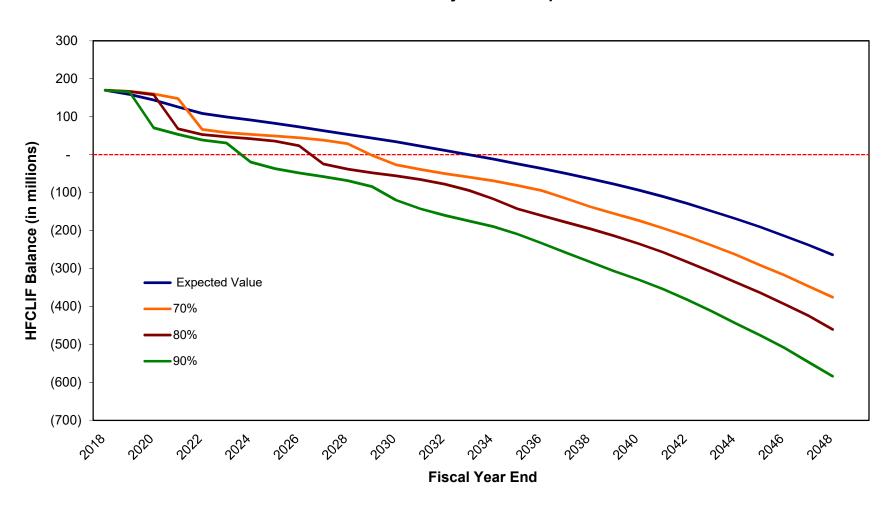
#### 5% Probability of Catastrophe



## Projected Fiscal Year End HFCLIF Balance 10% Probability of Catastrophe

Fiscal		Confidence Levels		
Year	Expected Value	70%	80%	90%
7/1/2017-6/30/2018	169,757,738	169,757,738	169,757,738	169,757,738
7/1/2018-6/30/2019	159,025,000	166,814,200	166,283,000	164,981,300
7/1/2019-6/30/2020	144,205,100	160,135,600	157,818,700	70,857,200
7/1/2020-6/30/2021	125,363,900	147,828,000	68,020,610	53,491,070
7/1/2021-6/30/2022	108,739,900	66,413,850	53,120,650	38,795,180
7/1/2022-6/30/2023	99,465,570	58,308,380	47,320,280	30,645,050
7/1/2023-6/30/2024	91,378,770	53,623,720	42,050,630	(19,308,990)
7/1/2024-6/30/2025	82,732,190	49,439,160	35,956,660	(36,613,210)
7/1/2025-6/30/2026	73,360,500	44,547,770	23,418,120	(48,021,100)
7/1/2026-6/30/2027	63,268,390	38,445,900	(24,452,980)	(57,934,040)
7/1/2027-6/30/2028	53,299,660	29,091,460	(38,084,920)	(68,469,670)
7/1/2028-6/30/2029	43,776,400	(1,757,558)	(47,515,170)	(84,003,410)
7/1/2029-6/30/2030	33,876,060	(26,578,840)	(55,678,830)	(119,831,500)
7/1/2030-6/30/2031	22,819,800	(38,923,540)	(65, 358, 500)	(142,626,900)
7/1/2031-6/30/2032	11,128,850	(49,967,380)	(77,528,970)	(159,958,100)
7/1/2032-6/30/2033	2,440	(58,951,500)	(94,053,310)	(174,768,800)
7/1/2033-6/30/2034	(11,565,890)	(68,846,920)	(116,557,200)	(189,523,500)
7/1/2034-6/30/2035	(24, 190, 500)	(81,040,870)	(142,388,600)	(209,026,200)
7/1/2035-6/30/2036	(36, 195, 340)	(94,521,280)	(160,559,700)	(233, 326, 200)
7/1/2036-6/30/2037	(49,227,150)	(115,036,400)	(178,089,200)	(258, 140, 200)
7/1/2037-6/30/2038	(63, 255, 080)	(137, 155, 400)	(195,124,900)	(282,611,900)
7/1/2038-6/30/2039	(77,731,860)	(155,586,700)	(214,023,500)	(306,896,400)
7/1/2039-6/30/2040	(93, 220, 470)	(173,184,000)	(234, 320, 700)	(329,055,900)
7/1/2040-6/30/2041	(110,271,800)	(193,338,400)	(256, 933, 700)	(353,512,500)
7/1/2041-6/30/2042	(128,653,700)	(215, 169, 400)	(282,344,200)	(381,768,500)
7/1/2042-6/30/2043	(148,241,200)	(238, 783, 200)	(308,704,900)	(411,936,200)
7/1/2043-6/30/2044	(168,479,500)	(263,070,400)	(335, 808, 200)	(444,298,000)
7/1/2044-6/30/2045	(190, 253, 300)	(291,001,600)	(363,457,100)	(475,659,500)
7/1/2045-6/30/2046	(213,580,000)	(317,080,000)	(393, 263, 800)	(508,559,000)
7/1/2046-6/30/2047	(237,862,700)	(346,464,000)	(423,991,400)	(546,300,000)
7/1/2047-6/30/2048	(263,744,200)	(375,448,500)	(460,314,100)	(583,694,100)

#### 10% Probability of Catastrophe



### Cal-Mortgage Loan Insurance Division California Health Facility Construction Loan Insurance Program Industry Countrywide Loss Experience - Hospitals Parameters for Monte Carlo Simulation Based on Data as of June 30, 2018

	(1)	(2)	(3)
	Hospitals	Nursing Homes	Selected
Issue	Loan Balance	Loan Balance	Loan Balance
Year	Default Rate	Default Rate	Default Rate
1981	1.94%	37.09%	26.4%
1982	1.13%	40.17%	28.3%
1983	0.28%	54.32%	37.9%
1984	0.23%	40.39%	28.2%
1985	0.91%	26.26%	18.6%
1986	3.88%	24.40%	18.2%
1987	1.92%	13.44%	9.9%
1988	0.45%	8.57%	6.1%
1989	0.61%	4.76%	3.5%
1990	0.82%	9.77%	7.0%
1991	2.77%	2.23%	2.4%
1992	2.70%	5.22%	4.5%
1993	1.93%	9.04%	6.9%
1994	1.14%	11.41%	8.3%
1995	0.29%	14.60%	10.3%
1996	3.30%	10.33%	8.2%
1997	1.07%	9.03%	6.6%
1998	0.83%	9.28%	6.7%
1999	0.45%	8.50%	6.1%
2000	0.05%	5.74%	4.0%
2001	0.05%	6.11%	4.3%
2002	0.45%	3.78%	2.8%
2003	2.39%	3.38%	3.1%
2004	0.14%	6.66%	4.7%
2005	0.45%	1.64%	1.3%
2006	0.19%	3.57%	2.5%
2007	2.78%	4.90%	4.3%
2008	0.38%	6.84%	4.9%
2009	0.11%	15.65%	10.9%
2010	0.37%	17.09%	12.0%
2011	0.46%	10.08%	7.2%
2012	0.86%	13.57%	9.7%
2013	0.70%	10.43%	7.5%
2014	0.75%	10.01%	7.2%
2015	0.89%	17.17%	12.2%
2016	1.03%	13.44%	9.7%
2017	1.10%	11.75%	8.5%

	Current Split of Exposure (Current Principal Balance)			
4)	Hospital:	30.4%		
5)	Nursing Home:	69.6%		
	Indicated CV (Coefficient of Variation):			
	1981 - 2017	0.852		
	1981 - 1999	0.802		
	1997 - 2007	0.415		
	2005 - 2017	0.463		
	1997 - 2017	0.488		
	Prior CV	0.610		
	Selected CV	0.570		

- From Section III, Exhibit 2, Page 2, Column (5)
   From Section III, Exhibit 2, Page 5, Column (5)

- (3) = [(1) x (4) + (2) x (5)]
   (4) Based on data from Section III, Exhibit 2, Page 1
   (5) Based on data from Section III, Exhibit 2, Page 1

#### Parameters for Monte Carlo Simulation Based on Data as of June 30, 2018

		Distribution	Expected	Selected CV	Low	High
(1)	Default Rate	Truncated Lognormal	6.40%	57.00%	1.28%	32.00%
(2)	Loss Severity	Triangle	64.50%		30.00%	100.00%
(3)	Loss Severity - CAT	Triangle	75.00%		50.00%	100.00%
(4)	New Insured Loan	Uniform			Expected - \$50M	Expected + \$50M
(5)	Termination Rate	Triangle	7.00%		0.00%	15.00%
(6)	Investment Yield	Triangle			Expected - 2%	Expected + 2%

#### Notes:

- (1) From Section III, Exhibit 2, Page 1 and Section IV, Exhibit 6, Page 1
- (2) From Section III, Exhibit 3
- (3) Selected
- (4) Selected
- (5) From Section III, Exhibit 5
- (6) Selected

#### Ten Largest Borrowers Based on Original Insured Amount Based on Data as of June 30, 2018

Вонномон		Original	Current
Borrower	Borrower	Insured	Principal
Rank		Amount	Balance
#1	ENLOE MEDICAL CENTER	242,645,000	207,650,000
#2	VIAMONTE SENIOR LIVING	187,230,000	187,230,000
#3	JEWISH HOME OF SAN FRANCISCO	135,920,000	135,920,000
#4	LOS ANGELES JEWISH HOME FOR THE AGING	251,105,000	112,280,000
#5	CHANNING HOUSE	98,165,000	97,880,000
#6	ODD FELLOWS HOME OF CALIFORNIA	98,550,000	82,905,000
#7	CASA DE LAS CAMPANAS	112,310,000	64,231,000
#8	CHINESE HOSPITAL	65,000,000	60,960,000
#9	NORTHERN CALIFORNIA PRESBYTERIAN HOMES & SERVICES	63,210,000	60,770,000
#10	MARSHALL MEDICAL CENTER	64,700,000	54,385,000
	TOTALS	1,318,835,000	1,064,211,000

Selected Catastrophe Loss	120,000,000
Prior Selected Catastrophe Loss	115,000,000
Average Excluding High & Low	125,565,000
Average	131,883,500



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