FEATURED ARTICLE
ZIEGLER OBSERVATIONS FROM PHILADELPHIA

It was great seeing many of our clients, colleagues and industry partners in Philadelphia this week for the LeadingAge Annual Meeting. We all participated in numerous educational sessions, engaged in meaningful dialogue, and tapped into the wide array of resources provided by the countless industry experts and business firms present at the conference. In an attempt to take all of that information and tease out the key themes to take back to your respective organizations, we wanted to share the key messages that we heard across the days of the event.

1. Workforce Is Top of Mind. There are few organizations who are not feeling the pressures of employee turnover and difficulties with filling open positions. It is a national problem. The good news is that many of the national (and state) senior living associations, including LeadingAge, are working hard to bring resources and best practices to members and to forge partnerships with schools of education and other institutions that can raise awareness about the field of aging services. The number of exhibitors that are available to provide consulting or tech-enabled solutions has risen as well. We are hopeful that the collaborative efforts and technological innovations can help mitigate some of these pressures.

2. Skilled Nursing’s Growing Complexity. Outside of workforce challenges, the complexity of the skilled nursing and post-acute business is only increasing. The convergence of payment reform, changing consumer preferences and yes, a shortage of healthcare workers, has created the perfect storm for senior living providers. LeadingAge has launched the Center for Managed Care Solutions & Innovations. This is a great resource for providers who are entering at-risk arrangements and who are looking to enhance sophistication around these changes. The changes we have been talking about since the 2010 adoption of the Affordable Care Act are here and the need to adapt is non-negotiable for survival.

3. Technology: A Common Thread. Have any of you taken the time to count the number of exhibitors who are technology-based in their offerings? It has grown exponentially over the past 10 years. There is no doubt that technology plays a critical role in providing solutions to our challenges and with enabling us to be smarter and more efficient. Sophistication with technology is also ever-present in terms of expectations among residents/clients and staff. If you are not asking about the role that technology can play in all elements of your strategic plan, you are missing out.

4. Partnerships Abound. We are stronger together. We realize that those partnerships can take many forms, but the ability to come together and position our organizations for a future of thriving (not just surviving) is exciting. The consolidation continues in senior living, as it is in many healthcare sectors, and creative partnerships are often found within the not-for-profit sector. Many of those partnerships are with for-profit, private-sector organizations. We can all learn from one another and the collaborations highlighted at the conference are evidence of that.

5. The Time is Now! We have never in the history of our country been in a position where the proportion of older adults will represent such a significant portion of our population. Generally speaking, the not-for-profit sector has been more risk averse and slower in its growth coming out of the recession. There has been no better time to grasp the brass ring and expand your missions and ministries. Yes, competition is greater than ever and yes, the consumer is changing, but the opportunities are significant. Grab the brass ring!

6. A Sense of Rejuvenation. We are observing a renewed sense of energy around growth and venturing into diverse service/business lines. Nationally, the not-for-profit senior living occupancy is healthy, an increasing number of providers are executing on growth plans and we are embracing that the future will be, and needs to be, different than the past. Strategic planning consultants, developers, architects, etc. are busier than ever with new projects, expansion into home-and-community-based services and general growth-related consulting. The capital markets and availability of funding for projects have been very favorable to the sector. This is all good to see. We need to ensure that the not-for-profit senior living sector is just as vibrant in the decades to come as it has been for the past 150+ years.

We look forward to seeing many of you at the remaining educational events through the end of the year and to next year’s LeadingAge Annual Meeting in San Diego. For further questions about our experience in Philadelphia or anything else discussed in this article, please refer to the Ziegler banker in your region.

LISA MCCCRACKEN
DIRECTOR, SENIOR LIVING RESEARCH AND DEVELOPMENT
ZIEGLER
### NOT-FOR-PROFIT SENIOR LIVING RATINGS ACTIONS
OCTOBER 25 - 31, 2018

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>RATING AGENCY</th>
<th>RATING/ OUTLOOK</th>
<th>TYPE OF ACTION</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Foulkeways at Gwynedd (PA)</td>
<td>S&amp;P</td>
<td>BBB Stable</td>
<td>Affirmed Rating</td>
<td>10/25/18</td>
</tr>
<tr>
<td>Kendal at Ithaca (NY)</td>
<td>S&amp;P</td>
<td>BBB Stable</td>
<td>Affirmed Rating</td>
<td>10/30/18</td>
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<tr>
<td>El Castillo Retirement Residences (NM)</td>
<td>S&amp;P</td>
<td>BBB- Negative</td>
<td>Affirmed Rating Revised Outlook</td>
<td>10/31/18</td>
</tr>
</tbody>
</table>

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Any non-Ziegler sources referenced in this Z-News are believed to be reliable but cannot be guaranteed.

### INTEREST RATES/YIELDS
(AS OF OCTOBER 26, 2018)

<table>
<thead>
<tr>
<th></th>
<th>CURRENT</th>
<th>LAST WEEK</th>
<th>52-WK AVG</th>
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<tr>
<td>30-Yr MMD</td>
<td>3.34%</td>
<td>3.40%</td>
<td>2.95%</td>
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<tr>
<td>Senior Living 30-Yr “A”</td>
<td>4.24%</td>
<td>4.30%</td>
<td>3.75%</td>
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<tr>
<td>Senior Living 30-Yr “BBB”</td>
<td>4.44%</td>
<td>4.50%</td>
<td>3.99%</td>
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<tr>
<td>Senior Living Unrated</td>
<td>5.19%</td>
<td>5.25%</td>
<td>4.74%</td>
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<tr>
<td>Senior Living New Campus</td>
<td>6.50%</td>
<td>6.50%</td>
<td>6.50%</td>
</tr>
<tr>
<td>SIFMA Muni Swap Index</td>
<td>1.60%</td>
<td>1.57%</td>
<td>1.32%</td>
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</table>

<table>
<thead>
<tr>
<th></th>
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<th>WEEKLY AVERAGE</th>
<th>SPREAD TO MMD</th>
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<tr>
<td>*ZSLMLB Index</td>
<td>4.88%</td>
<td>4.88%</td>
<td>1.53%</td>
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*Ziegler Senior Living Municipal Long Bond Index
Source: Ziegler Capital Markets

### FEATURED FINANCING

THE BEATITUDES CAMPUS
Phoenix, Arizona

The Industrial Development Authority of the City of Glendale, Arizona, Revenue Bonds, Series 2018

$20,160,000
### MONEY MARKET RATES

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<th>1 WEEK AGO</th>
<th>1 MONTH AGO</th>
<th>1 YEAR AGO</th>
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<tr>
<td>Prime Rate</td>
<td>5.25</td>
<td>5.25</td>
<td>5.25</td>
<td>4.25</td>
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<tr>
<td>Federal Funds (weekly average)</td>
<td>2.17</td>
<td>2.17</td>
<td>1.97</td>
<td>1.16</td>
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<tr>
<td>90 Day T-Bills</td>
<td>2.32</td>
<td>2.26</td>
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<tr>
<td>30-Day Commercial Paper (taxable)</td>
<td>2.29</td>
<td>2.27</td>
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<td>1.14</td>
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<tr>
<td>Libor (30-day)</td>
<td>2.29</td>
<td>2.28</td>
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<td>1.23</td>
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<tr>
<td>7 Day Tax-Exempt VRDB</td>
<td>1.60</td>
<td>1.57</td>
<td>1.56</td>
<td>0.92</td>
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<tr>
<td>Daily Rate Average</td>
<td>1.59</td>
<td>1.57</td>
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### COMPARATIVE YIELDS

#### TAXABLE REVENUE

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<tr>
<th>GOVT</th>
<th>MMD</th>
<th>NR**</th>
<th>NR*</th>
<th>BB</th>
<th>BBB</th>
<th>A</th>
<th>AAA</th>
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<tbody>
<tr>
<td>1 Year</td>
<td>2.62</td>
<td>3.07</td>
<td>1.89</td>
<td>3.14</td>
<td>3.24</td>
<td>3.04</td>
<td>2.59</td>
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<tr>
<td>5 Year</td>
<td>2.92</td>
<td>3.77</td>
<td>2.28</td>
<td>3.68</td>
<td>3.78</td>
<td>3.53</td>
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<tr>
<td>7 Year</td>
<td>3.01</td>
<td>4.06</td>
<td>2.45</td>
<td>4.00</td>
<td>4.20</td>
<td>3.80</td>
<td>3.45</td>
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<tr>
<td>10 Year</td>
<td>3.08</td>
<td>4.33</td>
<td>2.70</td>
<td>4.55</td>
<td>4.70</td>
<td>4.20</td>
<td>3.80</td>
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<tr>
<td>30 Year</td>
<td>3.32</td>
<td>4.92</td>
<td>3.34</td>
<td>5.19</td>
<td>5.34</td>
<td>4.84</td>
<td>4.44</td>
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* (* Representative of retail sales.); (** Representative of institutional sales.)*

### TAX-EXEMPT MARKET INDICATORS

<table>
<thead>
<tr>
<th>Bond Buyer</th>
<th>THIS WEEK</th>
<th>LAST WEEK</th>
<th>CHANGE</th>
<th>2018 HIGH</th>
<th>2018 LOW</th>
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<tbody>
<tr>
<td>20 Bond Index</td>
<td>4.30</td>
<td>4.35</td>
<td>-.05</td>
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<td>11 Bond Index</td>
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<td>Revenue Bond Index</td>
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<td>30 Year MMD</td>
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<td>3.40</td>
<td>-.06</td>
<td>3.41</td>
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<tr>
<td>Weekly Tax-Exempt Volume (Bil)</td>
<td>4.07</td>
<td>7.31</td>
<td>-3.24</td>
<td>11.11</td>
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<tr>
<td>30 Day T/E Visible Supply (Bil)</td>
<td>6.50</td>
<td>4.62</td>
<td>+1.88</td>
<td>14.29</td>
<td>0.63</td>
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<tr>
<td>30 year “A” Rated Hospitals as % of 30 Year Treasuries</td>
<td>127.71</td>
<td>127.59</td>
<td>+.12</td>
<td>128.37%</td>
<td>118.68%</td>
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<tr>
<td>DATE</td>
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<td>PRIME RATE</td>
<td>FED FUNDS WEEKLY AVG</td>
<td>13-WEEK T-BILL RATE</td>
<td>C.P. RATE TAXABLE</td>
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<td>---------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>10/26/18</td>
<td>1.60</td>
<td>5.25</td>
<td>2.17</td>
<td>2.32</td>
<td>2.29</td>
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<td>10/19/18</td>
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<td>5.25</td>
<td>2.17</td>
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<tr>
<td>10/12/18</td>
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<td>09/21/18</td>
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<td>2.04</td>
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<td>08/31/18</td>
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<td>2.02</td>
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<td>1.90</td>
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