### Virginia Retirement System

**Alternative Investment Manager Aggregate Profit Sharing Results**

**Calendar Year 2018**

*expressed in millions*

<table>
<thead>
<tr>
<th></th>
<th>Calendar Year 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Retirement System Portion</td>
<td>$712</td>
</tr>
<tr>
<td>Alternative Investment Manager Portion</td>
<td>217</td>
</tr>
<tr>
<td>Total Profits</td>
<td>$929</td>
</tr>
</tbody>
</table>

1. Based on available data for private investments with profit sharing arrangements for Calendar Year 2018.

### Notes:

The primary objective of the VRS investment portfolio is to achieve the highest level of return for a given level of risk over the long term. The VRS Board of Trustees believes in active management, which has been a value-added proposition for the fund, because market inefficiencies exist in varying degrees across and within all asset classes.

VRS invests with top-tier alternative investment managers that consistently generate strong net returns. These private investments have historically generated the highest absolute net returns of the plan.

To gain access to these attractive strategies, VRS may participate in profit-sharing (carried interest) arrangements with alternative investment managers. In general, profit sharing is when an investment manager is allocated a portion of the gain on an investment. Typically, the manager must meet the following three conditions before profit sharing occurs:

- return invested capital to VRS,
- return fees and expenses to VRS, and
- achieve a minimum annualized rate of return (or hurdle rate) on the investment.
Virginia Retirement System
Alternative Investment Manager Aggregate Profit Sharing Results
Calendar Year 2017
(expressed in millions)

<table>
<thead>
<tr>
<th></th>
<th>Calendar Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Retirement System Portion</td>
<td>$2,835</td>
</tr>
<tr>
<td>Alternative Investment Manager Portion</td>
<td>566</td>
</tr>
<tr>
<td>Total Profits</td>
<td>$3,401</td>
</tr>
</tbody>
</table>

1 Based on available data for private investments with profit sharing arrangements for Calendar Year 2017.

Notes:
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- return invested capital to VRS,
- return fees and expenses to VRS, and
- achieve a minimum annualized rate of return (or hurdle rate) on the investment.
Virginia Retirement System
Alternative Investment Manager Aggregate Profit Sharing Results¹
as of December 31, 2016
(expressed in millions)

<table>
<thead>
<tr>
<th></th>
<th>Calendar Year 2016</th>
<th>Since Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Retirement System Portion</td>
<td>$1,317</td>
<td>$18,116</td>
</tr>
<tr>
<td>Alternative Investment Manager Portion</td>
<td>352</td>
<td>3,785</td>
</tr>
<tr>
<td>Total Profits</td>
<td>$1,669</td>
<td>$21,901</td>
</tr>
</tbody>
</table>

¹ Based on available data from private investments and hedge funds with profit sharing arrangements from 1989 through December 31, 2016.

Notes:
The primary objective of the VRS investment portfolio is to achieve the highest level of return for a given level of risk over the long term. The VRS Board of Trustees believes in active management, which has been a value-added proposition for the fund, because market inefficiencies exist in varying degrees across and within all asset classes.

VRS invests with top-tier alternative investment managers (private investments and hedge funds) that consistently generate strong net returns. VRS’ private equity and real assets managers generated the highest absolute net returns of the plan over the past 10 years and VRS’ hedge fund managers protected capital during tumultuous market environments and still delivered strong investment returns over the long term.

To gain access to these attractive strategies, VRS participates in profit-sharing (or carried interest) arrangements with alternative investment managers. In general, profit sharing is when an investment manager is allocated a portion of the gain on an investment. Typically, the manager meets the following three conditions before profit sharing occurs:

- returns invested capital to VRS,
- returns fees and expenses to VRS, and
- achieves a minimum annualized rate of return (or hurdle rate) on the investment.

The typical gain sharing arrangement, which is defined in the partnership agreement at the beginning of the investment relationship, is 80% to the investor (VRS) and 20% to the investment manager, with an 8% hurdle rate. As seen above, the gain-sharing arrangements VRS has with its alternative investment managers contributed approximately $18.1 billion to the fund since inception.