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BEST PRACTICE BENCHMARKS FOR PUBLIC SECTOR CORE DEFINED CONTRIBUTION PLANS[1]

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[1] This paper is based upon "Defined Contribution Pension Plans in the Public Sector: A Best Practice Benchmark Analysis," by Roderick Crane, Michael Heller and Paul Yakoboski (April 2008). (Click here for paper.)

EXECUTIVE SUMMARY

This paper examines best practices for the design of public sector defined contribution plans intended to be the primary source of retirement income. The primary plan objective is taken to be providing adequate and secure income. No single design is ideal for all situations, however, as public employers have a variety of sometimes competing objectives for retirement benefits.

Principles for public sector defined contribution plan design are:

- Provide adequate and secure income throughout retirement.
- Retirement income adequacy and security is a shared employer/employee/ government responsibility.
- All individuals should have access to an employer-sponsored plan, whether mandatory with employer contributions or voluntary and without.
- Provide investment offerings consistent with plan objectives.
- Provide the necessary range of participant services in an integrated manner.
- Incorporate competent fiduciary mechanisms.

Resulting best practices following from these principles are:

- Mandatory participation, with low or no age restrictions and maximum waiting periods for participation of one year.
- Non-elective employer and employee contributions totaling at least 12 percent of pay if covered by Social Security and 18-20 percent if not.
- Immediate vesting by one year of service; if participation is not immediate, this implies a vesting period of less than one year.
- Mandatory or default investment into lifecycle target-date funds; a limited non-overlapping array of options covering the major asset classes when participants have choice.
- No lump sums at job change; no hardship withdrawals or loans.
- Limited ability at retirement to withdraw funds in a lump sum combined with requirement that a minimum amount be annuitized through a vehicle providing inflation protection.
- Single recordkeeper structure.
- Broad-based retirement and investment education services. A higher best practice hurdle is individual-specific advice.

Typical primary defined contribution plans in the public sector do not resemble private sector 401(k) plans. This often means current public plans satisfy best practice benchmarks whereas 401(k) plans frequently do not. As the public sector examines defined contribution plans, one message should become clear - - the traditional 401(k) model is inadequate and inefficient for meeting the needs of public employers and employees.

INTRODUCTION

The purpose of this paper is to examine best practices for the design of public sector defined contribution (DC) pension plans that are intended to be the primary or core source of retirement benefits. The best practices are established from the perspective of providing adequate and secure retirement income as the appropriate primary objective of these plans.

As a preliminary note, the identification of best practices for the design of core defined contribution pension plans is not intended to define an "ideal" plan design. No single plan design is best for all situations. Rather, the purpose of identifying best practices is to provide a basis for identifying potential strengths and weaknesses of design that may affect the ability of a plan to achieve its primary objective.

The specific elements of the approach for the study include:

- Identifying basic design principles that support the effectiveness of core defined contribution pension plans.
- Identifying best practices of plan design that support meeting the basic principles for effective core defined contribution pension plans.
- Providing a general discussion on how existing public sector core defined contribution pension plans compare to the best practice standards identified and considerations for future plan designs.

The importance of these "core" DC plans should not be undervalued even though far fewer public employees participate in them compared to defined benefit (DB) plans.[2] The design and funding of these core DC retirement benefit programs is far too important to be left unexamined. In the same fashion as the DB plans that cover most public employees, core DC plans are vital to the economic security of thousands of existing retirees and beneficiaries and are an important component of the compensation structure of state and local governments that offer them.

PLAN DESIGN OBJECTIVES

Public employers have a variety of sometimes competing objectives for retirement benefits. Public employers certainly need their retirement plans, in part, to help them manage workforce objectives — to attract and retain quality employees and to facilitate the orderly and timely movement of employees out of the workforce at the end of their careers. Retirement designs can be and usually are used to benefit targeted workers. Vesting schedules and benefit/contribution formulas, for example, can be used to benefit longer or shorter service employees as the employer may desire.

[2] Fourteen percent of full-time public employees participate in defined contribution retirement plans for their employer provided retirement benefit; this includes individuals who participate in combination DB/DC plans. This translates into over 2 million public employees who rely in whole or in part on defined contribution arrangements for their employer based core retirement benefit. (Source: "Benefit Cost Comparisons Between State and Local Governments and Private-Sector Employers," by Ken McDonnell, *EBRI Notes*, Vol. 23 Number 10, October 2002.

Public sector entities, however, do not look at retirement benefits for their employees as just related to their role as an employer. A principal function of government is to ensure the general welfare of our society. This makes the public sector uniquely concerned with the adequacy and security of public employee retirement benefits. If the core defined contribution retirement plans they sponsor fail to provide adequate and secure income during retirement, a consequence may be an increased burden on social welfare programs in the future.

It is the view of the authors that the interest of public sector entities as employers managing their workforce issues, while important, should be secondary. Helping workers achieve financial security is the larger concern leading to the proposition that public employee retirement plans should be designed with the primary objective of providing adequate and secure retirement income.

GUIDING PRINCIPLES AND RESULTING BEST PRACTICES

To establish best practice benchmarks for the design of public sector defined contribution pension plans that are intended to be the primary or core source of retirement benefits, it is useful to set out principles for their design, funding and administration:

- *Principle #1: Retirement plans should focus on providing adequate and secure income throughout retirement.* Secondary purposes such as wealth accumulation, providing survivor income and other death and disability benefits also are appropriate components of a comprehensive retirement benefit policy.
- *Principle #2: Retirement income adequacy and security is a shared employer/employee/ government responsibility.* Employers, employees and governments have a common interest in developing retirement programs that focus on securing as much as possible financial security during retirement for individuals. This mutual goal is best achieved when all parties recognize that each shares the responsibility for meeting this objective.
- *Principle #3: It is important for all individuals, including full- and part-time staff, to have access to a well-designed employer-sponsored retirement program, whether they are plans with an employer contribution or voluntary, supplemental plans.* Employer-sponsored plans are a more cost-effective and efficient way to deliver retirement benefits, and offer unique benefits (such as the plan sponsor taking on fiduciary oversight), opportunities (pretax contributions, employer contributions, etc.) and economies of scale that are not available in individual retail products.
- *Principle #4: Effective retirement programs require an appropriate investment offering that is designed to achieve the objectives of the plan.* If the primary purpose of the plan is to provide retirement income, then the investment structure should be carefully constructed using high-quality funds to maximize the chance that this objective will be met. Traditional DC plan designs allow participants to make poor investment decisions.
- *Principle #5: Effective retirement programs require a broad range of integrated participant services.* Personalized service will be more important than ever since individuals will be increasingly responsible for their own financial security during retirement.

- *Principle #6: Retirement programs are more effective with competent fiduciary mechanisms.* Active engagement and oversight allows an employer to better align the design and administration of the plan to continually meet the benefit plan's objectives. It also helps ensure that investment, administrative and other professional service providers are meeting performance and service standards and that their fees are reasonable and competitive.

The resulting implications for best practice core DC plan design in the public sector are:

- Provide participation and vesting requirements that maximize retirement accumulations.
- Provide for a total contribution level and an investment structure that together are expected to accumulate sufficient assets to fund an adequate retirement income for each participant.
- Include a payout design that provides an adequate and secure level of retirement income.
- Manage the various risks that threaten retirement objectives, including investment volatility, longevity, and inflation.
- Provide access to independent, expert and personalized education, planning and investment advice services during both the accumulation phase and through retirement.
- Active management of the plan by the sponsoring employer employers with an emphasis on administrative simplicity to control costs.

BEST PRACTICES FOR PLAN DESIGN

The following is an outline of public sector core DC plan design best practices that increase the likelihood fulfilling the principles outlined above. Best practices are compared with current practices in the public plan market. Two sets of plans, chosen to be illustrative of common plan design, are examined; eleven covering general public sector employees plans and seven covering public higher education employees. A summary of the comparisons is provided in the appendix.

Eligibility and Participation

Mandatory participation is the best practice for a core defined contribution plan, along with low or no age restrictions and waiting periods for participation of no more than 1-year. Employers may also consider expanding the eligibility for employer retirement plans to less than full-time employees.

In the public sector plans examined here (both state and higher education) participation by the employee is mandatory in all cases. The only caveat is in the case of an optional retirement plan, where participation in a retirement plan is mandatory, but the individual chooses whether to participate in the primary defined benefit plan or the primary defined contribution plan. In two other plans, all new hires are automatically enrolled in the defined benefit plan, but then have a limited period of time to switch to the defined contribution plan if they so choose.

Not only is plan participation mandatory, but it is also typically immediate. There are several instances of service requirements, however.

Contribution Levels

Best practice calls for non-elective contributions by both the employer and employee that will result in an adequate retirement income assuming typical investment returns. This implies mandated contribution levels totaling at least 12 percent of pay if covered by Social Security and 18-20 percent of pay if not.[3]

All of the public plans examined specify both non-elective employer and employee contribution levels as a fixed percentage of pay. In the state plans examined here, non-elective employer contribution rates range from 4 percent of salary to 10.15 percent. In some plans, the employer contribution rates vary for different types of positions. The non-elective employee contribution rate ranges from 0 percent to 9.4 percent. Combining the non-elective employer and employee contribution rates results in total non-elective contribution levels ranging from 4 percent to over 18 percent.

In the public higher education plans examined here, employer non-elective contribution rates range from 5 percent to 15 percent of salary. In addition, employer non-elective contribution rates can vary within the plan based on salary, years of participation or age. The employee non-elective contribution rate ranges from 0 percent to 10 percent. As with employer contribution rates, required employee contributions sometimes vary within a given plan based on years of participation, age or salary. Across the public higher education plans examined, combined employer and employee non-elective contribution rates were a minimum of 10 percent, typically in the range of 15 percent, and as high as 20 percent.

Vesting

Best practice calls for participants to be immediately vested in employer contributions after no more than one-year of service. If immediate participation is adopted by a plan sponsor, then best practice allows for the imposition of a vesting period of up to one year. If participation is delayed, then best practice implies a vesting period of less than 1-year and possibly immediately (given the best practice of participation beginning no later than 1-year after the hire date.)

In the state plans examined, only one had immediate vesting in employer contributions. The typical vesting schedule is graded vesting over a period of 5 years, though the period of service required ranged from 1 to 12 years.

Immediate vesting is the near universal norm in the public higher education plans examined, with the exception of 100 percent cliff vesting after 1 year of service in one plan.

[3] Assumes a 75 -89 percent wage replacement target as derived in the *2004 Georgia State University/Aon RETIRE Project.* This target reflects, in part, the higher costs of retiree health care that current and future retirees are likely to experience. Public safety employees would need to have significantly higher contribution rates in order support earlier retirement ages common to those job classifications.

Investments

Best practice calls for mandatory or default into a lifecycle target-date fund[4] to address investment risk. When participants are given choice, best practice calls for a limited non-overlapping array (about 15-20) of investment options covering the major asset classes and allowing participants a reasonable opportunity to manage their own risk and return needs.

The number of options offered in the state plans examined ranges from 9 to 70. The number of investment options offered in public higher education is typically greater than the number offered elsewhere in the public sector. With one exception, which offers 10 options, all other higher education plans examined offer anywhere from 31 to over 150 options. The larger number of funds offered by these public universities is usually related to the existence of multiple service providers offering stand alone bundled arrangements.

All plans specify a default option for when a participant does not specify investment elections. In some cases, the default is a managed account or a target-date fund; in other cases, it is a relatively conservative investment, like a short term bond fund, or a balanced investment fund.

Pre-Retirement Distributions

Best practice plan design eliminates or minimizes leakage from participant accounts prior to retirement. Best practice would not allow lump sums at job change, hardship withdrawals or loans.[5] All public plans examined provide full lump sum distributions at job change. With a couple exceptions, hardship withdrawals and plan loans are not available.

Retirement Distributions

Best practice plan design regarding retirement distributions is to limit participant ability to withdraw funds as a lump sum combined with the requirement that a minimum amount of the account be annuitized through a vehicle providing some degree of inflation protection (such as participating guaranteed annuities, a variable payout annuity, or specialized inflation-protection annuities.) This addresses both longevity and inflation risks in retirement,.

In the state plans examined here, full lump sums are always a distribution option. On the other hand, most of the state plans have annuitization as a distribution option, but none require any degree of annuitization by the participant. Three of the state plans also provide an inflation hedged annuitization option. All other state plans examined provide no inflation hedge other than the ability to invest in equities after retirement.

Among the DC plans in higher education examined, all have an annuitization option providing features that at least partially address inflation risk, including the use of variable life annuities and fixed life annuities with a feature for annual benefit increases. These plans, however, also offer full lump sums as a distribution option and do not require any degree of annuitization at retirement.

[4] Custom designed lifecycle funds should be considered because they develop investment allocation glide paths and strategies that take into account specialized circumstances including when the core defined contribution plan is part of a combination DB/DC arrangement and when the participant does not participant in Social Security.

[5] A limited exception can be made for small benefit accruals that do not exceed thresholds established by the plan sponsor to control the cost of administering numerous small value accounts (e.g., $5,000).

Administrative Structure

Best practice is a single recordkeeper structure. High administration and investment fees reduce the ultimate level of retirement savings available to participants of defined contribution plans. Multiple vendor structures and agent-broker delivery models are generally more expensive than single recordkeeper administrative platforms.

Among the state plans examined here, all but one use a single recordkeeper structure. Among public university plans, however, multiple recordkeeper structures are the norm.

Larger plans should be able to take advantage of available economies of scale to deliver plan services at lower cost. Total costs (administrative and investment fees) for a quality, state-of-the-art core defined contribution plan should be available for 100 basis points or less for larger plans.

Education and Advice

Best practice design provides broad-based retirement and investment education services to participants. A higher best practice hurdle is the provision of individual-specific investment advice. The mode for delivering personalized retirement services will need to reflect the evolving ways that individuals access information, e.g., by phone, through the Web and in person. While technology can enable more effective communication, it will not replace the need for one-on-one consultation, particularly as individuals approach retirement.

All of the plans reviewed provide their participants with basic information regarding the plan, as well as basic education about saving for retirement.

Eight of ten state plans examined provide investment advice. Participant investment advice is provided by all the public university plans examined here, with the exception one plan which will likely be offering it by year-end 2008.

TABLE 1.
SUMMARY OF BEST PRACTICES FOR A CORE DEFINED CONTRIBUTION PLAN DESIGN

Plan Design Feature	Best Practice Benchmarks
Eligibility and Participation	■ Mandatory enrollment/participation ■ No age restrictions ■ No more than 1-year waiting period before participation begins
Vesting	■ 100% after 1-year
Total Contributions (Employer and Employee)	■ At least 12% of pay if covered by Social Security; 18-20% of pay if not covered by Social Security
Investments	■ Mandatory or default into lifecycle/target date ■ Limited array of 15-20 participant directed investments covering the major asset classes ■ Individual investment advice for participant directed investments ■ Broad-based employee investment education
Distributions	Pre-retirement: ■ Limited or no hardship or loan features ■ No pre-retirement age distributions other than small benefit cash-outs Retirement: ■ Distributions limited to normal or early retirement age; exception for small benefit accumulations ■ Some level of mandatory guaranteed annuity providing life income ■ Limited lump-sum distributions ■ Provide inflation protected options including continued exposure to equity investments during retirement – e.g., post-retirement lifecycle/target date funds, inflation protected annuities, variable annuities
Administrative Structure and Fees	■ Avoid multiple vendor recordkeeping structures where possible ■ Single point of contact for participants ■ Larger plans benchmark: Total administrative and investment costs not to exceed 100 basis points
Other participant services	■ Employee and retiree retirement and financial planning services delivered through multiple modes: call center, internet and in person

CONCLUSION

Core defined contribution retirement plans during the past twenty to thirty years have drifted away from their origins. The early designs of money purchase plans and the traditional designs used in the higher education arena focused first on providing income during retirement. However, with the advent of the 401(k) plan about 30 years ago, the focus began to shift away from retirement income as a primary purpose toward structures that, instead, emphasize wealth accumulation and maximizing investment returns as the main objective.

The result has been clear. While the growth of the 401(k) market has been phenomenal, for too many people the standard 401(k) model has failed to deliver the financial promises that were expected and needed.[6] The reasons for this failure are multiple and include:

- The largely voluntary nature of participation.
- Insufficient employer and employee contribution rates.
- The prevalence of participant directed investments and the failure or inability of many participants to adopt appropriate asset allocation strategies.
- The failure to preserve retirement assets for retirement – the so-called "pension leakage" phenomenon that occurs when DC plan assets are distributed and used for pre-retirement consumption.
- High administrative, investment, sales and other fees and expenses in some arenas that significantly reduce the savings that should be kept for the benefit of participants.

A defined contribution plan that is intended to be the primary or core source of retirement benefits should be designed differently than the traditional private sector 401(k) plan or the standard 457(b) or 403(b) supplemental tax deferred compensation arrangements common in the public sector. Unlike these other plans, which tend to focus on wealth accumulation as a primary objective, a core defined contribution plan can and should focus on providing retirement income and security. From a best practices benchmark perspective, therefore, the design for a core DC plan must include features that increase the likelihood that this primary objective is met.

Typical core defined contribution plans in the public sector today do not resemble the typical 401(k) plan in the private sector along multiple dimensions, including the mandatory nature of participation, contribution provisions for employer and employee and benefit payment options. These differences in many instances mean public plans satisfy best practice benchmarks whereas private sector 401(k) plans frequently do not. However, while many features of a "best practice" defined contribution plan are met by many public sector plans, there is variance in this regard as well.

Public sector employers and employees need and will be seeking better results and flexibility from their core defined contribution retirement plans. While it is not expected that public employers will move away from their core defined benefit plans as a primary

[6] Appendix B: Excerpt from EBRI Issues Brief #304, April 2007.

method of delivering retirement benefits, interest in defined contribution solutions will continue as public policy makers engage in the continuing efforts to make sure retirement benefits designs remain a good fit in these changing environmental conditions. As public policy makers examine defined contribution retirement plan designs one message should become clear - - the traditional 401(k) model of the for-profit corporate world is an inadequate and inefficient way to meet the needs of public employers and employees.

APPENDIX

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME			
Best Practice Benchmark	**Alaska Defined Contribution Plan**	**Colorado PERA Defined Contribution Plan**	**District of Columbia Defined Contribution Plan**	**Florida Retirement System Investment Plan**
ELIGIBILITY AND PARTICIPATION				
Mandatory participation; no age restriction; no more than 1-year wait	Mandatory participation; no age restriction or waiting period	Mandatory participation; no age restriction or waiting period; optional to DB plan	Mandatory participation; no age restriction; 1-year waiting period	Mandatory participation; no age restriction or waiting period; optional to DB plan
VESTING				
100% no later than after 1-year of service	Graded: 25% after 2 years 50% after 3 years 75% after 4 years 100% after 5 years	50% immediate, graded to 100% after 5-years	Cliff: 100% after 5 years	Cliff: 100% after 1- year
TOTAL EMPLOYER AND EMPLOYEE CONTRIBUTIONS				
12%+ of pay if covered by Social Security; 18-20% of pay if not covered by Social Security	<u>Non-Social Security</u> Teachers— ER: 7% EE: 8% PERS— ER: 5% EE: 8%	<u>Non-Social Security</u> ER: 10.15% EE: 8% for state troopers— ER: 12.85% EE: 10%	ER: 5% EE: 0% for detention officers—ER: 5.5% EE: 0%	Regular employees— ER: 9% EE: 0% for other employees—ER contribution ranges from 10.95% to 20% and EE is 0%
INVESTMENTS				
Mandatory or default into target-date lifecycle funds	Default to qualified managed account	Default to balanced fund	Default to target date fund	Default to moderate risk balanced fund

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME			
Best Practice Benchmark	**Alaska Defined Contribution Plan**	**Colorado PERA Defined Contribution Plan**	**District of Columbia Defined Contribution Plan**	**Florida Retirement System Investment Plan**
INVESTMENTS continued				
Limited array of no more than 15-20 funds covering the major asset classes	12	13	13	20
Individual investment advice through one or more providers	Yes	No	Yes	Yes
PRE-RETIREMENT DISTRIBUTIONS				
Small benefit distributions only before retirement age	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination
No hardship or loan distributions	Not available	Not available	Not available	Not available
RETIREMENT DISTRIBUTIONS				
Minimum level of annuitization required	Annuity available, but not required	No annuitization option	Annuity available, but not required	Annuity available, but not required
Limited lump sum distribution	Full lump sum available	Full lump sum available	Full lump sum available	Full lump sum available
Provide inflation protected features	Nothing other than the ability to invest in equities after retirement	Nothing other than the ability to invest in equities after retirement	Nothing other than the ability to invest in equities after retirement	Life annuity with a 3% annual increase in benefit payments

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME			
Best Practice Benchmark	**Alaska Defined Contribution Plan**	**Colorado PERA Defined Contribution Plan**	**District of Columbia Defined Contribution Plan**	**Florida Retirement System Investment Plan**
ADMINISTRATIVE STRUCTURE				
Avoid multiple vendor record-keeping structures	Single record-keeper	Single record-keeper	Single record-keeper	Single record-keeper
OTHER PARTICIPANT SERVICES				
Investment education, retirement and financial planning services	Yes	Yes	Yes	Yes

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME				
Best Practice Benchmark	**Michigan 401(k) Plan**	**Montana PERS Defined Contribution Retirement Plan**	**Nebraska DC Plan (closed to employees hired on or after 1/1/2003)**	**North Dakota PERS Defined Contribution Plan**	**Ohio PERS Member-Directed Plan**
ELIGIBILITY AND PARTICIPATION					
Mandatory participation; no age restriction; no more than 1-year wait	Mandatory participation; no age restriction or waiting period	Mandatory participation ; no age restriction or waiting period (automatically enrolled in DB plan, but have one year to switch to DC plan)	Mandatory participation; no age restriction or waiting period	Mandatory participation; no age restriction or waiting period (automatically enrolled in DB plan; have six months to switch to DC plan)	Mandatory participation; no age restriction or waiting period (worker must choose participation in the DB, DC plan or combined plan within 180 days of hire)
VESTING					
100% after 1-year service	Graded: 50% after 2 years 75% after 3 years 100% after 4 years	Cliff: 100% after 5 years	Cliff: 100% after 3 years	Graded: 50% after 2 years 75% after 3 years 100% after 4 years	Graded over 5 years at 20% per year
TOTAL EMPLOYER AND EMPLOYEE CONTRIBUTIONS					
12%+ of pay if covered by Social Security; 18-20% of pay if not covered by Social Security	ER: 4.0% EE: 0.0% (plus 100% ER match on elective EE contributions up to 3% of pay)	ER: 4.19% EE: 6.9%	ER: 7.5% EE: 4.8%	ER: 4.12% EE: 4.0%	Non-Social Security ER: 8.73% for state employees and 8.65% for local employees EE: 9.4%

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME				
Best Practice Benchmark	**Michigan 401(k) Plan**	**Montana PERS Defined Contribution Retirement Plan**	**Nebraska DC Plan (closed to employees hired on or after 1/1/2003)**	**North Dakota PERS Defined Contribution Plan**	**Ohio PERS Member-Directed Plan**
INVESTMENTS					
Mandatory or default into target-date lifecycle funds	Default to short term fund	Default to balanced fund	Default to moderate pre-mixed fund for employer contributions and stable value fund for employee contributions	Default to target date fund	Default to moderate balanced fund (60% equity, 40% fixed-income)
Limited array of no more than 20 participant directed investments covering the major asset classes	21	15	13	28	9
Individual investment advice through one or more providers	Yes	Yes	Yes	?	No
PRE-RETIREMENT DISTRIBUTIONS					
Small benefit distributions only before normal retirement age	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination
No hardship or loan distributions	Both available	Not available	Not available	Not available	Not available

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME				
Best Practice Benchmark	**Michigan 401(k) Plan**	**Montana PERS Defined Contribution Retirement Plan**	**Nebraska DC Plan (closed to employees hired on or after 1/1/2003)**	**North Dakota PERS Defined Contribution Plan**	**Ohio PERS Member-Directed Plan**
RETIREMENT DISTRIBUTIONS					
Minimum level of annuitization required	No annuitization option	No annuitization option	Annuitization option available; not required	Annuitization option available; not required	Annuitization option available; not required
Limited lump sum distribution	Full lump sum available	Full lump sum available	Full lump sum available	Full lump sum available	Full lump sum available
Provide inflation protected features	Nothing other than the ability to invest in equities after retirement	Nothing other than the ability to invest in equities after retirement	Life annuity with a 2.5% annual increase in benefit payments	Nothing other than the ability to invest in equities after retirement	Nothing other than the ability to invest in equities after retirement
ADMINISTRATIVE STRUCTURE					
Avoid multiple vendor recordkeeping structures	Single record-keeper	Single record-keeper	Single record-keeper	Single record-keeper	Single record-keeper
OTHER PARTICIPANT SERVICES					
Investment education, retirement and financial planning services	Yes	Yes	Yes	Yes	Yes

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME				
Best Practice Benchmark	**South Carolina Optional Retirement Plan**	**West Virginia Teachers DC Plan**	**Indiana University Plan**	**Michigan State University Plan**	**Purdue University Plan**
ELIGIBILITY AND PARTICIPATION					
Mandatory participation; no age restriction; no more than 1-year wait	Mandatory participation; no age restriction or waiting period (must choose participation in either the DB or DC plan within 30 days of hire; DB is the default)	Mandatory participation; no age restriction or waiting period	Mandatory participation; no age restriction or waiting period	Immediate eligibility; mandatory participation after age 35 and two years of service	Mandatory participation; eligibility varies from immediate to three years of service depending upon position
VESTING					
100% after 1-year service	Immediate	Graded: 1/3 after 6 years 2/3 after 9 years 100% after 12 years	Immediate	Immediate	Immediate
TOTAL EMPLOYER AND EMPLOYEE CONTRIBUTIONS					
12%+ of pay if covered by Social Security; 18-20% of pay if not covered by Social Security	ER: 5.0% EE: 6.5%	ER: 7.5% EE: 4.5%	ER: varies from 10% to 12% depending on position (varies from 11% to 15% for those hired before 1989) EE: 0%	ER: 10% EE: 5%	ER: 11% on first $9,000 of pay and 15% thereafter EE: 0%

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME				
Best Practice Benchmark	**South Carolina Optional Retirement Plan**	**West Virginia Teachers DC Plan**	**Indiana University Plan**	**Michigan State University Plan**	**Purdue University Plan**
INVESTMENTS					
Mandatory or default into target-date lifecycle funds	Default into DB if do not specify investment choices	Default to balanced fund	Default to age-based life-cycle funds	Default to money market fund	Default to age-based life-cycle funds
Limited array of no more than 20 participant directed investments covering the major asset classes	70	13	38	31	34
Individual investment advice through one or more providers	Yes	No	Yes	Yes	Yes
PRE-RETIREMENT DISTRIBUTIONS					
Small benefit distributions only before normal retirement age	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination
No hardship or loan distributions	Not available	Not available	Not available	Both available	Not available

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME				
Best Practice Benchmark	**South Carolina Optional Retirement Plan**	**West Virginia Teachers DC Plan**	**Indiana University Plan**	**Michigan State University Plan**	**Purdue University Plan**
RETIREMENT DISTRIBUTIONS					
Minimum level of annuitization required	Annuitization option available; not required	Annuitization option available; not required	Annuitization option available; not required	Annuitization option available; not required	Annuitization option available; not required
Limited lump sum distribution	Full lump sum available	Full lump sum available	Full lump sum available	Full lump sum available	Full lump sum available
Provide inflation protected features	Variable life annuity and fixed life annuity with increasing benefits both available	Nothing other than the ability to invest in equities after retirement	Variable life annuity and fixed life annuity with increasing benefits both available	Variable life annuity and fixed life annuity with increasing benefits both available	Variable life annuity and fixed life annuity with increasing benefits both available
ADMINISTRATIVE STRUCTURE					
Avoid multiple vendor recordkeeping structures	Multiple record-keepers	Single record-keeper	Multiple record-keepers	Multiple record-keepers	Multiple record-keepers
OTHER PARTICIPANT SERVICES					
Investment education, retirement and financial planning services	Yes	Yes	Yes	Yes	Yes

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME			
Best Practice Benchmark	**State University of New York**	**University of Iowa**	**University of Michigan**	**University of Washington**
ELIGIBILITY AND PARTICIPATION				
Mandatory participation; no age restriction; no more than 1-year wait	Mandatory participation; optional to DB plan	Mandatory participation; optional to DB plan	Immediate eligibility; mandatory participation after age 35 and two years of service	Immediate eligibility; mandatory participation after two years of service
VESTING				
100% after 1-year service	Cliff: 1 year	Immediate	Immediate	Immediate
TOTAL EMPLOYER AND EMPLOYEE CONTRIBUTIONS				
12%+ of pay if covered by Social Security; 18-20% of pay if not covered by Social Security	ER: 8% during first 7 years of participation and 10% thereafter (Note: higher rates apply to members who joined plan prior to July, 1992) EE: 3%	ER: First 5 years: 6.67% on first $4,800 and 10% thereafter; 10% after 5 years EE: First 5 years: 3.33% on first $4,800 and 5% thereafter; 5% after 5 years	ER: 5% EE: 0% (100% ER match of EE elective contributions up to an additional 5%)	Both ER and EE: 5% if under age 35; 7.5% between ages 35 and 50; 10% if age 50 and older
INVESTMENTS				
Mandatory or default into target-date lifecycle funds	Default to money market fund	Default to age-based life-cycle fund	Default to age-based life-cycle fund	Default to money market fund
Limited array of no more than 20 participant directed investments covering the major asset classes	32	39	150+	10
Individual investment advice through one or more providers	Yes	Yes	Yes	No (but likely in 2008)

COMPARISON OF BEST PRACTICE BENCHMARKS TO MAJOR PUBLIC SECTOR CORE DC PLANS

	PLAN NAME			
Best Practice Benchmark	**State University of New York**	**University of Iowa**	**University of Michigan**	**University of Washington**
PRE-RETIREMENT DISTRIBUTIONS				
Small benefit distributions only before normal retirement age	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination	Full lump-sum available on termination
No hardship or loan distributions	Not available	Not available	Not available	Not available
RETIREMENT DISTRIBUTIONS				
Minimum level of annuitization required	Annuitization option available; not required	Annuitization option available; not required	Annuitization option available; not required	Annuitization option available; not required
Limited lump sum distribution	Full lump sum available	Full lump sum available	Full lump sum available	Full lump sum available
Provide inflation protected features	Variable life annuity and fixed life annuity with increasing benefits both available	Variable life annuity and fixed life annuity with increasing benefits both available	Variable life annuity and fixed life annuity with increasing benefits both available	Variable life annuity and fixed life annuity with increasing benefits both available
ADMINISTRATIVE STRUCTURE				
Avoid multiple vendor record-keeping structures	Multiple record-keepers	Multiple record-keepers	Multiple record-keepers	Multiple record-keepers
OTHER PARTICIPANT SERVICES				
Investment education, retirement and financial planning services	Yes	Yes	Yes	Yes

ABOUT THE AUTHORS

Roderick B. Crane is a national authority on public sector retirement plans. He is responsible for developing and executing strategies for the state and local government 401(a), 457, 401(k) and 403(b) markets for TIAA-CREF. Before joining TIAA-CREF, Mr. Crane was a senior consultant with The Segal Company and Mercer Human Resources Consulting. During this 22-year period, he worked primarily with large state and local governments on the design and administration of their defined benefit and defined contribution retirement programs as well as their deferred compensation and retiree health savings plans. Prior to entering the benefits consulting arena, he served as staff legal counsel for the North Dakota Legislative Assembly and its public employee retirement oversight committee. Mr. Crane graduated from the University of North Dakota with a BA in economics in 1978 and received his Juris Doctor from the University of North Dakota School of Law in 1982.

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Paul Yakoboski conducts research on issues related to retirement income security, including saving and planning for retirement and funding retiree health insurance. Prior to joining the Institute, he held positions as Director of Research for the American Council of Life Insurers, Senior Research Associate with the Employee Benefit Research Institute and Senior Economist with the U.S. General Accounting Office. Dr. Yakoboski is a member of the National Academy of Social Insurance and the American Economic Association, and has served as Director of Research for the American Savings Education Council. He received his Ph.D. (1990) and M.A. (1987) in economics from the University of Rochester (Rochester, NY) and his B.S. (1984) in economics from Virginia Tech (Blacksburg, VA.)