### Investment Strategy

This fund seeks long-term growth of capital and provides a single diversified investment option composed of stocks and bonds for members during their working careers. It is automatically adjusted during the course of a specified time period aimed at a target retirement date.

The OPERS Target 2045 Fund should provide a diversified investment that is appropriate for an investor who has a long (retiring between 2043 and 2047) investment period and is very comfortable with fluctuations in the value of their investment.

The asset allocation of the 2045 Fund is established by OPERS general investment consultant New England Pension Consultants. Staff then uses a variety of BlackRock index funds to construct the recommended asset allocation for this fund.

**Category Description: Target-Date 2045**

Target-date portfolios provide diversified exposure to stocks, bonds, and cash for those investors who have a specific date in mind (in this case, the years 2041-2045) for retirement. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Management adjusts the allocation among asset classes to more-conservative mixes as the target date approaches, following a preset glide path. A target-date portfolio is part of a series of funds offering multiple retirement dates to investors.

### Volatility Analysis

The asset allocation of the 2045 Fund should provide a diversified investment that is appropriate for an investor who has a long (retiring between 2043 and 2047) investment period and is very comfortable with fluctuations in the value of their investment.

In the past, this investment has shown a relatively moderate range of price fluctuations relative to other investments. This investment may experience larger or smaller price declines or price increases depending on market conditions. Some of this risk may be offset by owning other investments with different portfolio makeup or investment strategies.

**Best 3 Month Return** 28.70%  
**Worst 3 Month Return** -34.22%  
(Mar ’09 - May ’09) (Sep ’08 - Nov ’08)

### Operations

**Expense Ratio** 0.04% of fund assets  
**Fund Inception Date** 04-01-08  
**Total Fund Assets ($mil)** 142.37

### Portfolio Manager(s)

NEPC LLC

### Notes

You should review Investment Disclosures before making any decisions. The Morningstar Rating that is reflected on page is hypothetical, because Morningstar does not independently analyze the custom fund universe. Rather the Rating is assigned to the custom fund universe as a means to compare the institutional funds with the universe of mutual funds that Morningstar rates.

**Morningstar® Target 2045 Fund**

**Benchmark**  
Morningstar Lifetime Mod 2045 TR USD

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**Allocation of Stocks and Bonds**

<table>
<thead>
<tr>
<th>Years Until Retirement</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation</td>
<td>100%</td>
<td>80%</td>
<td>60%</td>
<td>40%</td>
<td>20%</td>
<td>10%</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Performance**

<table>
<thead>
<tr>
<th>YTD</th>
<th>1 Year</th>
<th>3 Year</th>
<th>5 Year</th>
<th>10 Year</th>
<th>Since Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.96</td>
<td>22.96</td>
<td>10.34</td>
<td>7.46</td>
<td>8.48</td>
<td>8.29</td>
</tr>
<tr>
<td>24.97</td>
<td>24.97</td>
<td>11.42</td>
<td>8.26</td>
<td>9.69</td>
<td>—</td>
</tr>
<tr>
<td>24.35</td>
<td>24.35</td>
<td>11.17</td>
<td>7.83</td>
<td>9.20</td>
<td>6.36</td>
</tr>
</tbody>
</table>

**Allocation**

- Bonds
- U.S. Stocks
- Non-U.S. Stocks
- Cash
- Other

**Top 10 Holdings**

<table>
<thead>
<tr>
<th>% Assets</th>
<th>% S&amp;P 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Stocks</td>
<td>41.8</td>
</tr>
<tr>
<td>Non-U.S. Stocks</td>
<td>42.0</td>
</tr>
<tr>
<td>Bonds</td>
<td>14.7</td>
</tr>
<tr>
<td>Cash</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>0.1</td>
</tr>
</tbody>
</table>

**Total Number of Holdings** 5  
**Annual Turnover Ratio %** 

**Top 10 Holdings**

1. BlackRock MSCI ACWI ex U.S. Index F 42.18  
2. BlackRock Russell 1000® Index NL F 22.96  
3. BlackRock Russell 2000® Index NL F 19.64  
4. BlackRock U.S. Debt Index NL F 7.62  
5. BlackRock Govt/Credit Bond Index NL F 7.61

**Management Company** BlackRock