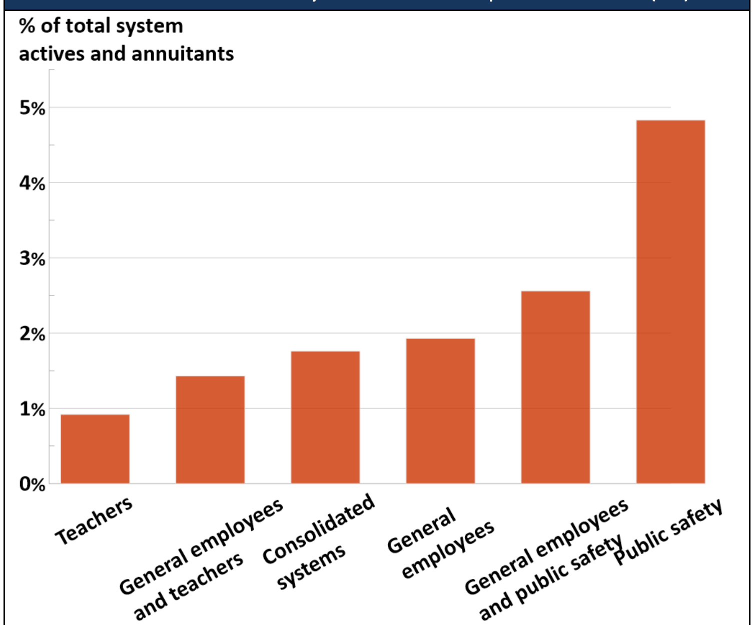
Analysis of Public Retirement System Disability Incidence

July 2024

Public retirement systems commonly administer disability benefits to participants who are unable to work for an extended period. Previous research has shown that these disability benefits exhibit variations among systems in eligibility criteria, benefit levels, and other key plan design features. Although these variations are not closely correlated to outcomes in every case, they do offer valuable insights into the experience of different systems, offering some commonalities among them based on certain shared characteristics. By examining these factors, system stakeholders can gain a deeper understanding of their disability program outcomes and how certain factors might affect those outcomes.

This analysis examines the disability incidence of public retirement systems based on three factors: occupational class, disability eligibility criteria, and disability plan design. Data are distinguished by employee type whenever possible, contingent on the scope of coverage and reporting framework in use among systems and plans.

Figure 1. Median disabilitants as a percentage of total actives and annuitants by covered occupational class(es)



Compiled by NASRA from public retirement system annual financial reports and plan actuarial valuations

One challenge encountered during the production of this analysis is differing methods used by systems to report disabled participant counts. Many systems provide, as a regular component of their financial and/or actuarial reporting, a running count of the number of participants who are retired from their status as a disability annuitant. Other systems move disabled participants to the regular service annuitant count once they meet normal retirement eligibility criteria. For those systems, their count of disabled retirees reflects only those currently on disability, rather than the more comprehensive total of all participants retired from disability, the latter of which is required for standardization of comparisons in this analysis. With that acknowledgement, there are some high-level trends and observations with potential relevance to systems seeking to understand their disability experience in context.

Finally, it is important to acknowledge that other plan design or administrative factors may also be exerting influence over different disability outcomes beyond those investigated in this analysis. For example, final authority to approve disability benefits applications rests in some cases with the retirement system board, and in other cases a third-party contractor makes the determination. Also, disability retirees in some cases are able to earn unlimited income from outside employment while on disability; in other cases disability retirees face earnings restrictions which, if exceeded, can result in the reduction or suspension of their disability benefit.

Occupational Class

Public retirement systems vary in the scope of their covered populations: some systems administer benefits for only one type of public employee, such as teachers, or public safety officers; others cover multiple employee types. Because they have different job responsibilities, working conditions, and occupational hazards, different occupational classes predictably have different rates of disability incidence. For example, public safety officers, chiefly police officers and firefighters, are exposed to unique occupational hazards such as physical violence, potential exposure to hazardous materials, and traumatic incidence. Consequentially, they experience a heightened probability of injuries and other disabling conditions compared to other types of public employees. Figure 1 identifies the median disability incidence rates across systems organized by public employee type. Median incidence rates range from less than one percent for teachers, to nearly five percent for public safety officers. Some systems cover multiple types of participants for whom disability experience is not distinguished. Figure 1 identifies the disability incidence rates for systems that cover both general employees and teachers, general employees and public safety personnel, and systems that cover all three of these participant types, which are referred to as "consolidated systems".

Eligibility Standard

A fundamental aspect of a long-term disability benefit is the standard of eligibility that employees must attain to qualify for benefits. Among various eligibility standards, the primary distinction is the level of work the participant is able to perform. The most permissive standard, used by most systems, is the "own occupation" standard. Under this standard, a participant can qualify for disability benefits if they are unable to perform the duties of their current job (or sometimes a comparable job based on their education and experience) for an extended or permanent period. Conversely, the most restrictive standard is the "any employment" standard, which means that participants can qualify for disability only if they are deemed incapable of performing any type of gainful employment. This standard is sometimes also referred to as "total and permanent disability," and is also consistent with the Social Security disability standard, to which some systems adhere. Other variations include time-based standards, where the initial standard may be more permissive for a designated period, such as the first 12 months of disability, before transitioning to a more restrictive standard afterward.

Figure 2. Median disabilitants as a percentage of total actives and annuitants by covered occupational class(es) and disability benefit eligibility standard

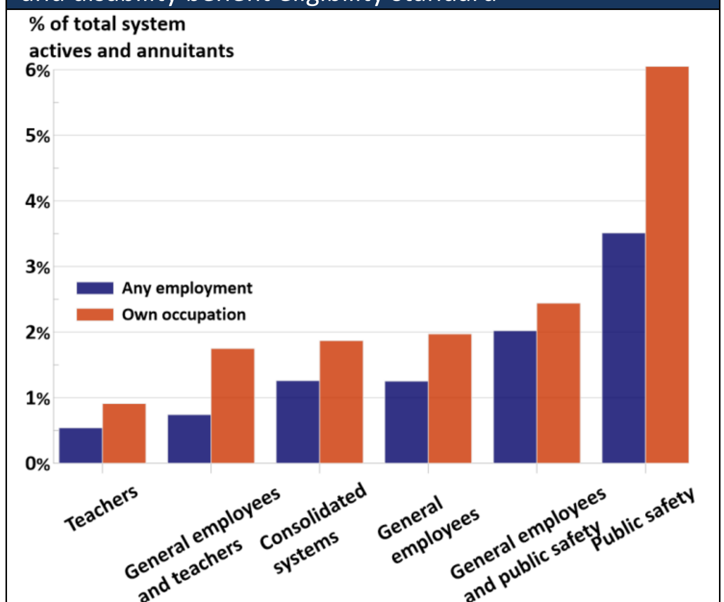


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Figure 2 identifies median disability incidence rates across occupational classes, further divided into the disability benefit eligibility criteria in use. Not surprisingly, median incidence rates for all groups are significantly lower for systems using the "any employment" standard compared to the much higher rates for systems that use the "own occupation" standard.

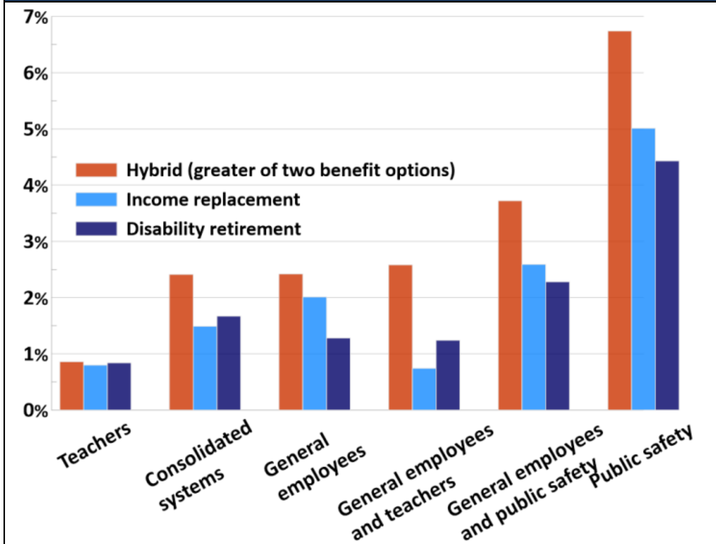
Plan Design

The determination of disability benefits typically falls into one of two broad categories: disability retirement or income replacement. A disability retirement benefit is calculated in the same manner as a service retirement benefit, sometimes with service projected to a certain age and/or without actuarial reduction for early retirement. An income replacement benefit provides a benefit that is equal to a specified percentage of a qualified participant's salary at the time of disability.

Several variations exist within these two overarching disability benefit plan designs. Common variations include plan designs that provide the greater of a benefit produced by either the disability retirement or income replacement calculations, or a minimum disability retirement benefit, equal to a specified percentage of the participant's final salary. These arrangements may be considered "hybrid" arrangements, in the sense that they combine multiple elements into one plan design.

Figure 3 identifies the median disability incidence rates organized by occupational class and disability benefit plan design. Incidence rates are higher for each occupational class for systems that provide a hybrid disability benefit arrangement. No similar trend is observable for income replacement or disability retirement plan designs, whose incidence rates vary among employee types.

Figure 3. Median disabilitants as a percentage of total actives and annuitants by covered occupational class(es) and disability benefit plan design



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Conclusion

This analysis provides compelling evidence for the influence of three factors – employee type, eligibility standard, and disability benefit plan design – on rates of disability incidence for public retirement systems. The trends outlined are not entirely predictive, and the experience of some plans is not in alignment with these general outcomes. Also, other factors, such as the source of final disability approval, may also be worth investigating to determine their impact on disability incidence. Despite these limitations, certain characteristics of disability benefit plan design clearly are aligned with different rates of disability incidence, and understanding these distinctions and their potential impact may help systems contextualize their experiences and make informed comparisons.

Links to Resources

- NASRA Analysis of Disability Benefits In Public Retirement Plans

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- Learn more at nasra.org

Appendix: List of Included Systems and Classifications

System	General employees	Teachers	Public Safety	General & teachers	General & public safety	Consolidated
Retirement Systems of Alabama		X			X	X
Arizona State Retirement System				X		
Arizona Public Safety Personnel Retirement System			X			
City of Phoenix Employees' Retirement System	X					
Arkansas Public Employees' Retirement System					X	
Arkansas Teachers' Retirement System		X				
Arkansas State Highway Employees' Retirement System					X	
California Public Employees' Retirement System	X		X		X	
California State Teachers' Retirement System		X				
Alameda County Employees' Retirement Association	X		X		X	
Contra Costa County Employees' Retirement System	X		X		X	
Los Angeles City Employees' Retirement System	X					
Los Angeles Police & Fire Retirement System			X			
Los Angeles County Employees' Retirement Association	X		X		X	
Orange County Employees' Retirement System	X		X		X	
San Bernardino County Employees' Retirement Association	X		X		X	
Sonoma County Employees' Retirement Association	X		X		X	
University of California Retirement System				X		
Colorado Public Employees' Retirement System		X			X	X
Colorado Fire & Police Pension Association			X			
Denver Employees' Retirement Plan	X					
Connecticut State Employees' Retirement System					X	
Connecticut Teachers' Retirement System		X				
Connecticut Municipal Retirement System	X		X		X	
Delaware Public Employees' Retirement System			X	X		
District of Columbia Retirement Board		X	X			
Florida Retirement System						X

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System	General employees	Teachers	Public Safety	General & teachers	General & public safety	Consolidated
Employees' Retirement System of Georgia					X	
Georgia Teachers' Retirement System		X				
Hawaii Employees' Retirement System	X	X	X	X	X	X
Illinois State Employees' Retirement System					X	
Illinois State Universities' Retirement System				X		
Illinois Teachers' Retirement System		X				
Indiana Public Retirement System	X	X	X	X	X	X
Iowa Public Employees' Retirement System						X
Iowa Municipal Fire & Police Retirement System			X			
Kansas Public Employees' Retirement System	X	X	X	X	X	X
Kentucky Public Pensions Authority	X		X		X	
Kentucky Teachers' Retirement System		X				
Louisiana State Employees' Retirement System					X	
Louisiana Teachers' Retirement System		X				
Louisiana Parochial Employees' Retirement System	X					
Louisiana School Employees' Retirement System	X					
Louisiana Municipal Employees' Retirement System	X					
Louisiana Municipal Police Employees" Retirement System			X			
Maine Public Employees' Retirement System	X	X	X	X	X	X
Maryland State Retirement & Pension System	X	X	X	X	X	X
Massachusetts State Employees' Retirement System					X	
Massachusetts Teachers' Retirement System		X				
Michigan Office of Retirement Services		X	X			
Municipal Employees' Retirement System of Michigan					X	
Minnesota State Retirement System	X		X		X	
Minnesota Teachers' Retirement Association		X				
Minnesota Public Employees' Retirement Association	X		X		X	
St. Paul Teachers' Retirement Association		X				
Mississippi Public Employees' Retirement System						X

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System	General employees	Teachers	Public Safety	General & teachers	General & public safety	Consolidated
Missouri Public School / Public Education Employee Retirement System	X	X		X		
Missouri Local Government Employees' Retirement System					X	
Kansas City Fire Retirement System			X			
Kansas City Police Retirement System			X			
St. Louis School Employees' Retirement System		X				
Montana Public Employees' Retirement Association	X		X		X	
Montana Teachers' Retirement System		X				
Nebraska Public Employees' Retirement System		X	X			
Omaha Employees' Retirement System	X					
Nevada Public Employees' Retirement System			X	X		X
New Hampshire Retirement System	X	X	X	X	X	X
New Jersey Division of Pensions & Benefits	X	X	X	X	X	X
New Mexico Educational Retirement Board		X				
New York State & Local Employees' Retirement System	X		X		X	
New York State Teachers' Retirement System		X				
North Carolina Retirement System	X	X	X	X	X	X
Charlotte Firefighters' Retirement System			X			
North Dakota Teachers' Fund for Retirement		X				
Ohio Public Employees' Retirement System					X	
Ohio State Teachers' Retirement System		X				
Ohio School Employees' Retirement System	X					
Ohio Police & Fire Pension Fund			X			
Cincinnati Employees' Retirement System	X					
Oklahoma Public Employees' Retirement System					X	
Oklahoma Teachers' Retirement System		X				
Oregon Public Employees' Retirement System						X
Pennsylvania State Employees' Retirement System					X	
Pennsylvania Public School Employees' Retirement System		X				

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System	General employees	Teachers	Public Safety	General & teachers	General & public safety	Consolidated
Pennsylvania Municipal Employees' Retirement System					X	
Rhode Island Employees' Retirement System	X	X	X	X	X	X
South Carolina Public Employee Benefit Authority			X	X		X
South Dakota Retirement System	X	X	X	X	X	X
Tennessee Consolidated Retirement System		X			X	X
Employees' Retirement System of Texas	X					
Teacher Retirement System of Texas		X				
Texas County & District Retirement System					X	
Texas Municipal Retirement System					X	
City of Austin Employes' Retirement System	X					
Houston Employees' Retirement System	X					
Houston Firefighters' Relief & Retirement Fund			X			
Vermont State Employees' Retirement System	X		X		X	
Vermont State Teachers' Retirement System		X				
Virginia Retirement System	X	X	X	X	X	X
Fairfax County Employees' Retirement System	X					
Washington State Department of Retirement Systems	X	X	X	X	X	X
West Virginia Consolidated Public Retirement Board	X	X		X		
Wisconsin Retirement System						X
Wyoming Retirement System			X	X		X