Analysis of Disability Benefits in Public Retirement Plans
July 2019

Public retirement systems typically administer pension, disability, and survivor benefits in accordance with the plan sponsor’s public employee benefits policy. Just as pension benefits are intended to promote a high level of public service through the recruitment and retention of a professional workforce, so are disability benefits intended to achieve this same goal by providing retirement income security to public employees who are unable to work for an extended period. The provision of disability benefits is consistent with sound public retirement plan design that promotes key stakeholder objectives; this is particularly true for those employees whose occupations involve hazardous or public safety duties.

Disability benefits for public employees have been modified at some systems in recent years, often resulting in a tiered structure, in which benefits vary based on the employee’s date of hire. Although the data compiled from approximately 100 statewide public retirement systems in the U.S. reflected in this Analysis1 includes some information on benefit levels under tiers that are now closed, this narrative, and most of the data, pertains to the benefits in place for employees hired today.

Overview
Although a long-term disability benefit is available to participants of every retirement system examined, a wide range and variety exist in benefit levels, eligibility criteria, and most other basic features that make up this benefit. A long-term disability benefit is defined generally as a monthly stream of income provided for employees who are determined to be unable to work due to a physical or mental impairment. The expected duration of the disability varies among plans, with a minimum expected duration of 12 months and a maximum duration of permanent.

Underlying this definition are two different approaches to calculating benefits for public employees whose disabilities are expected to be either long-lasting or permanent. One approach, adopted by a majority of systems examined in this data compilation, is to treat a long-term disability as a form of retirement. In these cases, which will be referred to as a “disability retirement” approach, the benefit typically is calculated in the same manner as a service retirement benefit would be, often accompanied by either a) a minimum benefit as a percentage of the participant’s final average salary, or b) projecting the participant’s length of service to increase the benefit to what the participant would receive had they attained normal, unreduced retirement eligibility.

The other broad approach to providing a long-term disability benefit is to treat the disability benefit as a means of income replacement prior to retirement for participants who become unable to work for an extended period. In these cases, which will be referenced in this narrative as an “income replacement” approach, those determined to have a long-term disability in most such systems do not “retire,” but rather they receive a benefit that will either terminate should the participant’s condition improve enough to return to employment, or convert to a normal retirement benefit should the participant’s disability persist until they are eligible for a service retirement benefit.

Some systems administer a disability benefits program that provides multiple forms of benefits. For example, some systems that administer disability retirement benefits also provide a supplemental income.

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1 Data was compiled by NASRA of its members’ plan design features including benefit calculation method, the standard of eligibility to qualify for a disability benefit, vesting periods, and duration of disability benefits.
replacement benefit to eligible participants. In some cases, this supplemental benefit is provided as an elective benefits option for participating employers.

Compared to pensions, whose benefit formulas and levels tend to be fairly consistent from one system to another, public retirement systems rely on a range of different methods to calculate their long-term disability benefits. In addition to the differences produced by the two broad methods of calculating the disability benefit—disability retirement and income replacement—many plans create further distinctions by applying such benefit formula features as minimum and maximum salary replacement rates; different vesting periods for disabilities incurred in-service and out-of-service; projecting—or not—participant service levels; and, in some cases, applying or waiving actuarial reductions. When the result of disability benefit tiers is added atop this structure, the result is that there are almost as many long-term disability benefits frameworks as there are public retirement systems.

**Benefit Calculation Method**

As discussed previously, the method of calculating disability benefits generally falls into one of two broad categories. As shown in Table 1, nearly 70 percent of the systems examined calculate the disability benefit in a manner consistent with the pension benefit; most of the other systems determine the disability benefit level as a percentage of pay at the time of disablement.

<table>
<thead>
<tr>
<th>Method Used to Calculate Disability Benefit</th>
<th>Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability Retirement Benefit: Calculated in a manner consistent with retirement benefit, i.e., benefit is based on participant length of service and final average salary</td>
<td>69</td>
</tr>
<tr>
<td>Income Replacement: Calculated solely on the basis of participant’s salary at time of disablement</td>
<td>32</td>
</tr>
<tr>
<td>Other/Mixed</td>
<td>2</td>
</tr>
</tbody>
</table>

**Minimum Benefits**

Many of the systems that treat the disability benefit as a disability retirement benefit also establish a minimum benefit, or floor, equal to a specified percentage of final average salary. For example, employees participating in the Public Employees’ Retirement System of Mississippi are eligible for a disability benefit equal to the greater of 50 percent of final average compensation or the benefit calculated under the normal retirement formula based on years of service accumulated prior to disability.

**Actuarial Reduction for Early Retirement**

Most of the “disability retirement” systems also calculate the benefit with no reduction for early retirement, as otherwise would be applied to a service retirement benefit for a retiree with less than the required age and/or length of service. Several systems also project, or add to the number of years of service, to increase the benefit to what the participant would receive had they attained normal, unreduced retirement eligibility.
Two notable exceptions to the practice of waiving early retirement reductions are the California Public Employees’ Retirement System (CalPERS) and the Tennessee Consolidated Retirement System. CalPERS applies an actuarial reduction to its disability retirement benefit for those under age 50. Although the Tennessee Consolidated Retirement System projects the participant’s service to normal retirement, the benefit is then reduced by 10 percent to provide a benefit of 90 percent of what the participant would receive under a normal retirement benefit.

Disability Benefit Replacement Rates

Given the different approaches and methods for calculating disability benefit levels, and because the age of disability benefit applicants runs a wide range, from younger to older, establishing a definitive comparison of benefit levels provided to different systems would be nearly impossible. Some comparisons are possible, however, among income and salary replacement rates for disability benefit recipients who are participating in systems with similar benefit calculation frameworks.

Among “income-replacement” systems, the average income replacement rate for in-service disabilities is 56 percent of salary at the time of disablement, ranging from 25 percent to 100 percent. For disabilities incurred outside of service in income-replacement systems, the average replacement rate is lower, at 47 percent of salary.

Among “disability retirement” systems, many establish a minimum benefit level as a percentage of the employee’s final average salary. This ensures that participants with less service and who meet the system’s vesting requirement will receive a benefit that replaces at least a minimum portion of their salary. For participants in this category whose disability is incurred in-service, the average minimum final average salary replacement rate is 41 percent, ranging from 15 percent to 72 percent. For those whose disability is incurred outside of service, the average minimum final average salary replacement rate is 33 percent, ranging from 15 percent to 70 percent.

Replacement rates and ranges for disability retirement systems should be considered in the context that actual benefit levels will vary depending on each participant’s length of service; the figures in Table 2 represent average minimum replacement rates. In addition, five systems in the group place caps, or maximums, on disability income replacement rates.

For general employees and teachers, roughly 30 percent of systems have different—usually higher—levels of benefits for those whose disabilities are a result of the performance of their duties, rather than unrelated to their jobs. The percentage of systems with different benefit levels for public safety officers is higher: nearly one-half of systems whose members include public safety personnel provide a different benefit for in-service and out-of-service disabilities.

Differences in benefit levels based on the source of the disability vary, from relatively small to substantial. For example, general employees in the Kentucky Retirement System who are deemed disabled qualify for a benefit based on their normal retirement benefit but not less than 25 percent of their final average salary. KRS participants whose disability is not a result of their work are eligible for their normal retirement benefit but with 20 percent of their final average salary. By contrast, the disability benefit administered by the Illinois State Employees’ Retirement System provides 75 percent of final average salary for on-the-job disabilities, and 50 percent for non-service-related disabilities.

A similarly-wide range in difference in benefit levels exists among retirement systems for public safety personnel. For example, disabled public safety personnel participating in the Maryland State Retirement and Pension System are eligible for a benefit based on their normal retirement benefit, with a minimum benefit of two-thirds of final average salary plus an annuity based on the member’s contributions.
and interest. Maryland public safety personnel who are disabled not as a result of their work are eligible for a benefit based on their normal retirement benefit, with a minimum benefit of 25 percent of their final average salary.

**Standard of Eligibility**
A key component of a long-term disability benefit is the definition of disability required to qualify for a benefit. This component is typically measured by the level of work, if any, the participant is able to perform. The result of these differences among systems in eligibility standards is that an individual with a certain condition may qualify for disability benefits in one plan, while in another plan, an individual with the same condition may not qualify. The most permissive standard, and the standard used by a plurality of examined systems, is that the participant is unable to perform the duties of their position. According to this standard, if the participant is unable to continue to perform the duties of their job, and if that condition is expected to be of an extended or permanent duration, they are eligible for a disability benefit for as long as the condition persists and assuming they have met vesting requirements (see Table 3).

By contrast, the most restrictive eligibility standard, and the next most frequently used, is that the participant is unable to engage in any gainful employment. This standard may be identified by one of several different labels, including “total and permanent disability;” a requirement to meet the Social Security standard, which is totally disabled; or “incapacitation” as defined by a state workers’ compensation agency.

A few systems employ a time-based eligibility standard, in which the participant qualifies for a disability benefit for a limited period, ranging from 12 months to 30 months, when the standard is simply the inability to perform the duties of one’s position. At the end of the designated timeframe, the standard becomes more restrictive, for example, requiring the participant to perform any work for which they are reasonably qualified, or to perform any gainful employment. To illustrate one example, the standard of eligibility for a disability benefit under the Arizona State Retirement system is:

For first 30 months following onset of disability, inability to perform all duties of the position; thereafter, inability to perform any work for which the employee is reasonably qualified by education, training or experience and for compensation at an amount greater than or equal to two-thirds of employee’s compensation at the time of disability.

**Vesting Periods**
For many systems, whether the disability was a result of the participant performing their duties (in-service) or not (out-of-service) makes a key difference in the length of time required to be eligible for a benefit (i.e., vesting), and, for some systems, the level of benefits. For other systems, there is no distinction in the vesting requirements or benefit levels for disabilities acquired in- or out-of-service. As shown in Table 3, vesting periods for disabilities incurred in-service, or on the job, are immediate (no vesting requirement) for more than half of the systems and five years or less for nearly 90 percent. By contrast, for disabilities incurred out-of-service, or not job-related, only around 10 percent have immediate vesting and about one-third having vesting periods of more than five years.

Retirement system members who experience a disability on the job prior to vesting for such a benefit may also qualify for a workers’ compensation benefit, which is a form of employer insurance designed to cover employment-related work injuries.

Of systems whose members include public safety officers, i.e., police officers and firefighters, some treat public safety personnel differently than general employees and teachers, usually by maintaining a shorter vesting period to claim a disability benefit. The Ohio Public Employees Retirement System, for example, has five-year vesting for eligibility for disability benefits for its general employee members, but provides immediate vesting for disabilities incurred in service for its public safety personnel members.
### Table 3. Vesting Periods Based on Benefit Calculation Method

<table>
<thead>
<tr>
<th></th>
<th>In-Service</th>
<th>Out-of-Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>56</td>
<td>11</td>
</tr>
<tr>
<td>Longer than immediate, less than five years</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Five years</td>
<td>26</td>
<td>43</td>
</tr>
<tr>
<td>More than five years</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>Other/Mixed</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

### Duration of Disability Benefits

The method of calculating the disability benefit can affect the duration of the benefit. In most disability retirement arrangements, the disability benefits are provided until either the recipient’s recovery from their disabling condition or their death, or the death of their surviving beneficiary.

With limited exceptions, disability benefits calculated under the income replacement method terminate upon the recipient’s attainment of eligibility for normal retirement. In many such cases participants continue to accrue service credit while receiving the disability benefit, which is then factored into the calculation of their normal retirement benefit.

### Conclusion

A disability benefit is a key method of providing retirement income security to public employees who become unable to work for an extended period of time. Although most public retirement systems provide disability benefits to their participants, there is wide variation in the plan design components of the disability benefit. The result of these differences in eligibility standards, benefit calculations, and other factors, is that the disability benefits provided by public retirement systems are highly individualized.

### Future Areas of Research into Disability Benefits

The focus of this data compilation effort was to describe the framework of benefits that are administered by statewide retirement systems. Additional research in this area is warranted and could include:

- The processes systems use to evaluate applicants’ eligibility for a disability benefit.
- Efforts to rehabilitate or re-train disability benefits recipients so they can return to work.
- Acceptance and rejection rates among disability benefits applicants.
- The accrual of service credit, or lack thereof, during the period of disability.
- Governance frameworks.
- The correlation of disability benefit structures and rates of participation.

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