# SPECIAL REPORT ZIEGLER CREDIT SURVEILLANCE



# FINANCIAL RATIO MEDIANS FOR NOT-FOR-PROFIT ENTRANCE FEE CONTINUING CARE RETIREMENT COMMUNITIES

# BASED ON AUDITED FYE 2020 RESULTS

Mike Vitiello | Vice President, Credit Surveillance and Analytics | mvitiello@ziegler.com

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# EXECUTIVE SUMMARY

Ziegler Credit Surveillance (ZCS) is pleased to present this annual study of 19 financial ratio median and quartile values we deem important for analyzing the credit quality of not-for-profit Continuing Care Retirement Communities (CCRCs). These ratios address profitability, liquidity, cash flow, and capital structure.

The medians and quartiles discussed in this report are based on the fiscal year-ended 2020 audits of 116 not-for-profit CCRC borrower entities. These borrowers comprise legal entities for which Ziegler has underwritten debt, as well as a select few others we follow. Of the 116 borrowers, 52 had debt rated in the investment grade categories, while 64 had non-rated debt or debt rated in non-investment grade rating categories. We also include a multi and single-site comparison. 39 multi-site and 77 single-site borrowers were included. The number of included borrowers decreased by seven from last year. The sample size changes yearly due to a combination of new Ziegler clients, borrowers starting or stabilizing new projects, borrowers exiting or entering the public debt market, borrowers defaulting on their debt, and efforts to include non-Ziegler borrowers. This year some audits were also delayed due to COVID-19.

We did not include any FYE 2020 audits received after October 15, 2021. We were able to compute all 19 ratios for the vast majority of borrowers studied. However, for certain borrowers some ratios were not able to be computed. These instances are noted in the commentary for that particular ratio. The names of the 116 borrowers included in this Special Report can be found in Appendix A. Ziegler has underwritten bond issues for many more than the 116 borrowers included in our data. As of October 25, 2021, Ziegler Credit Surveillance follows 324 senior living borrowing entities, most of them with Ziegler underwritten debt outstanding. The rest of the 208 borrowers' audits were excluded from this report for the following reasons:

During the fiscal year 2020:

- The borrower had no material entrance fee collection. The borrower may operate on a rental basis only or requires only a nominal entrance fee to enter the community.
- The borrower did not offer a continuum of care: independent living as well as assisted living and/or skilled nursing care.
- The borrower was a new development CCRC or in the midst of a substantial repositioning and as such, the borrower was capitalizing a material amount of funded interest costs. Alternatively, material amounts of non-recurring initial

A CCRC provides coordinated care and services for older persons through contractual agreements. The community provides independent residential living, in addition to assisted living and/or skilled nursing care. To provide such services, the CCRC: 1) accepts an entrance fee or other type of advance fee; and/or 2) charges a full or discounted periodic fee.

Some industry participants have begun using the term "Life Plan Community" instead of CCRC. Ziegler Credit Surveillance has decided not to make this change yet.

Please refer to important analyst's certification and disclosure at the end of this Special Report.

Past performance is no guarantee of future results. This Special Report does not constitute a solicitation or an offer to purchase or sell any type of security described herein.

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entrance fees were being collected. Borrowers with small expansion projects who were capitalizing interest amounts that Ziegler Credit Surveillance judged to be immaterial were included in the data.

- The borrower's only bond debt outstanding was either 100% Letter of Credit (LOC) enhanced Variable Rate Demand Bonds (VRDBs), a Direct/Bank Placement, or a combination of both. These CCRCs are typically not required to file audited financial statements with the MSRB's Electronic Municipal Market Access (EMMA).
- The borrower was in monetary default or was severely financially distressed. Ratios would not be reflective of an operationally viable CCRC.

Ziegler Credit Surveillance calculates financial ratios generally, but not fully, in accordance with the guidelines published by the Continuing Care Accreditation Commission (CARF), a reputable body that accredits CCRCs. If our method for a particular ratio varies from CARF's method, it will be noted in the commentary for that ratio. Standard & Poor's and Fitch Ratings annually publish financial ratio medians for borrowers who have rated bonds. The rating agency's methodologies are similar, but not identical to, Ziegler Credit Surveillance's. Moody's is not active in rating CCRC bonds. We note that due to CARF's extensive accreditation criteria, and the high bar set to obtain an investment grade rating from a rating agency, our aggregate median results tend to be lower than the median results reported by CARF, Fitch, and S&P. More than half of the borrowers included in our study have non-rated bonds outstanding.

Ziegler Credit Surveillance was able to calculate Maximum Annual Debt Service (MADS) for all borrowers included in this year's Special Report except for two. Our ability to calculate MADS for almost all borrowers this year compared to past years mainly stems from the high issuance of publicly issued fixed rate debt over the past three years. Debt Service Schedules (DSS) in the newer Official Statements include previously unreleased aggregated debt service schedules including Direct/ Bank Placement debt. This facilitated a street calculation of MADS, thus MADS-involved ratios could be calculated. A secondary reason may be an improved understanding by management teams of the importance of proper disclosure of privately held debt details to public investors, in conjunction with better guidance from regulatory bodies regarding disclosure of debt service schedules.

Consensus among the participants who have a stake in creating uniformity around calculating financial ratios has not fully taken place. No absolute uniform national standards exist. Because of differences related to methods and values used, we publish a companion Special Report entitled, "Calculating Financial Ratios for Not-for-Profit Continuing Care Retirement Communities." Our companion report provides extensive background and detail on the analytical protocols we follow when computing ratios.

All Borrower FYE 2020 Financial Ratio Median Values	Ratios
Net Operating Margin (NOM)	3.6%
Net Operating Margin – Adjusted (NOM-A)	14.3%
Operating Ratio (OR)	98.7%
Operating Margin (OM)	-1.5%
Total Excess Margin (TEM)	1.0%
Change in Unrestricted Net Assets Margin (CUNAM)	1.7%
Days in Accounts Receivable (DAR)	13 days
Days Cash on Hand (DCOH)	360 days
Cushion Ratio (CUSH)	6.2 times
Debt Service Coverage – Revenue Basis (DSC-R)	0.94 times
Debt Service Coverage (DSC)	1.77 times
Maximum Annual Debt Service (MADS) as a Percentage of Total Operating Revenues and Net Non-operating Gains and (Losses) (DS-TR)	12.9%
Unrestricted Cash and Investments to Long-Term Debt (CTD)	50.0%
Reserve Ratio (RR)	54.8%
Long-Term Debt as a Percentage of Total Capital (LTDC)	97.3%
Long-Term Debt as a Percentage of Total Capital – Adjusted (LTDC-A)	75.4%

All Borrower FYE 2020 Financial Ratio Median Values	Ratios
Long-Term Debt as a Percentage of Total Assets (LTD-TA)	46.2%
Average Age of Plant (AAP)	11.9 years
Capital Expenditures as a Percentage of Depreciation Expense (CED)	71%

Of the 116 borrowers in our analysis, 52 had investment grade rated ("BBB-" or greater rating from S&P or Fitch) bonds when we compiled our data set in October 2021. We did not use the ratings in effect at FYE 2020, but we think this practice did not have material effect on the median split. The proportion of rated borrowers decreased from last year. As expected, the ratio medians generated from the audited financial results of borrowers who have investment grade rated bonds show these borrowers are in a stronger financial state when compared to the typical non-investment grade rated borrower. (For ease of reading, henceforth, we aggregately refer to non-rated and non-investment grade rated bonds as 'non-rated' in this report.) The stronger ratios associated with investment grade rated status provides further credibility regarding the creditworthiness calibration accuracy of S&P and Fitch. If both agencies rate the borrower, and one gives an investment grade rating while the other does not, we count that borrower as non-rated. Only a small percentage of new-issue bond financings are sold with a non-investment grade rating ("BB+" or lower from S&P or Fitch), though non-investment grade new issues are now more common than in prior years. Fifteen borrowers were rated non-investment grade and included as non-rated.

Breakout of FYE 2020 Financial Ratio Median Values: Investment Grade vs. Non-Rated						
Туре	Investment Grade	Non-rated				
Number of Borrowers	52	64				
Net Operating Margin (NOM)	-0.4%	4.8%				
Net Operating Margin – Adjusted (NOM-A)	14.4%	14.0%				
Operating Ratio (OR)	98.0%	99.4%				
Operating Margin (OM)	1.9%	-5.8%				
Total Excess Margin (TEM)	3.5%	-2.3%				
Change in Unrestricted Net Assets Margin (CUNAM)	4.6%	-1.0%				
Days in Accounts Receivable (DAR)	14 days	13 days				
Days Cash on Hand (DCOH)	516 days	250 days				
Cushion Ratio (CUSH)	10.7 times	4.1 times				
Debt Service Coverage – Revenue Basis (DSC-R)	1.02 times	0.87 times				
Debt Service Coverage (DSC)	2.19 times	1.46 times				
Maximum Annual Debt Service (MADS) as a Percentage of Total Operating Revenues and Net Non-operating Gains and (Losses) (DS-TR)	10.3%	15.7%				
Unrestricted Cash and Investments to Long-Term Debt (CTD)	78.9%	31.9%				
Reserve Ratio (RR)	85.3%	34.8%				
Long-Term Debt as a Percentage of Total Capital (LTDC)	77.2%	133.5%				
Long-Term Debt as a Percentage of Total Capital – Adjusted (LTDC-A)	51.5%	99.1%				
Long-Term Debt as a Percentage of Total Assets (LTD-TA)	34.5%	58.9%				
Average Age of Plant (AAP)	12.4 years	11.6 years				
Capital Expenditures as a Percentage of Depreciation Expense (CED)	93%	50%				



For this year's multi-site versus single-site analysis, we consider 39 borrowers to be multi-site and 77 to be single site. We define a multi-site borrower as either a single corporation or multiple corporations owning and operating more than one senior living campus. Twenty four of the 39 multi-site borrowers have investment grade rated debt. Due to this overlap in the samples we expect to see similar trends in the both the comparisons of multi vs single site, and investment grade vs non-rated. We do not compute ratios based on financial statements that are consolidated or combined with non-obligated entities.

Breakout of FYE 2020 Financial Ratio Median Values: Multi-Site vs. Single-Site						
Туре	Multi-site	Single-site				
Number of Borrowers	39	77				
Net Operating Margin (NOM)	3.7%	3.2%				
Net Operating Margin – Adjusted (NOM-A)	12.0%	16.5%				
Operating Ratio (OR)	96.6%	100.5%				
Operating Margin (OM)	-0.3%	-2.6%				
Total Excess Margin (TEM)	1.9%	-0.1%				
Change in Unrestricted Net Assets Margin (CUNAM)	1.2%	1.9%				
Days in Accounts Receivable (DAR)	18 days	11 days				
Days Cash on Hand (DCOH)	308 days	386 days				
Cushion Ratio (CUSH)	6.9 times	5.8 times				
Debt Service Coverage – Revenue Basis (DSC-R)	1.13 times	0.81 times				
Debt Service Coverage (DSC)	1.81 times	1.74 times				
Maximum Annual Debt Service (MADS) as a Percentage of Total Operating Revenues and Net Non-operating Gains and (Losses) (DS-TR)	10.5%	15.2%				
Unrestricted Cash and Investments to Long-Term Debt (CTD)	54.0%	44.5%				
Reserve Ratio (RR)	59.2%	51.5%				
Long-Term Debt as a Percentage of Total Capital (LTDC)	92.9%	116.8%				
Long-Term Debt as a Percentage of Total Capital – Adjusted (LTDC-A)	78.2%	74.5%				
Long-Term Debt as a Percentage of Total Assets (LTD-TA)	41.6%	50.3%				
Average Age of Plant (AAP)	12.6 years	11.9 years				
Capital Expenditures as a Percentage of Depreciation Expense (CED)	89%	58%				

# FISCAL YEAR TRENDS 2016 THROUGH 2020

Financial Ratios	FYE 2016 Medians	FYE 2017 Medians	FYE 2018 Medians	FYE 2019 Medians	FYE 2020 Medians
Number of Borrowers	96	110	119	123	116
Net Operating Margin (NOM)	8.6%	5.8%	4.3%	5.0%	3.6%
Net Operating Margin – Adjusted (NOM-A)	22.7%	24.0%	22.3%	19.2%	14.3%
Operating Ratio (OR)	99.2%	98.8%	99.6%	98.9%	98.7%
Operating Margin (OM)	-1.7%	-1.1%	-2.4%	-2.4%	-1.5%
Total Excess Margin (TEM)	-0.6%	1.2%	-0.2%	0.3%	1.0%
Change in Unrestricted Net Assets Margin (CUNAM)	-1.4%	4.3%	-1.8%	1.6%	1.7%
Days in Accounts Receivable (DAR)	16 days	14 days	15 days	15 days	13 days
Days Cash on Hand (DCOH)	315 days	330 days	334 days	367 days	360 days
Cushion Ratio (CUSH)	5.5 times	5.8 times	5.8 times	6.4 times	6.2 times
Debt Service Coverage – Revenue Basis (DSC-R)	0.85 times	0.89 times	0.81 times	0.86 times	0.94 times
Debt Service Coverage (DSC)	1.82 times	2.24 times	2.05 times	1.89 times	1.77 times
Maximum Annual Debt Service (MADS) as a Percentage of Total Operating Revenues and Net Non-operating Gains and (Losses) (DS-TR)	13.0%	14.0%	13.2%	12.8%	12.9%
Unrestricted Cash and Investments to Long- Term Debt (CTD)	41.8%	45.7%	42.7%	47.2%	50.0%
Reserve Ratio (RR)	48.0%	53.0%	53.0%	53.1%	54.8%
Long-Term Debt as a Percentage of Total Capital (LTDC)	101.1%	95.7%	98.6%	92.9%	97.3%
Long-Term Debt as a Percentage of Total Capital – Adjusted (LTDC-A)	79.5%	75.1%	76.8%	73.7%	75.4%
Long-Term Debt as a Percentage of Total Assets (LTD-TA)	49.8%	49.9%	47.9%	47.1%	46.2%
Average Age of Plant (AAP)	11.3 years	11.4 years	11.9 years	12 years	11.9 years
Capital Expenditures as a Percentage of Depreciation Expense (CED)	97.0%	88.0%	89.0%	91.0%	71.0%

As we can see from the chart above, most ratios were reasonably stable, if not improved, year-over-year. Due to the COVID pandemic, analysis of these results is more nuanced and difficult than usual. It is safe to say that ZCS does not find comfort in or opine on financial security for the sector based on FYE 2020 ratios. We believe that any stability shown is a function of government aid sufficiently covering lost revenues and additional expenses. With that in mind, we are forgoing our usual analysis in this report to ensure that the figures are made public as soon as possible. Upon publication of this report, we will begin work on a special purpose, in depth article analyzing how COVID-19 impacted the financial statements of senior living providers, and what we may expect for FYE 2021. We invite any interested readers to submit novel suggestions to the author of any specific analyses they may find useful.

Even without our usual credit related analysis, it is important to understand how certain COVID related accounting items were treated in order to use this report as a tool.

We included all PPP funding shown on the balance sheet as unrestricted liquidity, as we believe the allowable uses are broad enough to effectively make the funds unrestricted. If the auditor included a corresponding liability in the Long Term Debt figure, we backed that out. We also did not include any possible repayment requirements when calculating MADS. We believe this is reasonable, as we are not aware of any borrowers who have not been granted full forgiveness.



Whether or not the borrower amortized any funds or had their loan forgiven by FYE did not impact our treatment. We included any amortized PPP as "other operating income" for income statement ratios. While we realize there are downsides to this choice related to variability of FYE timing and auditor treatment, we believe there is no other feasible option for this analysis.

All CARES Act Provider Relief funding was similarly treated as unrestricted cash, and any amount amortized was included as "other operating income".

We will give a high-level overview of how each ratio was, or was not, directly impacted by government aid. Bear in mind that we are focused on accounting treatment of government aid, not whether the COVID operating environment would impact the ratio. When we say "no material impact" below, we mean that the choices and timing of government aid accounting treatment would not impact the ratio. We do not mean that decreased revenues or increased expenses due to COVID would not impact the inputs used to compute the ratio.

We are also developing a special purpose companion report that will delve into greater detail, including in-depth analysis of how PPP impacted financial results, with a focus on DCOH and DSC. That report will be posted to ZieglerCreditSurveillance.com when completed.

NOM and NOM-A: These ratios only include "resident revenues". We purposely excluded all government funding from these ratios, though COVID related expenses are included. We believe this treatment allows these two ratios to show what results would look like if there had been no aid.

DSC, DSC- R, OR, OM, TEM, and CUNAM: These ratios all include whatever funding was amortized into income, as well as any COVID related expenses. Twenty three borrowers (20%) amortized some portion of their PPP funding before FYE. The median amount amortized was 0.45 times. Most of the 23 borrowers that amortized PPP amortized all PPP received.

DAR: No material impact, only resident revenues are included.

DCOH, CUSH, CTD, and RR: Included all government funding received, even if the auditor segregated the funds on the balance sheet. Sixty six borrowers (57%) included in the study received PPP funding before their FYE, but again only 23 of those 66 amortized any PPP into income. The median amount received was 32.5 DCOH.

LTDC, LTDC-A, and LTD-TA: Minimally impacted, to the extent that aid funding would increase total assets and/or net assets. Whether PPP loans were booked as a liability mainly depended on auditor decision and timing.

AAP and CED: No impact, government aid would not materially impact any figures used to calculate these ratios.

Another notable point is the variability of fiscal year end dates. Some borrowers may have had different COVID experiences during their fiscal year. For example, a borrower with a 3/31 FYE would not have experienced much impact on operating income, but may have actually seen a decline in liquidity ratios due to the state of the market on 3/31/20. A borrower with a 6/30 or 9/30 FYE would have had more COVID quarters impairing operations, but would have received government aid and had an opportunity to participate in improved investment market performance. A borrower with a 12/31 FYE would have seen most of their year under the COVID regime, but would have maximized government aid and would be much more likely to have amortized PPP before FYE. All borrowers had at least one quarter (ending 3/31/20) with very minimal COVID impact to operations- this will not be the case for FYE 2021.

For reference here is the breakdown of FYE dates for the sample-

1/31-3/31: 8 (7%) 4/30-6/30: 27 (23%) 7/31-9/30: 19 (16%) 10/31-12/31: 62 (53%)

We look forward to publishing this report next year for FYE 2021 results. As always, we ask readers to comment on the utility of this report and make suggestions for improvements.

Ziegler Credit Surveillance has computed median ratios for this sector since 2012. For past results not displayed in this report, please contact the author.

# RATIO 1: NET OPERATING MARGIN (NOM)

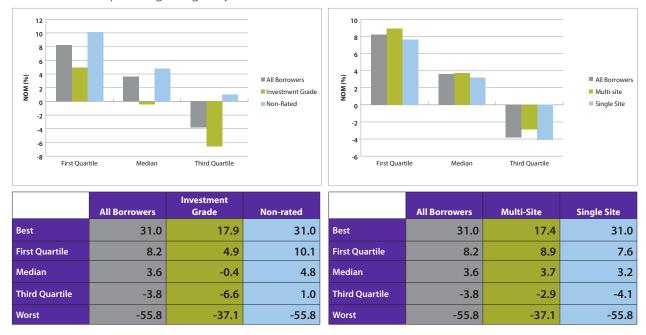
# FYE 2020 MEDIAN: 3.6% FYE 2019 MEDIAN: 5.0%

(Resident and Healthcare Revenue) - (Operating Expenses - Interest, Depreciation & Amortization Expenses) Resident and Healthcare Revenue

For this ratio, a higher value represents a more favorable result. All results for FYE 2020 were materially unfavorable to results for FYE 2019, with the interesting exception of first quartile, non-rated borrowers with similar results.

As started earlier, this ratio shows "organic" results — in other words, not inflated by any government aid. Keeping in mind that some borrowers had less COVID impact than others due to variations in FYE dates, we would expect the true impact on the median to be greater than the 1.4% shown.

NOM is the only ratio in this report where non-rated borrowers generally outperform their investment grade counterparts. ZCS believes this non-intuitive result is caused by exclusion of interest expense and non-resident revenues. Interest rates and related principal amounts are generally higher for non-rated borrowers compared to those rated investment grade. Thus, interest expense for non-rated borrowers will generally be higher than investment grade rated counterparts. Subtracting interest expense as part of the numerator improves the NOM for non-rated borrowers more than it does for investment grade borrowers. Also, investment grade borrowers tend to have larger amounts of unrestricted cash and investments, leading to potentially higher investment income. Investment income is a significant source of income for many CCRCs. Excluding it in the NOM hurts investment grade borrowers more than non-rated, while including it in other ratios has the opposite effect. Multi-site borrowers performed better than single-site on this performance measure.



FYE 2020 Net Operating Margin by Quartile

The Net Operating Margin (NOM) measures the operations of a CCRC and examines the revenues and expenses related to the delivery of services to residents. The purpose of this ratio is to provide a benchmark from which users of this report can determine the margin generated by cash resident revenues after payment of cash operating expenses. This allows interested parties to gauge the operational performance of a CCRC. Amortization of Entrance Fees is not a component of Resident Revenue.

The NOM is expressed as a percentage rounded to one decimal point, e.g. 2.8%. For example, if a CCRC had \$20,000,000 in Resident Revenue (net of Amortization of Entrance Fees), \$22,000,000 in Operating Expense, \$1,000,000 in Interest, \$1,550,000 in Depreciation and Amortization; NOM would be 2.8%.

# RATIO 2: NET OPERATING MARGIN-ADJUSTED (NOM-A)

## FYE 2020 MEDIAN: 14.3% FYE 2019 MEDIAN: 19.2%

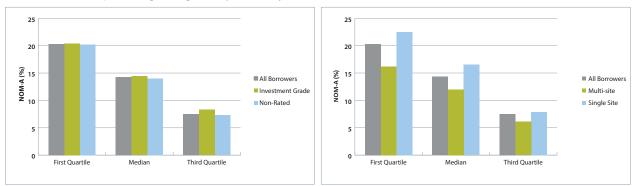
(Resident and Healthcare Revenue + Net Entrance Fees From Turnover) - (Operating Expenses - Interest, Depreciation and Amortization Expenses)

Resident and Healthcare Revenue + Net Entrance Fees From Turnover

For this ratio, a higher value represents a more favorable result. All results declined materially from FYE 2019. This decline was greater than the decline in NOM, showing the impact of significantly lower net entrance fee collection during the year. Investment grade borrowers performed similarly to non-rated. Single-site borrowers performed better than multi-site.

= NOM-A

# FYE 2020 Net Operating Margin-Adjusted by Quartile



	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	41.0	33.2	41.0	Best	41.0	23.9	41.0
First Quartile	20.3	20.4	20.2	First Quartile	20.3	16.2	22.5
Median	14.3	14.4	14.0	Median	14.3	12.0	16.5
Third Quartile	7.5	8.3	7.3	Third Quartile	7.5	6.1	7.9
Worst	-55.8	-34.4	-55.8	Worst	-55.8	-18.6	-55.8

The Net Operating Margin-Adjusted (NOM-A) measures a CCRC's margin produced by cash operating revenues after meeting cash expenses, but is adjusted to add net entrance fee receipts from turnover in both the numerator and denominator. This means figures from the Statement of Cash Flows are needed. Net turnover-related entrance fees are the cash flows associated with residents moving into previously occupied units. By comparing the results of this ratio to Ratio #1, NOM, the user can determine to what extent a CCRC relies on net turnover entrance fee receipts to enhance annual cash flows. A substantial difference in the NOM and NOM-A ratios shows a high sensitivity to, and dependence on, these fees. If NOM-A is lower than NOM, the CCRC had more entrance fee refunds than proceeds in the period. In tandem with other ratios such as Ratios #10 and #11 (Debt Service Coverage-Revenue Basis and Debt Service Coverage), users can determine the extent of a CCRC's reliance on net entrance fees for cash flow. Ziegler Credit Surveillance calculates this ratio differently from CARF. Ziegler Credit Surveillance excludes Initial Entrance Fees, while CARF includes them. Amortization of Entrance Fees is not a component of Resident Revenue.

The NOM-A is expressed as a percentage rounded to one decimal point, e.g. 11.6%. For example, if a CCRC had \$20,000,000 in Resident Revenue (net of Amortization of Entrance Fees), \$22,000,000 in Operating Expense, \$1,000,000 in Interest, \$1,550,000 in Depreciation and Amortization, and \$2,000,000 in Net Entrance Fees From Turnover; NOM-A would be 11.6%.

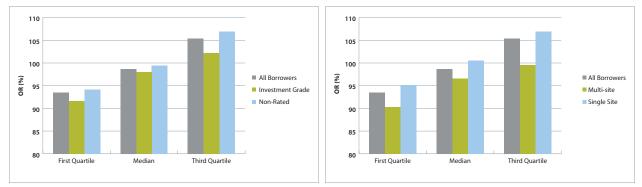
# RATIO 3: OPERATING RATIO (OR)

## FYE 2020 MEDIAN: 98.7% FYE 2019 MEDIAN: 98.9%

## Operating Expenses - (Depreciation, Amortization, Bad Debt Expenses) Operating Revenue - Amortization of Entrance Fees = OR

For this ratio, a lower value represents a more favorable result. From this ratio through CUNAM, we will be including any amortized aid funds — Provider Relief and PPP — as revenues. All results were similar to FYE 2019, except non-rated and single-site median and third quartile which were all unfavorable. Investment grade borrowers performed slightly better than non-rated and multi-site borrowers performed better than single-site. About 62% of investment grade borrowers, and 52% of non-rated borrowers reached the desired 100% benchmark for this ratio. Interestingly, proportionately fewer investment grade borrowers and more non-rated borrowers met 100% compared to FYE 2019. About 75% of multi-site borrowers reached the desired 100% benchmark, similar to FYE 2019.

FYE 2020 Operating Ratio by Quartile



	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	79.2	81.6	79.2	Best	79.2	79.2	81.6
First Quartile	93.5	91.6	94.2	First Quartile	93.5	90.3	95.2
Median	98.7	98.0	99.4	Median	98.7	96.6	100.5
Third Quartile	105.4	102.2	106.9	Third Quartile	105.4	99.6	106.9
Worst	132.2	112.6	132.2	Worst	132.2	110.8	132.2

The Operating Ratio (OR) measures cash operating revenues against cash operating expenses. The OR differs from the Net Operating Margin because: a) Interest Expense is included within operating expenses, b) Investment Interest/ Dividends and Net Assets Released for Operations are included within revenues, and c) no revenues are included in the numerator. Although an OR of less than 100 percent is desired, this ratio often pushes above the 100 percent mark, resulting from cash operating expenses exceeding cash operating revenues. The reason is the historical dependence of many CCRCs on cash from entrance fees collected to cover operating expenses, particularly interest expense. Although we do not include new development CCRCs in this study, these borrowers in particular will often experience an OR in excess of 100 percent if structured to rely on initial entrance fees to subsidize operating losses during the early fill-up years. The OR of a mature CCRC is generally expected to drop below 100 percent.

The OR is expressed as a percentage rounded to one decimal point, e.g. 100.3%. For example, if a CCRC has Operating Expenses of \$22,000,000, \$1,500,000 in Depreciation Expense, \$50,000 in Amortization Expense, \$22,400,000 of Operating Revenue and \$2,000,000 of Amortization of Entrance Fees; OR would be 100.3%.



# RATIO 4: OPERATING MARGIN (OM)

## FYE 2020 MEDIAN: -1.5% FYE 2019 MEDIAN: -2.4%

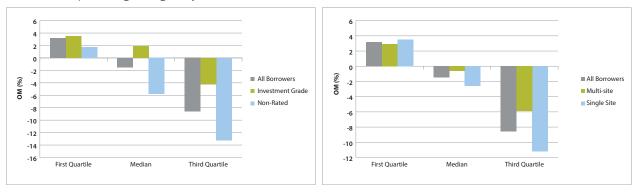
## Income (Loss) from Operations

## **Operating Revenue**

= **OM** 

For this ratio, a higher value represents a more favorable result. Most results improved or were stable from FYE 2019, with the exception of investment grade third quartile. Investment grade borrowers performed better than non-rated, and multi-site borrowers performed better than single-site., except for the first quartile. Of all borrowers, 44% had a positive result from this ratio.

# FYE 2020 Operating Margin by Quartile



	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	14.4	14.4	9.4	Best	14.4	8.3	14.4
First Quartile	3.2	3.5	1.7	First Quartile	3.2	2.9	3.5
Median	-1.5	1.9	-5.8	Median	-1.5	-0.3	-2.6
Third Quartile	-8.6	-4.2	-13.2	Third Quartile	-8.6	-5.9	-11.2
Worst	-81.3	-27.2	-81.3	Worst	-81.3	-20.4	-81.3

The Operating Margin (OM) measures the total portion of "operating" revenues remaining after operating expenses have been satisfied. It is considered to be a strong measure of the borrower's ability to generate surpluses for future requirements.

The OM is expressed as a percentage rounded to one decimal point, e.g. 1.8%. For example, if a CCRC had an Income from Operations of \$400,000 and Operating Revenue of \$22,500,000; OM would be 1.8%.

# RATIO 5: TOTAL EXCESS MARGIN (TEM)

# FYE 2020 MEDIAN: 1.0% FYE 2019 MEDIAN: 0.3%

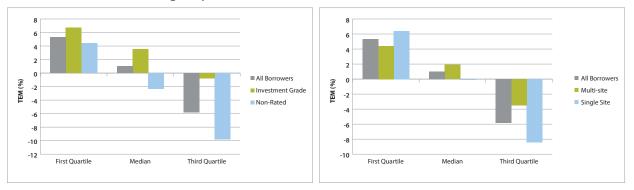
Total Excess of Revenues over Expenses

## Operating Revenue + Net Nonoperating Gains and (Losses)

For this ratio, a higher value represents a more favorable result. All results were improved from FYE 2019, with the exception of investment grade third quartile. Investment grade borrowers performed better than non-rated, and multisite borrowers performed better than single-site.

- = TEM

# FYE 2020 Total Excess Margin by Quartile



	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	19.4	19.4	15.1	Best	19.4	15.1	19.4
First Quartile	5.3	6.7	4.4	First Quartile	5.3	4.4	6.4
Median	1.0	3.5	-2.3	Median	1.0	1.9	-0.1
Third Quartile	-5.8	-0.8	-9.8	Third Quartile	-5.8	-3.5	-8.4
Worst	-77.7	-26.6	-77.7	Worst	-77.7	-17.2	-77.7

The Total Excess Margin (TEM) includes both operating and non-operating revenues and gains. In contrast to the Operating Margin, unrestricted contributions are included, as are realized gains or losses on investments or derivatives.

The TEM is expressed as a percentage rounded to one decimal point, e.g. 1.8%. For example, if a CCRC had an Excess of Revenues over Expenses of \$400,000, Operating Revenue of \$22,400,000, and Net Non-Operating Gain of \$100,000; the TEM would be 1.8%.



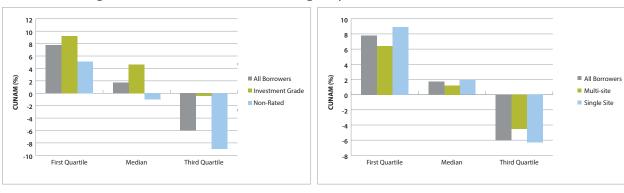
# RATIO 6: CHANGE IN UNRESTRICTED NET ASSETS MARGIN (CUNAM)

## FYE 2020 MEDIAN: 1.7% FYE 2019 MEDIAN: 1.6%

# Increase (Decrease) in Unrestricted Net Assets

All Revenues

For this ratio, a higher value represents a more favorable result. FYE 2020 median CUNAM was similar to FYE 2019. First quartile results improved slightly, while third quartile results increased significantly. Investment grade borrowers performed better than non-rated, and single-site borrowers overall performed better than multi-site in the first quartile and median, but worse in the third quartile.



# FYE 2020 Change in Unrestricted Net Assets Margin by Quartile

	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	49.3	28.9	49.3	Best	49.3	49.3	28.9
First Quartile	7.8	9.2	5.1	First Quartile	7.8	6.4	8.9
Median	1.7	4.6	-1.0	Median	1.7	1.2	1.9
Third Quartile	-6.0	-0.4	-9.0	Third Quartile	-6.0	-4.5	-6.3
Worst	-99.3	-24.2	-99.3	Worst	-99.3	-25.8	-99.3

This ratio is not computed by CARF, Fitch, or S&P. The CUNAM calculation includes all items listed on the Statement of Operations. Any net changes in the donor restricted Net Asset accounts for Temporarily or Permanently Restricted Net Assets are excluded from this ratio. We believe this ratio is the most comprehensive measure of the unrestricted "margin" a CCRC can produce. It incorporates all activities and financial line items that make up the bottom line change Unrestricted Net Assets on the Statement of Operations. Some examples of items that would be included in this ratio but are not included in Ratios 1-5 are: unrealized gain/loss on investments, gain/loss on bond refundings, and changes in pension obligations.

CUNAM is expressed as a percentage rounded to one decimal point, e.g. 0.4%. For example, if a borrower had a Change in Unrestricted Net Assets of \$100,000 and Revenues of \$22,800,000; CUNAM would be 0.4%.

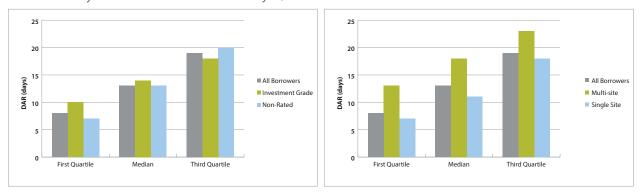
# RATIO 7: DAYS IN ACCOUNTS RECEIVABLE (DAR)

# FYE 2020 MEDIAN: 13 DAYS FYE 2019 MEDIAN: 15 DAYS

Net Accounts Receivable = DAR Resident and Healthcare Revenue/365

For this ratio, a lower value represents a more favorable result. Results for FYE 2020 were similar to results for FYE 2019. Investment grade borrowers performed comparably to non-rated, and single-site borrowers performed slightly better than multi-site.

FYE 2020 Days in Accounts Receivable by Quartile



	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	0	1	0	Best	0	5	0
First Quartile	8	10	7	First Quartile	8	13	7
Median	13	14	13	Median	13	18	11
Third Quartile	19	18	20	Third Quartile	19	23	18
Worst	84	50	84	Worst	84	50	84

The Days in Accounts Receivable (DAR) ratio measures how much revenue is tied up in uncollected billings. The calculation compares the total amount in accounts receivable (net of allowances for uncollectible accounts) to average daily operating revenues associated with net charges to residents of independent living, assisted living, and nursing units.

Generally, ILUs and ALUs in a CCRC are private pay. Typically, ILU charges are monthly, and billed in advance. For CCRCs with a high percentage of private pay (i.e., non-Medicare or Medicaid-insured) residents in nursing care beds (NCBs), this number should be low because typically private pay residents keep their account current. On the other hand, CCRCs with a high percentage of revenues from third-party payors (i.e. Medicaid and Medicare) will generally have a higher DAR because of systemic reasons that are somewhat out of management's control. The Medicaid receivable issue especially is more prevalent in some states than others. Before being able to judge a CCRC based on this ratio, users should understand the Borrower state's Medicaid billing/collection environment. It should be noted that a strong collection rate for private pay residents could mask potential issues with collections from third party payors.

DAR is expressed as a whole number of days, e.g. 12 days. For example, if a CCRC had \$750,000 in Net Accounts Receivable and \$60,300 in Daily Residential and Healthcare Revenues; DAR would be 12 days.



# RATIO 8: DAYS CASH ON HAND (DCOH)

## FYE 2020 MEDIAN: 360 DAYS FYE 2019 MEDIAN: 367 DAYS

Unrestricted Cash and Investments Daily Operating Expenses

For this ratio, a higher value represents a more favorable result. As mentioned earlier, the receipt of PPP by some, but not all, borrowers, as well as COVID related expense increases, complicates liquidity analysis. Again, 66 (57%) borrowers received PPP before FYE, with a median amount of 32.5 DCOH. The maximum amount received was 49 DCOH, and the minimum was 13 DCOH. A more in-depth analysis will be provided in our companion report. DCOH and the impact of PPP on liquidity will be a main focus of that report, due to common usage by investors and ubiquity of this ratio in covenant calculations.

FYE 2020 Days Cash on Hand by Quartile



The purpose of this ratio is to measure the number of days of cash the borrower has available for cash operating expenses, assuming no new revenue is received. A high DCOH indicates financial health in the event of an emergency or an immediate need for cash. With high liquidity, a borrower can hedge against potentially volatile annual cash flows and can internally fund routine capital expenditures. In addition, a CCRC offering entrance fee refunds needs to build cash reserves to offset any long-term nursing care subsidy while also keeping sufficient reserves to fund promised refunds, regardless of whether the refund is contingent upon resale/reoccupancy of the unit.

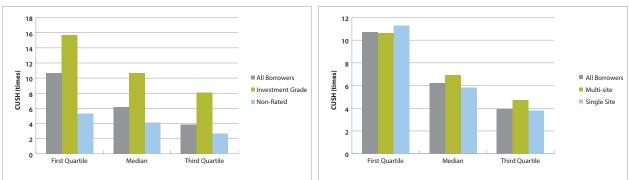
DCOH is expressed as a whole number of days, e.g. 179 days. Some put a possessive apostrophe (days') indicating a statement of the denominator's daily expenses. Ziegler Credit Surveillance chooses to make it simply a plural expression of days. For example, if a CCRC had Operating Expenses of \$22,000,000 and Depreciation, Amortization, and Bad Debt Expenses of \$1,550,000, the net annual cash operating expenses would be \$20,450,000. This amount is divided by 365 to arrive at the daily operating expense value, \$56,000. If the CCRC had Unrestricted Cash and Investments of \$10,000,000, we divide the daily operating expenses into the Unrestricted Cash and Investments to arrive at 179 days.

# RATIO 9: CUSHION RATIO (CUSH)

## FYE 2020 MEDIAN: 6.2 TIMES FYE 2019 MEDIAN: 6.4 TIMES

Unrestricted Cash and Investments	= CUSH
Maximum Annual Debt Service	= = cosh

For this ratio, a higher value represents a more favorable result. Median, first, and third quartile results for FYE 2019 were similar to results for FYE 2019. Investment grade borrowers performed considerably better than nonrated. Two borrowers were excluded from this ratio because we could not compute MADS.



# FYE 2020 Cushion Ratio by Quartile

	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	53.1	53.1	14.6	Best	53.1	21.8	53.1
First Quartile	10.7	15.7	5.3	First Quartile	10.7	10.6	11.3
Median	6.2	10.7	4.1	Median	6.2	6.9	5.8
Third Quartile	3.9	8.1	2.7	Third Quartile	3.9	4.7	3.8
Worst	0.1	4.4	0.1	Worst	0.1	1.7	0.1

The Cushion Ratio (CUSH) measures the borrower's cash position in relation to its annual debt service obligation. Ziegler Credit Surveillance uses Maximum Annual Debt Service (MADS) while CARF uses historical Annual Debt Service (ADS) taken straight from the audited financial statements. If we cannot compute a reliable MADS amount we will use ADS for analytical purposes, but we only use MADS for this report in order to avoid mixing calculation methods. A CUSH ratio of 1.0 times signifies that a CCRC has enough liquidity to cover MADS. If a CCRC's debt service has not been structured to be level, a low CUSH ratio using MADS may signal an inability to meet escalating or balloon principal payments.

The CUSH ratio is expressed to one decimal point, followed by the word "times," e.g. 6.7 times. Some use an "x" to represent the word times, however Ziegler Credit Surveillance chooses to write the word out. For example, if a CCRC had \$10,000,000 in Unrestricted Cash and Investments and Maximum Annual Debt Service of \$1,500,000; CUSH would be 6.7 times.



# RATIO 10: DEBT SERVICE COVERAGE-REVENUE BASIS (DSC-R)

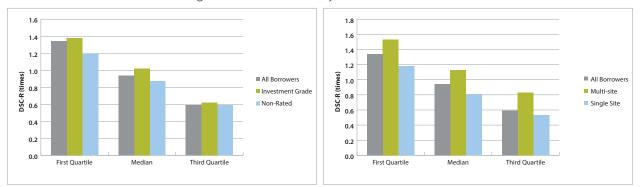
## FYE 2020 MEDIAN: 0.94 TIMES FYE 2019 MEDIAN: 0.86 TIMES

 Net Available for Debt Service

 Maximum Annual Debt Service

For this ratio, a higher value represents a more favorable result. As mentioned earlier, amortization of PPP by some, but not all, borrowers complicates analysis. Again, 23 included borrowers amortized PPP, with a median amount of 0.45 times coverage. Though we must perform a numerical analysis to confirm, we believe it is safe to state that at least some of the improvement in this ratio over FYE 2019 is due to PPP amortization and other government aid. Of the 114 borrowers whose DSC-R we were able to calculate, 46 or 40% had a DSC-R of over 1.00 times excluding PPP amortization (54 borrowers hit that benchmark including PPP). This proportion is generally in the high 30 to low 40 percent range. Two borrowers were excluded from this ratio because we could not compute MADS. We will include a more detailed analysis of DSC-R, focusing on PPP impact, in our upcoming companion report.

It is worth noting that negative DSC-R may not be indicative of a struggling CCRC, dependent on entrance fee structure. For example, seven of the ten lowest DSC-Rs in the study had DSCs of over 1.00 times — with none of the ten having amortized PPP funds. This data point illustrates that it is vital to view this ratio in conjunction with DSC.



FYE 2020 Debt Service Coverage – Revenue Basis by Quartile

	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	3.93	3.44	3.93	Best	3.93	3.44	3.93
First Quartile	1.34	1.38	1.19	First Quartile	1.34	1.53	1.18
Median	0.94	1.02	0.87	Median	0.94	1.13	0.81
Third Quartile	0.59	0.62	0.59	Third Quartile	0.59	0.83	0.53
Worst	-0.71	-0.71	-0.30	Worst	-0.71	-0.30	-0.71

Debt Service Coverage-Revenue Basis (DSC-R) shows how well a borrower can cover MADS without the benefit of cash flow from turnover-related net entrance fees. Covering debt service solely through operations and not relying on entrance fees is a more stringent and difficult goal to achieve. Ziegler Credit Surveillance uses Maximum Annual Debt Service (MADS) while CARF uses historical Annual Debt Service (ADS) taken straight from the audited financial statements. If we cannot compute a reliable MADS amount we will use ADS for analytical purposes, but we only use MADS for this report in order to avoid mixing calculation methods.

DSC-R is expressed to two decimal points, followed by the word "times", e.g. 0.77 times. Some use an "x" to represent the word times, however Ziegler chooses to write the word out. For example, if a borrower had Net Available for Debt Service of \$1,150,000 and Maximum Annual Debt Service of \$1,500,000; DSC-R would be 0.77 times.

# RATIO 11: DEBT SERVICE COVERAGE (DSC)

# FYE 2020 MEDIAN: 1.77 TIMES FYE 2019 MEDIAN: 1.90 TIMES

#### Net Available for Debt Service + Net Entrance Fees From Turnover = DSC

Maximum Annual Debt Service

For this ratio, a higher value represents a more favorable result. Of the 114 borrowers whose DSC we were able to calculate, 94 or 82% had a DSC of over 1.00 times excluding PPP amortization (100 borrowers hit that benchmark including PPP). This proportion is generally higher, in the low 90 percent range. As DSC-R actually improved from FY 2020, we can safely conclude that significantly lower turnover net entrance fees negatively outweighed amortized government aid. We will include a more detailed analysis of DSC, to include PPP impact, in our upcoming companion report. Two borrowers were excluded from this ratio because we could not compute MADS.

FYE 2020 Debt Service Coverage by Quartile

1.27

-0.40

1.76

-0.40

Third Quartile

Worst



Debt Service Coverage (DSC shows how well a borrower can cover MADS with the inclusion of cash flow from turnoverrelated net entrance fees. DSC should be considered in tandem with Ratio #10, Debt Service Coverage-Revenue Basis (DSC-R, discussed earlier. Again, Ziegler Credit Surveillance uses Maximum Annual Debt Service (MADS while CARF uses historical Annual Debt Service (ADS taken straight from the audited financial statements. If we cannot compute a reliable MADS amount we will use ADS for analytical purposes, but we only use MADS for this report in order to avoid mixing calculation methods.

Third Quartile

Worst

1.27

-0.40

1.49

0.07

1.22

-0.40

1.09

-0.30

DSC is expressed to two decimal points, followed by the word "times," e.g. 2.10 times. Some use an "x" to represent the word times, however Ziegler Credit Surveillance chooses to write the word out. For example, if a CCRC had Net Available for Debt Service of \$1,150,000, plus Net Entrance Fees from Turnover of \$2,000,000 the numerator would equal \$3,150,000. If Maximum Annual Debt Service was \$1,500,000; DSC would be 2.10 times.



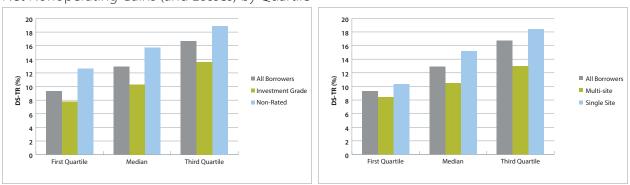
# RATIO 12: MADS AS A PERCENTAGE OF TOTAL OPERATING REVENUES AND NET NONOPERATING GAINS AND (LOSSES) (DS-TR)

# FYE 2020 MEDIAN: 12.9% FYE 2018 MEDIAN: 12.8%

Maximum Annual Debt Service = DS-TR Operating Revenues + Net Nonoperating Gains and (Losses) - Net Assets Released from Restrictions for PP&E

For this ratio, a lower value represents a more favorable result. All results were similar to FYE 2019. We would not expect to see a material difference due to COVID, as government aid would replace a substantial amount of lost revenue. Investment grade borrowers performed better than non-rated, and multi-site borrowers performed better than single-site. Two borrowers were excluded from this ratio because we could not compute MADS.

FYE 2020 Debt Service as a Percentage of Total Operating Revenues and Net Nonoperating Gains (and Losses) by Quartile



	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	3.0	3.0	6.1	Best	3.0	4.5	3.0
First Quartile	9.3	7.8	12.6	First Quartile	9.3	8.4	10.3
Median	12.9	10.3	15.7	Median	12.9	10.5	15.2
Third Quartile	16.7	13.6	18.9	Third Quartile	16.7	13.0	18.4
Worst	44.0	20.5	44.0	Worst	44.0	17.4	44.0

The purpose of this ratio is to indicate the percentage of operating revenues and non-operating gains (or losses) against other non-operating revenue taken up by MADS. Year-to-year, the DS-TR ratio will be affected by changes in maximum annual debt service and market conditions that enable favorable gains. Again, Ziegler Credit Surveillance uses Maximum Annual Debt Service (MADS) while CARF uses historical Annual Debt Service (ADS) taken straight from the audited financial statements. If we cannot compute a reliable MADS amount we will use ADS for analytical purposes, but we only use MADS for this report in order to avoid mixing calculation methods.

DS-TR is expressed as a percentage rounded to one decimal point, e.g. 6.7%. For example, if a CCRC had MADS of \$1,500,000, Operating Revenues of \$22,400,000, and Net Non-Operating Gain of \$100,000; DS-TR would be 6.7%.

# RATIO 13: UNRESTRICTED CASH & INVESTMENTS TO LONG-TERM DEBT (CTD)

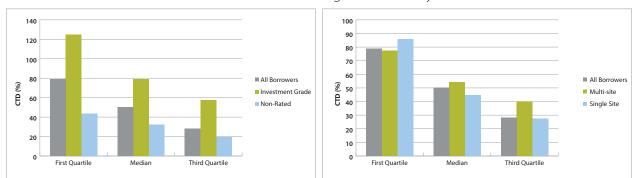
# FYE 2020 MEDIAN: 50.0% FYE 2019 MEDIAN: 47.2%

Unrestricted Cash and Investments

Long-Term Debt

\_\_\_\_\_ = CTD

For this ratio, a higher value represents a more favorable result. We would expect an increase from last year, as material amounts of government aid were received. Unlike DCOH, which would have a counterbalancing force in increased expenses, we do not believe debt amounts would have increased materially. As a reminder, we did not include PPP liabilities as Long-Term Debt for purposes of ratio calculation.



FYE 2020 Unrestricted Cash and Investments to Long-Term Debt by Quartile

	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	527.3	527.3	116.6	Best	527.3	153.7	527.3
First Quartile	78.7	124.9	43.4	First Quartile	78.7	77.2	85.8
Median	50.0	78.9	31.9	Median	50.0	54.0	44.5
Third Quartile	28.0	57.5	19.1	Third Quartile	28.0	39.7	27.3
Worst	0.7	38.9	0.7	Worst	0.7	14.4	0.7

The Unrestricted Cash and Investments to Long-Term Debt ratio (CTD) measures a CCRC's easily available cash and marketable securities (liquid and unencumbered cash and investments) in relation to its Long-Term Debt. This ratio is a measure of the borrower's ability to withstand annual fluctuations in cash flow, either from weakened operating results or negligible resident entrance fee receipts due to low turnover or a high amount of refunds.

CTD is expressed as a percentage rounded to one decimal point, e.g. 40.0%. For example, if a borrower had Unrestricted Cash and Investments of \$10,000,000 and Long-term Debt of \$25,000,000, CTD would be 40.0%.

# RATIO 14: RESERVE RATIO (RR)

## FYE 2020 MEDIAN: 54.8% FYE 2019 MEDIAN: 53.1%

## Unrestricted Cash and Investments + Debt Service Reserve Fund Long-Term Debt

For this ratio, a higher value represents a more favorable result. Like CTD, we would expect an increase from FYE 2019 due to aid with limited additional debt. We were unable to compute a Reserve Ratio for 31 borrowers as the specific amount of the Trustee-held Debt Service Reserve Fund was not disclosed in the audit. Investment grade borrowers performed significantly better than non-rated, and multi- site borrowers performed better than single-site except for the first quartile. As a reminder, we did not include PPP liabilities as Long-Term Debt for purposes of ratio calculation.

160 100 90 140 80 120 70 100 60 All Borrowers All Borrowers 8 50 RR (%) 80 Investment Grade Multi-site ¥ 40 Non-Rated Single Site 60 30 40 20 20 10 0 0 First Quartile Mediar Third Quartile First Quartile Mediar Third Quartile

FYE 2020 Reserve Ratio by Quartile

	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	538.6	538.6	99.6	Best	538.6	142.8	538.6
First Quartile	85.3	135.5	51.1	First Quartile	85.3	80.6	91.5
Median	54.8	85.3	34.8	Median	54.8	59.2	51.5
Third Quartile	33.8	59.6	25.2	Third Quartile	33.8	47.5	33.1
Worst	8.5	47.5	8.5	Worst	8.5	22.9	8.5

This ratio is not computed by CARF, Fitch, or S&P. We compute it for several reasons. Many CCRC bond issues impose operational covenants associated with cash and investments. One common covenant allows a new development CCRC the option of converting an initial Reserve Ratio into a DCOH ratio after certain financial milestones are reached. With longer fill-up time periods occurring with regularity, the Reserve Ratio covenant has stayed in place longer than most would have anticipated. Without the conversion, CCRCs – that self-report ratios – include any Debt Service Reserve Funds to report Reserve Ratio covenant compliance figures. As such, we include this ratio in our normal analysis.

The RR is expressed as a percentage rounded to one decimal point, e.g. 46.0%. For example, if a CCRC had Unrestricted Cash and Investments of \$10,000,000, a Debt Service Reserve Fund of \$1,500,000, and Long-term Debt of \$25,000,000; the Reserve Ratio would be 46.0%.

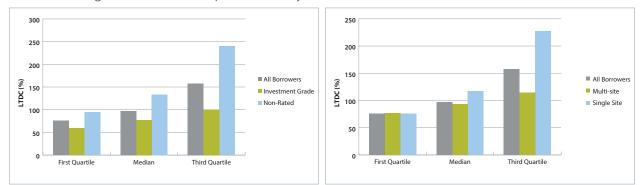
# RATIO 15: LONG-TERM DEBT AS A PERCENTAGE OF TOTAL CAPITAL (LTDC)

# FYE 2020 MEDIAN: 97.3% FYE 2019 MEDIAN: 92.9%

# Long-Term Debt Long-Term Debt + Unrestricted Net Assets

For this ratio, a lower value represents a more favorable result. FYE 2020 results were slightly unfavorable to FYE 2019. Five borrowers were excluded from this ratio. They had larger negative Unrestricted Net Assets than Long-Term Debt, and including these negative results would skew the median results. Investment grade borrowers performed better than non-rated, and multi-site borrowers performed better than single-site.

FYE 2020 Long-Term Debt-to-Capitalization by Quartile



	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	20.4	20.4	50.5	Best	20.4	48.6	20.4
First Quartile	75.8	59.3	94.1	First Quartile	75.8	76.5	75.6
Median	97.3	77.2	133.5	Median	97.3	92.9	116.8
Third Quartile	157.8	100.6	240.1	Third Quartile	157.8	114.7	227.2
Worst	29,219.0	532.6	29,219.0	Worst	29,219.0	1,145.7	29,219.0

The purpose of this ratio is to indicate the borrower's amount of leverage by measuring the debt compared to total "capital". When using this ratio to analyze for-profit corporations, debt includes both Short Term and Long Term Debt, and capital includes all debt and Shareholder's Equity. When analyzing not-for-profits (which, by definition, do not have shareholders), Unrestricted Net Assets is substituted for Shareholder's Equity. When analyzing CCRCs, we have decided to omit short term debt from the calculation because the vast majority of CCRCs only utilize long term bond debt. In general, for this ratio a lower value represents a more favorable result. However, this rule is negated if negative unrestricted net assets outweigh long term debt in the denominator. This situation yields a negative result from the subtraction in the denominator, and therefore a negative result for the ratio. Thus, the "favorability" of the results do not follow a linear track. For example, if a CCRC had Long-Term Debt of \$25,000,000 and negative Unrestricted Net Assets of \$24,000,000 the result would be a very unfavorable 2,500%. However, if negative Unrestricted Net Assets were \$26,000,000 the result would be negative result moves closer to 0%. Thus, we cannot effectively compare negative results with normal, positive results, though a negative result does hold some telling information by itself.

LTDC is expressed as a percentage rounded to one decimal place, e.g. 92.6%. For example, if a CCRC had \$25,000,000 in Long-Term Debt and \$2,000,000 in Unrestricted Net Assets; LTDC would be 92.6%



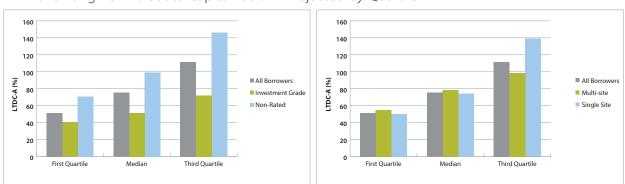
# RATIO 16: LONG-TERM DEBT AS A PERCENTAGE OF TOTAL CAPITAL-ADJUSTED (LTDC-A)

# FYE 2020 MEDIAN: 75.4% FYE 2019 MEDIAN: 73.7%

Long-Term Debt Long-Term Debt + Unrestricted Net Assets + Unearned Entrance Fees (Non-Refundable)

For this ratio, a lower value represents a more favorable result. First quartile, median, and third quartile results for FYE 2020 were stable from FYE 2019. Three borrowers were excluded from this ratio. They had larger negative Unrestricted Net Assets than Long-Term Debt and Unearned Entrance Fees, and including these negative results would skew the median. Investment grade borrowers performed better than non-rated. Single and multi-site borrowers performed comparably, except for the third quartile where multi-site well outperformed single-site.

- = LTDC-A



FYE 2020 Long-Term Debt to Capitalization – Adjusted by Quartile

	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	11.0	11.0	37.8	Best	11.0	27.8	11.0
First Quartile	51.5	40.5	71.0	First Quartile	51.5	55.0	50.2
Median	75.4	51.5	99.1	Median	75.4	78.2	74.5
Third Quartile	111.4	72.2	146.4	Third Quartile	111.4	98.5	138.9
Worst	1,212.1	800.8	1,212.1	Worst	1,212.1	287.3	1,212.1

Similar to the Long-Term Debt to Capitalization Percentage, the purpose of this ratio is to measure leverage by comparing the borrower's debt to total capital. Unearned revenue from entrance fees is added in recognition that this account balance represents cash paid to the community that is often used for capital improvements and/or retained as cash reserves. In general, for this ratio a lower value represents a more favorable result. However, this rule is negated if negative unrestricted net assets outweigh long term debt in the denominator. This situation yields a negative result from the subtraction in the denominator, and therefore a negative result for the ratio. Thus, the "favorability" of the results do not follow a linear track. For example, if a CCRC had Long-Term Debt of \$25,000,000 and negative Unrestricted Net Assets of \$24,000,000 the result would be a very unfavorable 2,500%. However, if negative Unrestricted Net Assets were \$26,000,000 the result would be negative 2,500%. All else equal, as negative Unrestricted Net Assets outweigh Long Term Debt and become more negative, the negative result moves closer to 0%. Thus, we cannot effectively compare negative results with normal, positive results, though a negative result does hold some telling information by itself.

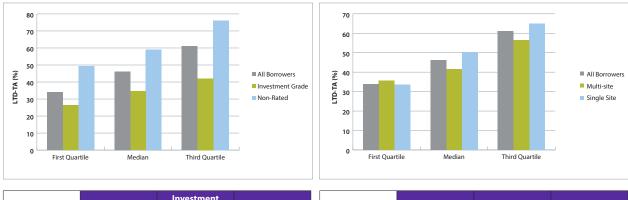
LTDC-A is expressed as a percentage rounded to one decimal place, e.g. 59.5% For example, if a CCRC had \$25,000,000 in Long-Term Debt, \$2,000,000 in Unrestricted Net Assets, and \$15,000,000 in Non-Refundable Unearned Entrance Fees; LTDC-A would be 59.5%.

# RATIO 17: LONG-TERM DEBT AS PERCENTAGE OF TOTAL ASSETS (LTD-TA)

# FYE 2020 MEDIAN: 46.2% FYE 2019 MEDIAN: 47.1%

Long-Term Debt = LTD-TA Total Assets

For this ratio, a lower value represents a more favorable result. First quartile, median, and third quartile results for FYE 2020 were all slightly favorable to FYE 2019. Investment grade borrowers performed better than non-rated, and multisite borrowers performed better than single-site.



FYE 2020 Long-Term Debt as a Percentage of Total Assets by Quartile

	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	9.1	9.1	21.9	Best	9.1	23.8	9.1
First Quartile	33.9	26.4	49.3	First Quartile	33.9	35.6	33.6
Median	46.2	34.5	58.9	Median	46.2	41.6	50.3
Third Quartile	61.1	42.1	76.1	Third Quartile	61.1	56.5	64.8
Worst	104.8	62.7	104.8	Worst	104.8	90.0	104.8

The Long-Term Debt to Total Assets (LTD-TA) ratio relates an organization's indebtedness to total assets. This ratio has some attributes of a liquidity ratio, as its value is sensitive to the market values of the borrower's investments. A borrower with a higher percentage for this ratio is considered to have a weaker capital structure than a borrower with a lower percentage.

LTD-TA is expressed as a percentage rounded to one decimal place, e.g. 41.7 %. For example, if a borrower had \$25,000,000 in Long-Term Debt and \$60,000,000 in Total Assets; LTD-TA would be 41.7%.



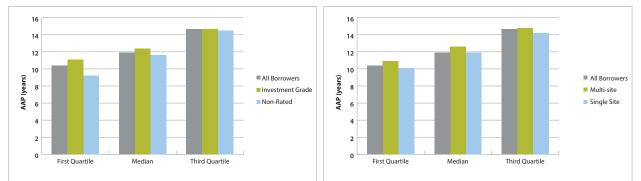
# RATIO 18: AVERAGE AGE OF PLANT (AAP)

## FYE 2020 MEDIAN: 11.9 YEARS FYE 2019 MEDIAN: 12.0 YEARS

Accumulated Depreciation	= AAP
Depreciation Expense	

For this ratio, a lower value represents a more favorable result. First quartile and median results for FYE 2020 were stable compared to FYE 2019 results, while third quartile results improved. We were unable to calculate AAP for five borrowers because material non-obligated entities were included in the consolidated/combined audited Accumulated Depreciation figure; no separate Obligated Group-only figures were presented. Non-rated borrowers performed better than investment grade, and single-site borrowers performed better than multi-site.

FYE 2020 Average Age of Plant/Facility by Quartile



	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	3.8	6.9	3.8	Best	3.8	6.9	3.8
First Quartile	10.4	11.1	9.2	First Quartile	10.4	10.9	10.1
Median	11.9	12.4	11.6	Median	11.9	12.6	11.9
Third Quartile	14.7	14.7	14.5	Third Quartile	14.7	14.8	14.2
Worst	21.6	18.4	21.6	Worst	21.6	19.0	21.6

The Average Age of Plant ratio (AAP) measures the historical commitment of a CCRC to facility upkeep and renewal. Instead of "plant" some ratio calculators use the word facility.

A lower Average Age of Plant is desired, as with older facilities there is a greater chance that a large expenditure will be required to keep the CCRC relevant. However, AAP is not a perfect measure of a CCRC's renewal because a low AAP could be a result of an expansion rather than renovation of existing facilities. This ratio may also indicate the "curb appeal" of the physical plant to a potential resident.

AAP is expressed as a number of years rounded to one decimal place, i.e. 10.0 years. For example, if the borrower had \$15,000,000 in Accumulated Depreciation and \$1,500,000 in Depreciation Expense; Average Age of Plant would be displayed as 10.0 years.

# RATIO 19: CAPITAL EXPENDITURES AS A PERCENTAGE OF DEPRECIATION EXPENSE (CED)

# FYE 2020 MEDIAN: 71% FYE 2019 MEDIAN: 91%

## Acquisition of PP&E

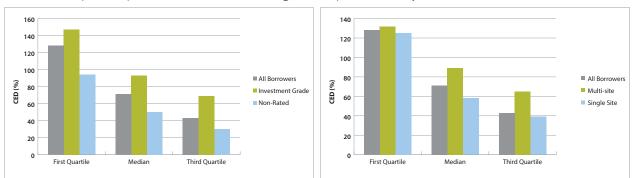
## **Depreciation Expense**

material items, such as building replacement or renovation.

For this ratio, a higher value represents a more favorable result. All results declined significantly from last year, across all borrower types. We believe that this reflects the common instinct among management teams to conserve cash due to COVID-19. Note that the decrease in capital expenditure would reflect both normal replacement items as well as longterm

– = CED

We were unable to calculate CED for one borrower because material non-obligated entities were included in the audited Acquisition of PP&E figure. Investment grade borrowers performed better than non-rated, and multi-site borrowers performed better than single-site. We believe that an 80-90% range for this ratio is healthy, as most stable CCRCs will let plant age a bit until doing a major repositioning, at which point they will usually be excluded from this study.



FYE 2020 Capital Expenditures as a Percentage of Depreciation by Quartile

	All Borrowers	Investment Grade	Non-rated		All Borrowers	Multi-Site	Single Site
Best	370	370	296	Best	370	241	370
First Quartile	128	147	94	First Quartile	128	132	125
Median	71	93	50	Median	71	89	58
Third Quartile	43	69	30	Third Quartile	43	65	39
Worst	2	30	2	Worst	2	21	2

The CED ratio is a tool for understanding the sufficiency of a CCRC's annual reinvestment in physical plant. A result of 100% shows that the borrower's expenditures on PP&E equaled the amount of depreciation expense.

CED is expressed as a percentage rounded to the nearest whole number, e.g. 67%. For example, if Acquisition of PP&E was \$1,000,000 and Depreciation Expense was \$1,500,000; CED would be 67%.

## ZIEGLER CREDIT SURVEILLANCE AND ANALYTICS

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## **ABOUT THE AUTHOR**

Mike Vitiello joined the surveillance team at Ziegler in April of 2013. He is primarily responsible for monitoring a portfolio of Ziegler and non-Ziegler underwritten senior living, healthcare and education credits. Mike is responsible for authoring borrower-specific credit research reports, commenting on each borrower's financial condition and highlighting any significant changes for the benefit of investors and Ziegler's internal business groups. His responsibilities also include the ZCS

annual CCRC Financial Ratio Median Analysis and the Default Study, as well as maintaining certain aspects of the Continuing Disclosure Call Program. Mike received a B.S.B.A. from Boston University in 2009, an M.B.A. from Pace University in 2018, holds Series 7 and 52 licenses from FINRA, is a CFA charter candidate, and belongs to several healthcare and municipal bond-related organizations.

## **ANALYSTS CERTIFICATION**

I, Mike Vitiello, hereby certify that the views expressed in this research report accurately refl ect my personal views about the subject securities, issuers and borrowers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specifi c recommendation or view expressed in this research report. The opinions expressed here refl ect my judgment and are subject to change. This is not a complete analysis of every material fact regarding any company, industry or security. Information has been obtained from sources considered reliable, but Ziegler cannot guarantee the accuracy. Additional information is available upon request. Other departments of Ziegler may have information, which is not available to Ziegler Credit Surveillance and Analytics, about companies mentioned in the report. Ziegler may execute transactions in the securities mentioned in the report, which may not be consistent with the report conclusions. Past perform investment banking or other services for, or solicit investment banking business from, any company mentioned in this report. This document may not be reprinted without permission.

# **ZCS ASSOCIATES**

## Lavinia Criswell

Director | Credit Surveillance and Analytics 312-705-7310 lcriswell@ziegler.com

### **Keith Bernard**

VP | Credit Surveillance and Analytics 212-284-5436 kbernard@ziegler.com

## **Mike Vitiello**

VP | Credit Surveillance and Analytics 212-284-5419 mvitiello@ziegler.com

### Victoria Neitzel

Senior Website Administrator | Credit Surveillance and Analytics 414-978-6464 vneitzel@ziegler.com

### Jill Kuehn

Associate| Credit Surveillance and Analytics 414-978-6461 jkuehn@ziegler.com

ZIEGLER CREDIT SURVEILLANCE AND ANALYTICS 2631 West Jetton Avenue Tampa, FL 33629

800 366 8899

www.ziegler.com



# APPENDIX A

## **CCRC Borrower Audits Used in Ratio Calculations**

Below is a listing of the borrowing entities whose financial results are part of this overall median study. In many instances, these borrowers have multiple bond issues outstanding. One hundred and three of the 116 borrowers (89%) of the borrowers included this year were also included last year, 20 dropped out and 13 were included this year but not last year.

Borrower Name	City	State	Last Yea
Aberdeen Heights (subsidiary Presbyterian Manors of Mid-America, Inc. (PMMA))	Kirkwood	MO	Yes
ACTS Retirement-Life Communities, Inc.	West Point	PA	Yes
Admiral at the Lake, The (sponsored by The Kendal Corporation)	Chicago	IL	Yes
Aldersly Garden Retirement Community	San Rafael	СА	Yes
American Baptist Homes of the Midwest (ABHM)	Eden Prairie	MN	Yes
Asbury Maryland Obligated Group (subsidiary of Asbury Communities, Inc.)	Gaithersburg	MD	Yes
Asbury Pennsylvania Obligated Group (subsidiary of Asbury Communities, Inc.)	Gaithersburg	MD	Yes
Asbury Place (aka Asbury, Inc.) (subsidiary of Asbury Communities, Inc.)	Maryville	ΤN	Yes
Atherton Baptist Homes	Alhambra	CA	Yes
Baptist Life Communities (aka Baptist Convalescent Center, Inc.)	Newport	KY	Yes
Bayview Retirement Community (aka Bayview Manor)	Seattle	WA	Yes
Beacon Hill at Eastgate (aka Michigan Ch <del>r</del> istian Home)	Grand Rapids	MI	Yes
Beatitudes Campus	Phoenix	AZ	Yes
Bethany Lutheran Village (aka Graceworks Lutheran Services)	Centerville	OH	No
Bishop Gadsden Episcopal Retirement Community (aka Episcopal Church Home)	Charleston	SC	No
Blue Skies of Texas Obligated Group (fka Air Force Village Obligated Group)	San Antonio	ΤX	Yes
Brazos Presbyterian Homes, Inc.	Houston	ΤX	Yes
Brethren Village Retirement Community	Lancaster	PA	No
Canterbury Court (aka All Saints - St. Luke's Episcopal Home for the Retired, Inc.)	Atlanta	GA	Yes
Carillon Senior LifeCare Community	Lubbock	ΤX	No
Carleton-Willard Village	Bedford	MA	Yes
Cedar Community (aka Benevolent Corporation Cedar Community)	West Bend	WI	Yes
Christian Horizons Obligated Group (fka Christian Homes, Inc.)	St. Louis	MO	Yes
Christian Living Neighborhoods	Greenwood Village	CO	Yes
Collington Episcopal Life Care Community, Inc. (sponsored by The Kendal Corporation)	Mitchellville	MD	Yes
Covenant Living Communities and Services (fka Covenant Retirement Communities, Inc.)	Skokie	IL	Yes
Covenant Woods	Mechanicsville	VA	Yes
Crane's Mill (Lutheran Social Ministries)	West Caldwell	NJ	Yes
Deerfield Episcopal Retirement Community, Inc.	Asheville	NC	Yes
Duncaster, Inc.	Bloomfield	СТ	Yes
Emerald Heights (subsidiary of Emerald Communities; aka Eastside Retirement Association)	Redmond	WA	Yes
Episcopal Communities & Services for Seniors (fka Episcopal Home Communities)	Pasadena	СА	Yes
Epworth Villa (aka Central Oklahoma United Methodist Retirement Facility, Inc.)	Oklahoma City	OK	Yes
Estates at Carpenters, The (aka Carpenter's Home Estates)	Lakeland	FL	Yes
/	Moorestown	NJ	Yes
Evergreens (The) (Subsidiary of ACTS Retirement-Life Communities)	MOOICStOwn		
Evergreens (The) (Subsidiary of ACTS Retirement-Life Communities) EveryAge (fka United Church Homes and Services Obligated Group) (NC)	Newton	NC	Yes
EveryAge (fka United Church Homes and Services Obligated Group) (NC)	Newton		Yes Yes
		NC NJ PA	



Borrower Name	City	State	Last Year
Franciscan Communities, Inc. Obligated Group	Homewood	IL	Yes
Friendship Village of Dublin	Columbus	OH	Yes
Friendsview Retirement Community (aka Friendsview Manor)	Newberg	OR	Yes
Goodwin House Incorporated	Alexandria	VA	Yes
Greencroft Obligated Group (IN) (sponsored by Greencroft Retirement Communities, Inc.)	Goshen	IN	Yes
GreenFields of Geneva (aka Friendship Village of Mill Creek) (subsidiary of Friendship Senior Options)	Geneva	IL	Yes
Gulf Coast Village (aka Gulf Care, Inc.)	Cape Coral	FL	Yes
Heritage Community of Kalamazoo	Kalamazoo	MI	Yes
Highlands at Wyomissing	Wyomissing	PA	Yes
Holland Home Obligated Group	Grand Rapids	MI	Yes
Horizon House	Seattle	WA	Yes
HumanGood California Obligated Group	Pleasanton	СА	Yes
HumanGood National Obligated Group	Phoenix	AZ	Yes
Immanuel Lutheran Corporation	Kalispell	МТ	No
Judson Obligated Group	Cleveland	OH	No
Kahala Nui (aka Kahala Senior Living Community, Inc.)	Honolulu	HI	Yes
Kendal at Hanover (sponsored by The Kendal Corporation)	Hanover	NH	Yes
Kendal at Ithaca (NY) (sponsored by The Kendal Corporation)	Ithaca	NY	Yes
Kendal at Oberlin (sponsored by The Kendal Corporation)	Oberlin	OH	Yes
Kirby Pines Retirement Community (aka Psalms, Inc.)	Memphis	TN	Yes
Lakeview Village, Inc.	Lenexa	KS	Yes
Lifespace Communities Obligated Group (fka Life Care Retirement Communities)	West Des Moines	IA	Yes
LifeSpire of Virginia (aka Virginia Baptist Homes) Obligated Group	west Des montes	VA	No
Longhorn Village	Austin	TX	Yes
Lutheran Homes of South Carolina Obligated Group	Irmo	SC	Yes
Lutheran Life Communities Obligated Group	Arlington Heights	IL	Yes
Lutheran Senior Services (LSS) Obligated Group	St. Louis	MO	Yes
Lutheran Services for the Aging	51. 1.0015	NC	Yes
Lutheran Village at Miller's Grant	Ellicott City	MD	Yes
Masonicare Obligated Group	Wallingford	CT	Yes
	0	PA	Yes
Messiah Lifeways (fka Messiah Village) Mirabella at South Waterfront (subsidiary of Pacific Retirement Services, Inc.)	Mechanicsburg		
	Portland	OR	Yes
MonteCedro (subsidiary of Episcopal Communities & Services For Seniors)	Pasadena	CA	No
Montereau, Inc.	Tulsa	OK	Yes
Montgomery Place	Chicago	IL	Yes
MRC Crestview (dba Crestview Retirement Community ) (subsidiary of Methodist Retirement Communities (MRC))	Bryan	TX	Yes
MRC The Crossings (aka Happy Harbor Methodist Home, Inc.) (subsidiary of Methodist Retirement Communities (MRC))	League City	ΤX	Yes
Mt. San Antonio Gardens (Congregational Homes, Inc.)	Pomona	CA	Yes
Navy Marine Coast Guard Foundation, Inc. and Vinson Hall	McLean	VA	Yes
Nazareth Living Center	St. Louis	MO	No
Oak Hammock at the University of Florida	Gainesville	FL	Yes
Ohio Living Communities (fka Ohio Presbyterian Retirement Services (OPRS Communities))	Columbus	OH	Yes

Borrower Name	City	State	Last Yea
Osborn, The (Miriam Osborn Memorial Home Association)	Rye	NY	Yes
Pennswood Village Project	Newtown	PA	Yes
Pleasant View Retirement Community	Manheim	PA	Yes
Plymouth Place, Inc.	LaGrange Park	IL	Yes
Presbyterian Homes Obligated Group	Evantson	IL	Yes
Presbyterian Manors, Inc. (PMI) (subsidiary of Presbyterian Manors of Mid-America, Inc. PMMA))	Wichita	KS	Yes
Presbyterian Retirement Communities Obligated Group	Orlando	FL	Yes
Royal Oaks Life Care Community (aka People of Faith, Inc.)	Sun City	AZ	Yes
Seabury (aka Church Home of Hartford Incorporated)	Bloomfield	СТ	Yes
Sierra Winds (aka Arizona Retirement Centers, Inc.)	Peoria	AZ	Yes
Simpson Senior Services	Bala Cynwyd	PA	Yes
inai Residences of Boca Raton (aka Federation CCRC Operations Corp.)	Boca Raton	FL	Yes
Springpoint at Lewes (SaL, d/b/a The Moorings at Lewes) (fka The Cadbury)		DE	No
St. James Place of Baton Rouge	Baton Rouge	LA	Yes
Stayton at Museum Way (aka Tarrant County Senior Living Center, Inc.) (subsidiary ofifespace)	Fort Worth	TX	No
Sunnyside Presbyterian Home	Harrisonburg	VA	Yes
Ferwilliger Plaza	Portland	OR	Yes
Three Crowns Park	Evanston	IL	Yes
Frezevant Manor (aka Trezevant Episcopal Home)	Memphis	TN	Yes
Jnited Methodist Communities (fka United Methodist Homes of New Jersey)	Neptune	NJ	Yes
Jnited Methodist Retirement Communities (UMRC) Obligated Group	Chelsea	MI	Yes
/illa St. Benedict	Lisle	IL	Yes
/illage at Germantown, Inc. (I'he)	Germantown	TN	Yes
Wake Robin Corporation	Shelburne	VΤ	No
Waverly Heights	Gladwyne	PA	Yes
Wesley Communities	Columbus	OH	No
Wesleyan Homes, Inc. Obligated Group	Georgetown	TX	Yes
Westminster at Lake Ridge (aka Westminster Presbyterian Retirement Community) (affiliate of Ingleside)	Lake Ridge	VA	Yes
Westminster Village Terre Haute, Inc.	Terre Haute	IN	Yes
Westminster-Canterbury of Richmond (aka Westminster-Canterbury Corp.)	Richmond	VA	Yes
Westminster-Canterbury on Chesapeake Bay Obligated Group (aka Westminster-Canterbury of Hampton Roads, Inc.)	Virginia Beach	VA	Yes
Whitney Center	Hamden	СТ	Yes
Willow Valley Communities	Lancaster	PA	Yes
WindsorMeade of Williamsburg (aka Virginia United Methodist Homes of Williamsburg, nc.) (subsidiary of Pinnacle Living)	Williamsburg	VA	Yes
Woodland Pond at New Paltz (aka HealthAlliance Senior Living Corp.)	New Paltz	NY	Yes
Westminster Village Terre Haute, Inc.	Terre Haute	IN	Yes
Westminster-Canterbury of Richmond (aka Westminster-Canterbury Corp.) (sponsored by Virginia Diocesan Homes, Inc. and Westminster Presbyterian Homes, Inc.)	Richmond	VA	Yes
Westminster-Canterbury on Chesapeake Bay Obligated Group (aka Westminster-Canterbury of Hampton Roads, Inc.)	Virginia Beach	VA	Yes
Whitney Center	Hamden	CT	Yes



Borrower Name	City	State	Last Year
WindsorMeade of Williamsburg (aka Virginia United Methodist Homes of Williamsburg, Inc.) (subsidiary of Pinnacle Living)	Williamsburg	VA	Yes
Woodland Pond at New Paltz (aka HealthAlliance Senior Living Corp.)	New Paltz	NY	Yes