Comparing Potential Retirement Income Under Defined Benefit and Defined Contribution Plans Offered to Non-Public Safety Employees under the Alaska Public Employees Retirement System (PERS)

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Retirement is a straightforward concept—people set aside money while they work so they can eventually live on sources of income other than work.

While simple in concept, discussion/evaluation of retirement is complicated by several factors:

- there is no set retirement age,
- retirement lifestyle requirements depend on individual preferences and financial circumstances, and
- the method of saving money during working years is not the same for everyone.

There are three categories of retirement plans:

1. Social Security is a federal government retirement plan that most workers join—not necessarily by choice.

2. At the other extreme, many individuals save on their own (often in traditional IRAs, Roth IRAs or deferred compensation plans).

3. The middle ground is employer sponsored retirement plans that both employer and employees contribute to.

Conclusions—Public Employees Retirement System (PERS) only—excludes police and firefighters and those in the Teachers Retirement System (TRS)

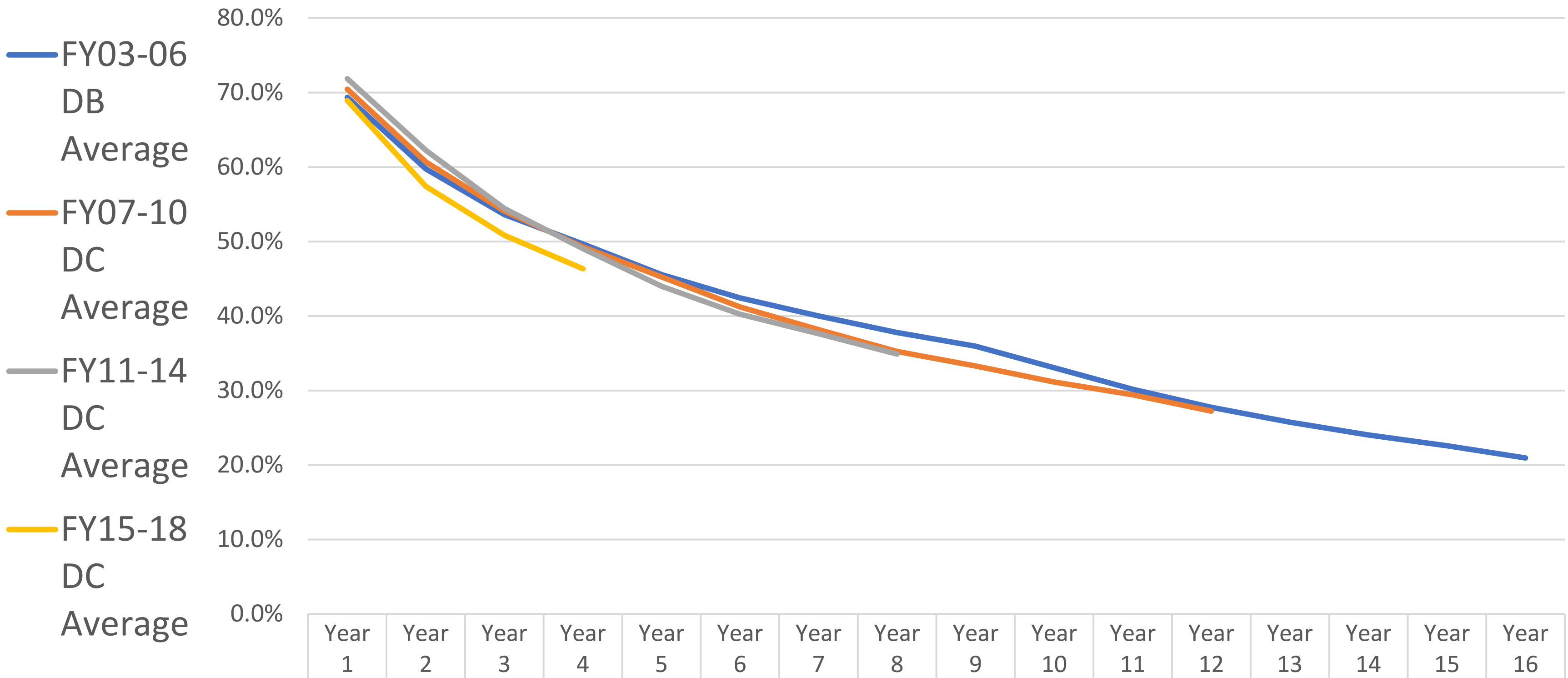
1. **Available data do not support the conclusion that Alaska's Tier IV defined contribution plan is inferior to a Tier III pension, particularly regarding employee retention.**
2. **Whether a 401(k) plan or a pension is a "better" retirement system is not clear.**
    1. In most cases, a 401(k) plan offers greater potential retirement income.
    2. Individual circumstances and preferences vary. Some people would prefer the certainty of a pension—even if it provides less income—while others prefer the advantages of a 401(k) plan.
3. **For those fortunate employees that participate in the Supplemental Benefits System (SBS) as well as the 401(k) plan, 25% of their salary is set aside for retirement. Given at least 15 years of service and a well-managed nest egg, they can look forward to retirement income of at least 70% of final salary.**
4. **Some employees have neither SBS nor Social Security, and retirement options for them could be improved.**

Employee Retention

There is little argument that employee retention is a problem in Alaska.

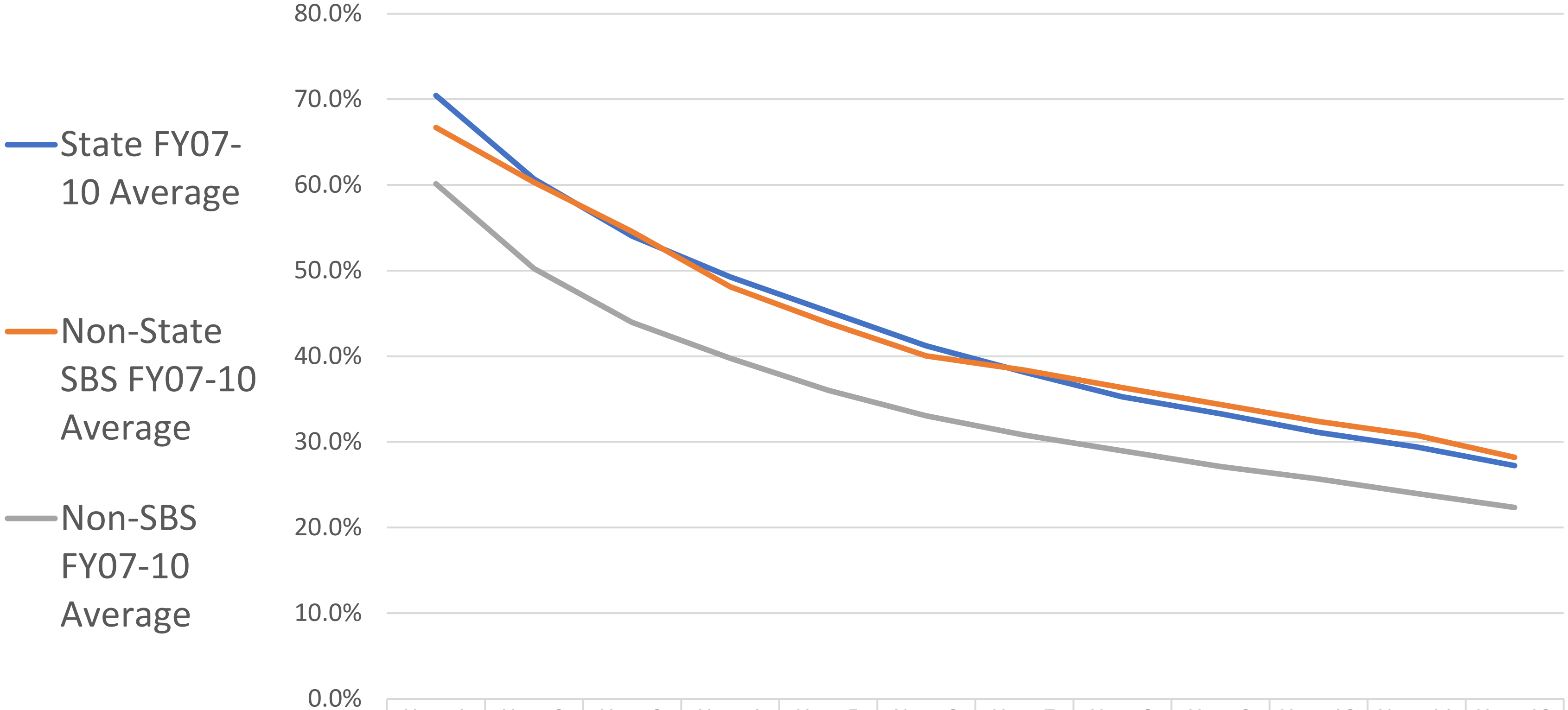
The question is: How much of the retention problem is due to the retirement system?

Retention Rate by Class Year, PERS Non-P/F, State Only



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16
FY03-06 DB Average	69.3%	59.7%	53.6%	49.7%	45.6%	42.4%	40.0%	37.8%	35.9%	33.0%	30.2%	27.7%	25.7%	24.0%	22.6%	20.9%
FY07-10 DC Average	70.4%	60.7%	54.0%	49.3%	45.3%	41.2%	38.1%	35.3%	33.3%	31.1%	29.4%	27.2%				
FY11-14 DC Average	71.8%	62.2%	54.4%	49.0%	44.0%	40.3%	37.6%	34.9%								
FY15-18 DC Average	68.9%	57.4%	50.8%	46.3%												

Retention Rate by Employer Type, PERS Non-P/F – FY07-10 (DC) only



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
State FY07-10 Average	70.4%	60.7%	54.0%	49.3%	45.3%	41.2%	38.1%	35.3%	33.3%	31.1%	29.4%	27.2%
Non-State SBS FY07-10 Average	66.7%	60.3%	54.6%	48.1%	43.9%	40.0%	38.4%	36.3%	34.4%	32.4%	30.8%	28.2%
Non-SBS FY07-10 Average	60.1%	50.2%	43.9%	39.8%	36.0%	33.1%	30.8%	29.0%	27.1%	25.7%	24.0%	22.4%

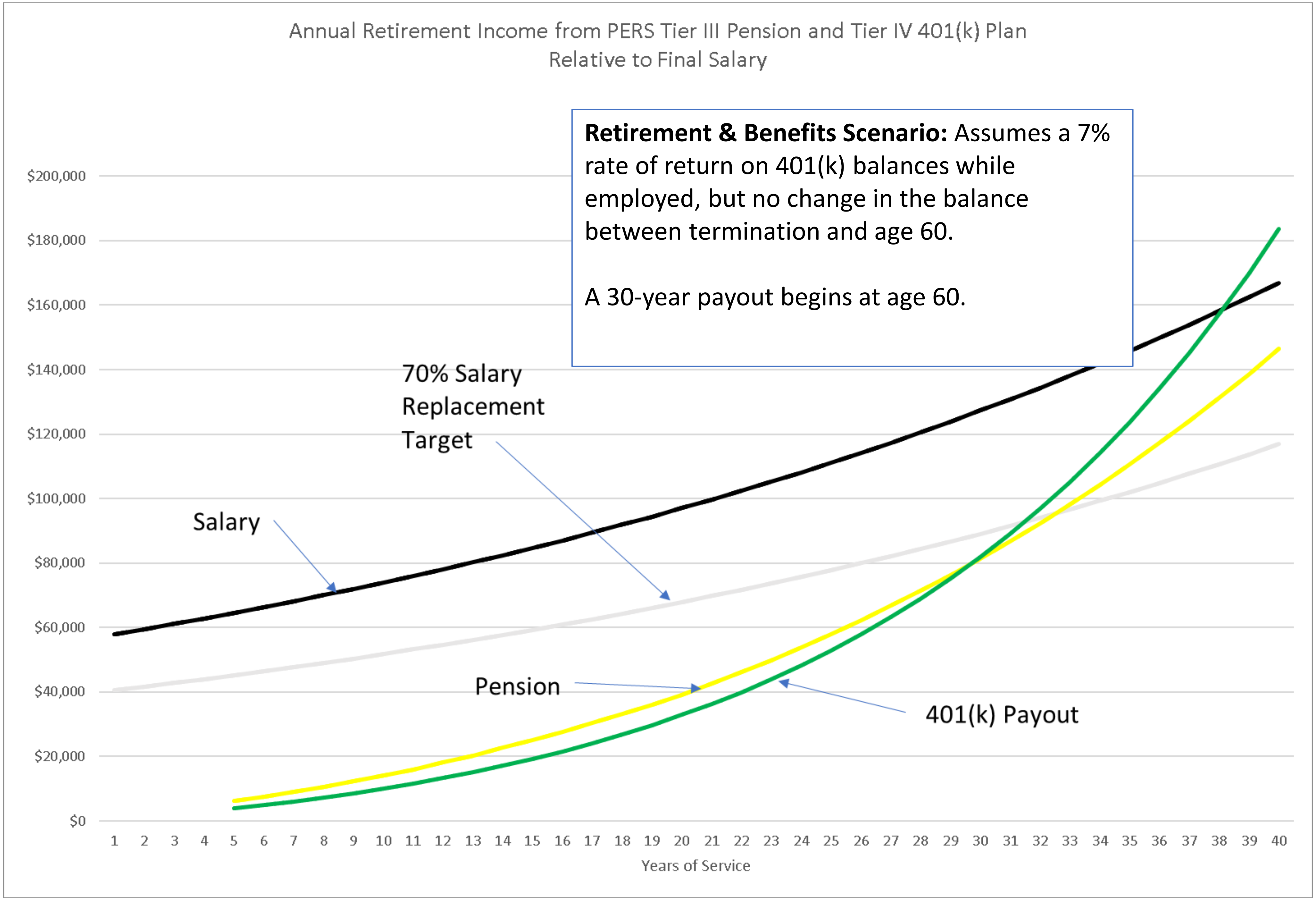
Things to Remember:

1. **The rate of return on investments is critical to any discussion of retirement plans.**
    - Earnings on contributions generally provide far more retirement income than contributions themselves. This is true of both pensions and 401(k) plans.
        - Example: 10 years of work at $100,000 in annual pay with 13% of payroll contributed (employee and employer combined) gives total contributions of $130,000. A pension for 10 years of work with a 2% multiplier for each year of service gives a pension of 20% of salary, or $20,000. The pension would burn through $130,000 in 6 ½ years. What magic allows people to collect a pension for 30 years? The magic is compound interest on investments.
2. **The rate of return is instrumental in determining both the payout under a 401(k) plan and the actuarial soundness of a pension system.**
3. **Future rates of return are unknown, so must be projected.**

Things to Remember (continued):

4. **If earnings are less than projected, either the employee or the employer will be disappointed.**
   a. In a 401(k) plan, the employee bears the risk that investment returns will not support the anticipated level of retirement income.
   b. With a pension, retirement benefits are not merely anticipated, they are specified by a formula that includes years of service and salary, but <u>not</u> investment returns. A defined benefit often means that employees bear no risk of poor investment performance.
5. **Timing of service affects a 401(k) payout but does not affect a pension.**

Salary Replacement for Public Employees Retirement System (PERS) Employees other than Police and Firefighters								
Years of Service	Annual Salary with Annual Growth of	Tier III Pension	Employee Contributions	Employer Contributions	Total Contributions	End of Year Balance Before Current Earnings	Earnings	End of Year 401(k) Balance with Earnings
	2.75%		8.00%	5.00%			7.00%	
1	57,949		4,636	2,897	7,533	7,533	527	8,061
2	59,543		4,763	2,977	7,741	15,801	1,106	16,907
3	61,180		4,894	3,059	7,953	24,861	1,740	26,601
4	62,862		5,029	3,143	8,172	34,773	2,434	37,207
5	64,591	6,123	5,167	3,230	8,397	45,604	3,192	48,796
6	66,367	7,549	5,309	3,318	8,628	57,424	4,020	61,444
7	68,193	9,049	5,455	3,410	8,865	70,309	4,922	75,230
8	70,068	10,627	5,605	3,503	9,109	84,339	5,904	90,243
9	71,995	12,284	5,760	3,600	9,359	99,602	6,972	106,575
10	73,975	14,024	5,918	3,699	9,617	116,191	8,133	124,325
11	76,009	16,031	6,081	3,800	9,881	134,206	9,394	143,600
12	78,099	18,137	6,248	3,905	10,153	153,753	10,763	164,516
13	80,247	20,347	6,420	4,012	10,432	174,948	12,246	187,194
14	82,454	22,665	6,596	4,123	10,719	197,913	13,854	211,767


Annual Retirement Income from PERS Tier III Pension and Tier IV 401(k) Plan
Relative to Final Salary
Retirement & Benefits Scenario: Assumes a 7% rate of return on 401(k) balances while employed, but no change in the balance between termination and age 60.
A 30-year payout begins at age 60.
$200,000
$180,000
$160,000
$140,000
$120,000
$100,000
$80,000
$60,000
$40,000
$20,000
$0
70% Salary Replacement Target
Salary
Pension
401(k) Payout
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Years of Service

- **The conclusion that a pension nearly always provides more retirement income than a 401(k) plan is flawed** because the comparisons reflect a retirement income based on the balance of a 401(k) account at the end of service. That is, the conclusion is based on an assumption that
  - a person transitions immediately from employment to retirement, or
  - a 401(k) account earns no interest from the date of termination until the date of retirement.
- The numbers provided by the Division of Retirement and Benefits (R&B) are not wrong, they simply show one scenario. And that scenario is unlikely to occur.
- **Scenarios in which the balance of a 401(k) plan continues to accumulate earnings until age 60 reach the opposite conclusion.**

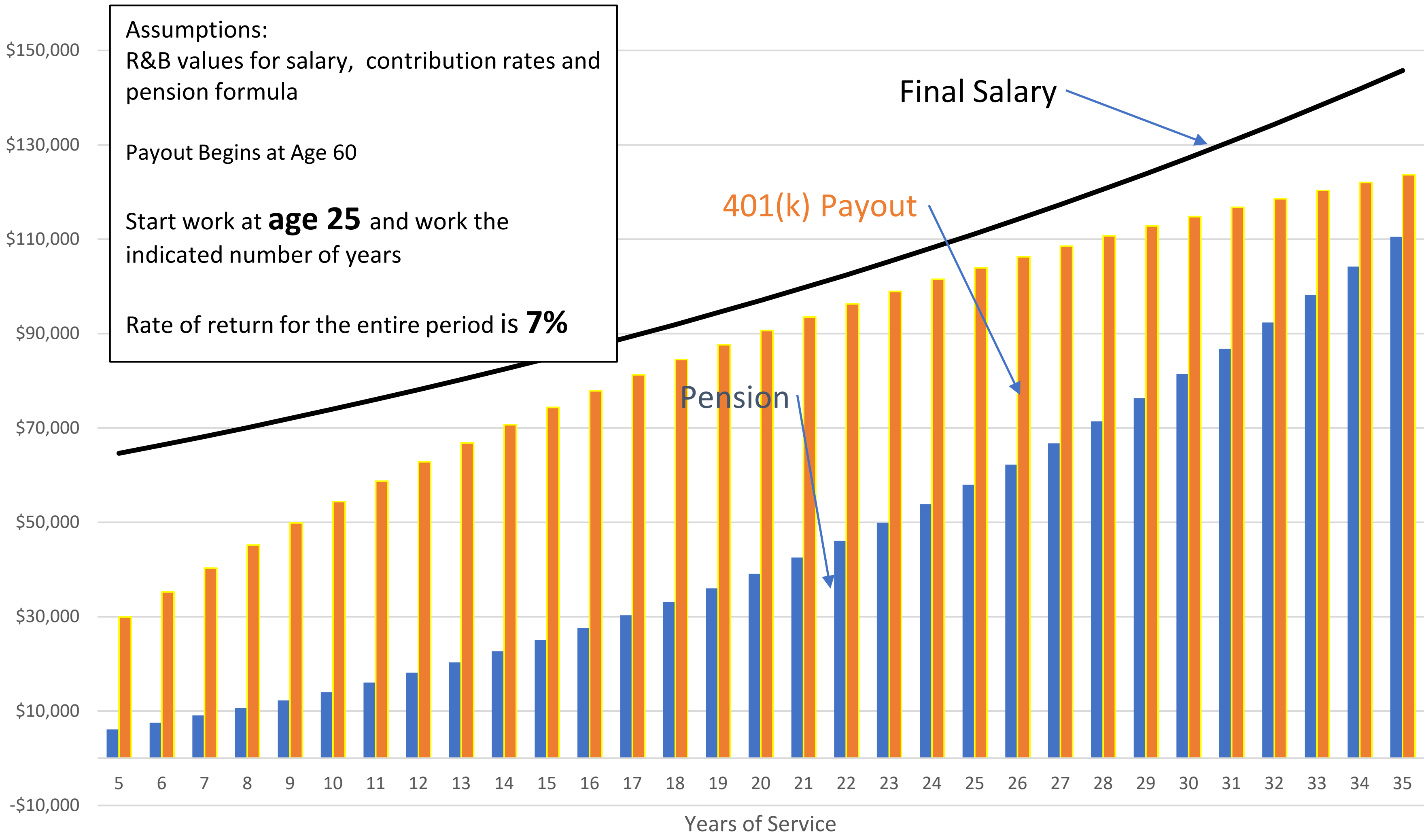
Pension versus 401(k) Payout for Ten Years of Service Beginning at the Indicated Age and with Retirement Beginning at Age 60						
Rate of Return	7.00%					
Start Work at Age	End Service at Age	Tier III Pension	401(k) Balance	Years 401(k) Will Compound	401(k) 30-Year Payout	401(k) / Pension
50	60	14,024	124,325	0	10,019	71%
45	55	14,024	174,372	5	14,052	100%
40	50	14,024	244,565	10	19,709	141%
35	45	14,024	343,015	15	27,642	197%
30	40	14,024	481,097	20	38,770	276%
25	35	14,024	674,763	25	54,377	388%
20	30	14,024	946,391	30	76,266	544%

Does slide 13 prove that 401(k) plans are always better than pensions?

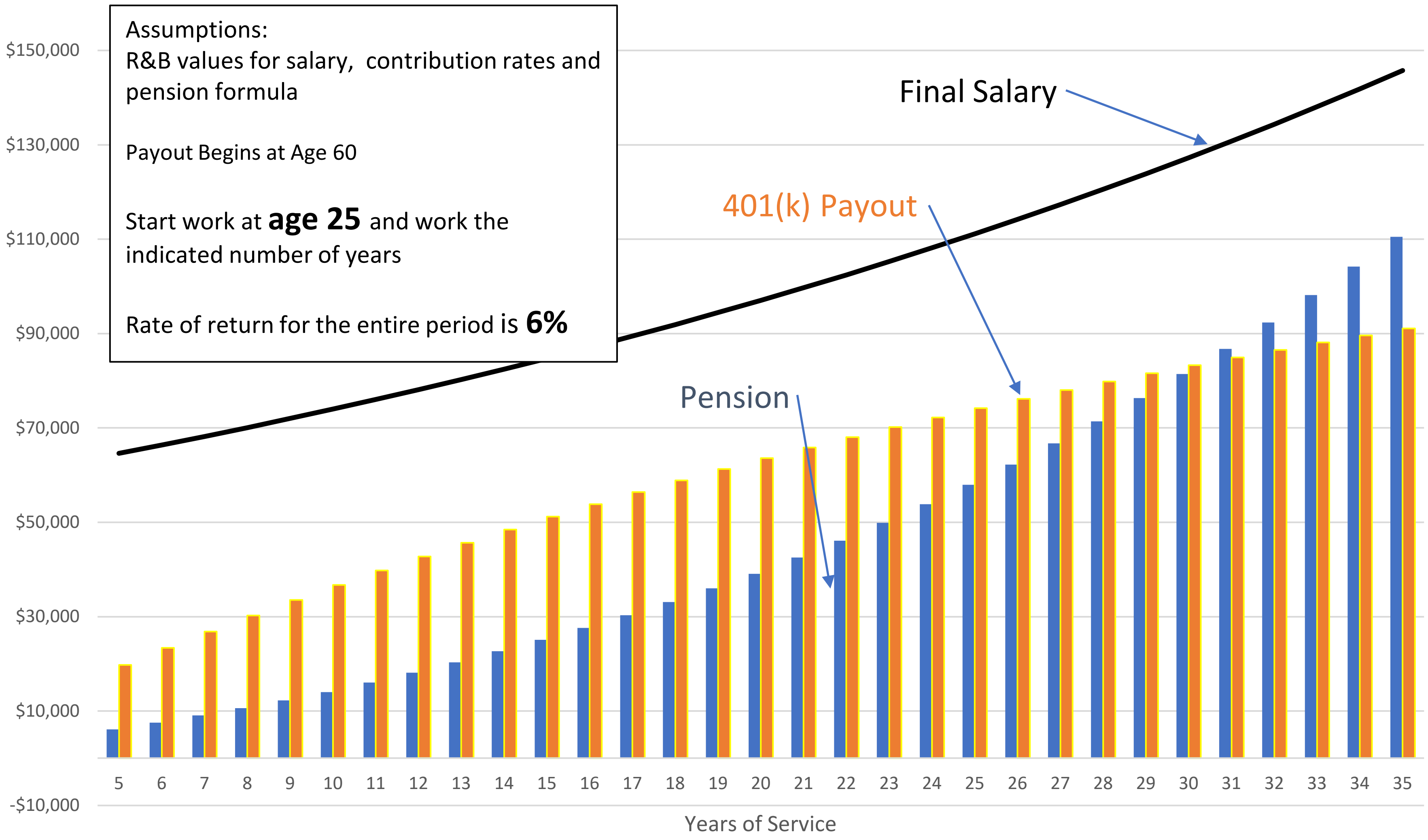
Not necessarily. 401(k)s *can* generate higher retirement income at similar contribution levels, but returns are uncertain.

And the potential for higher retirement income may not be the deciding factor. Preferences depend on individual circumstances.

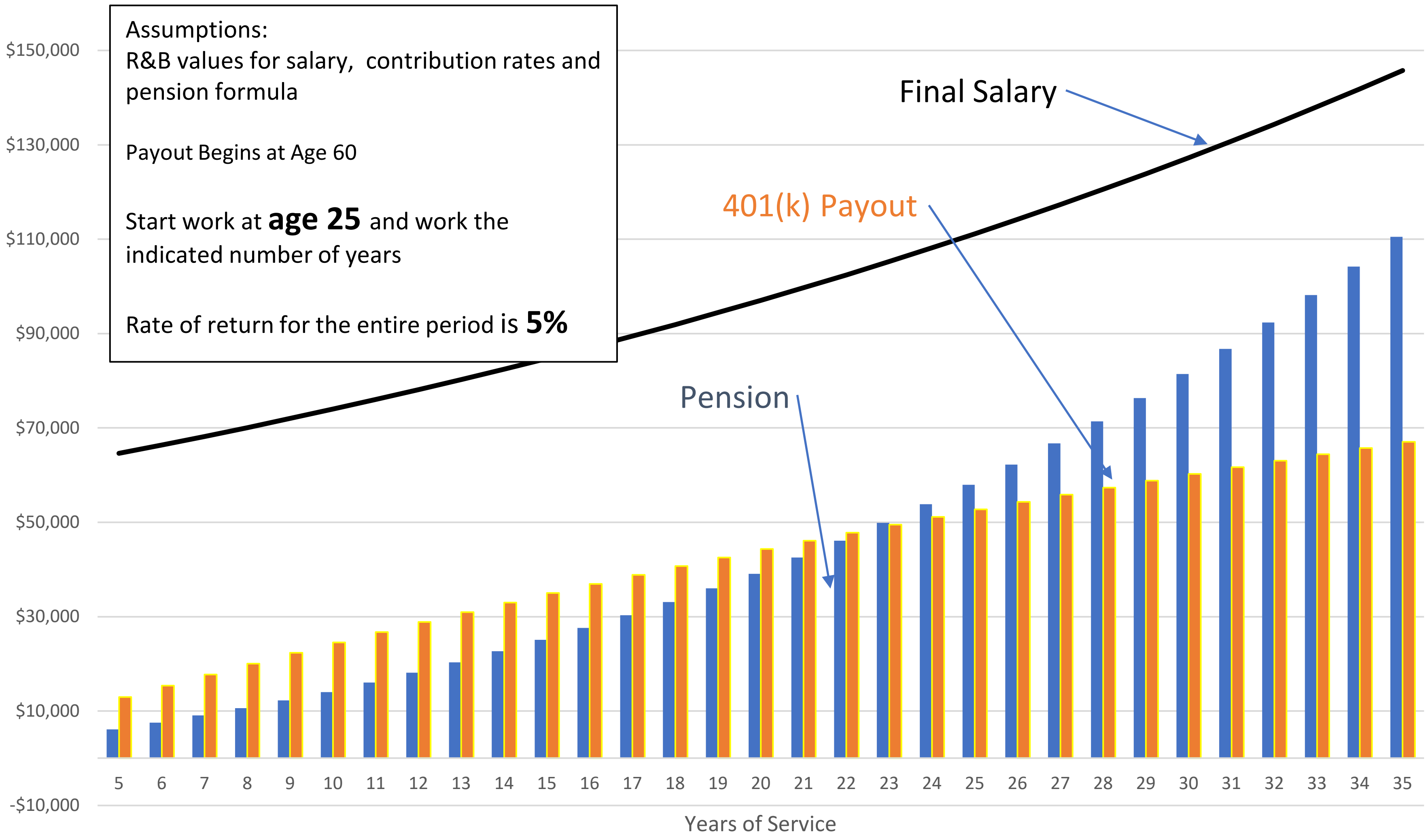
Pension versus 401(k) Payout



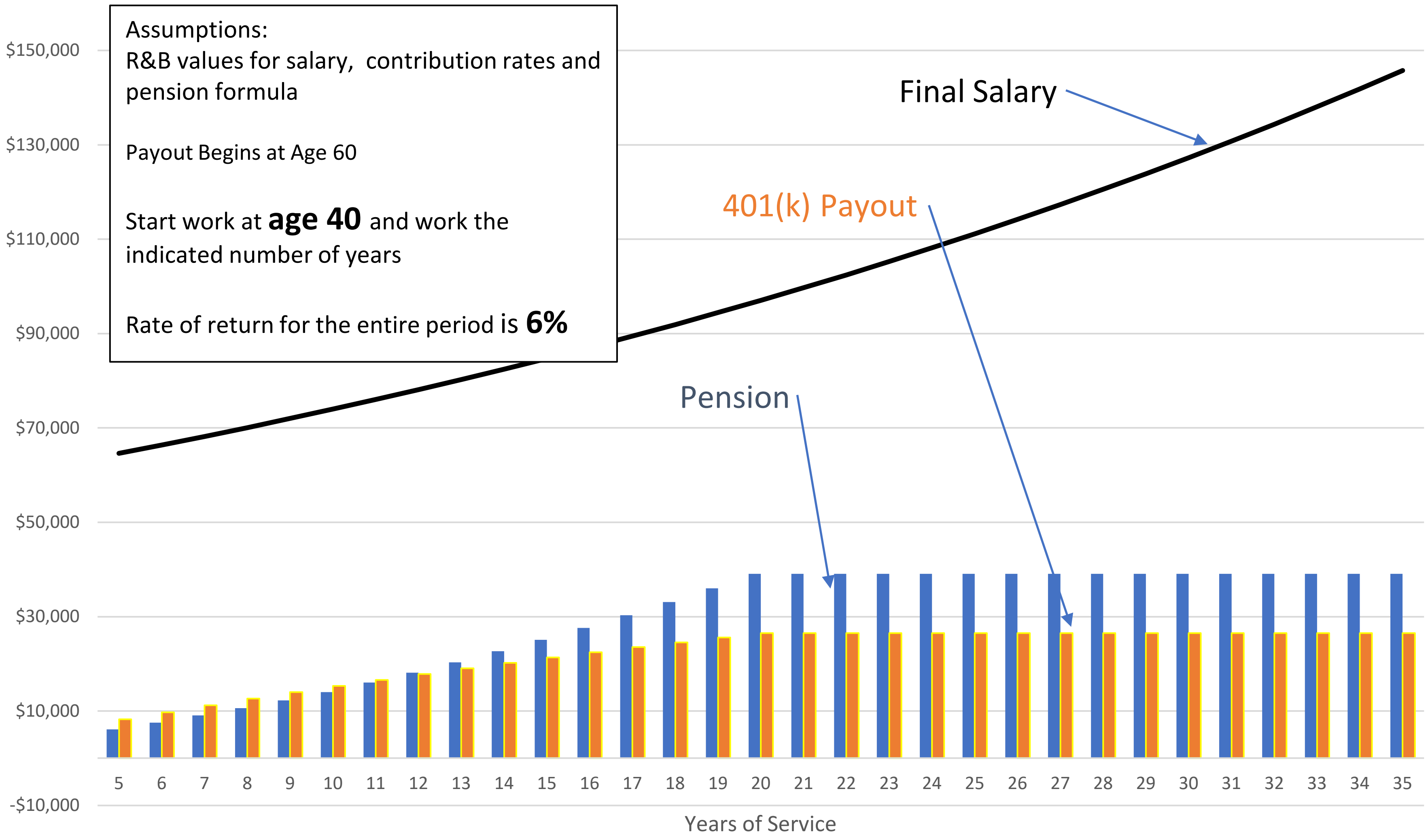
Pension versus 401(k) Payout



Pension versus 401(k) Payout



Pension versus 401(k) Payout



Takeaways:

1. **Projected income at retirement age is the only appropriate way to compare pension benefits to 401(k) payouts.**
   a. Pensions are not affected by rate of return or timing of service and do not gain value over time.
   b. Income from a 401(k) plan is affected by rate of return on investments and timing of service.
   c. Comparing a 401(k) balance at age 40 to a pension earned at age 40 is biased in favor of pensions because doing so ignores the continued compounding of earnings applicable to a 401(k) plan.

2. **As the rate of return on investments falls, 401(k) payouts fall but pensions are unaffected.**
   a. That point should now be obvious, and some use it to conclude that a pension generally provides greater retirement income than a 401(k).
   b. The conclusion is not supported by data.
   c. In most situations (even with investment returns as low as 5%) a 401(k) payout is greater than a pension.

Takeaways (continued):

3. **A less obvious point is that the same low returns that reduce 401k payouts could throw a pension system out of actuarial balance**—meaning that the trust fund balance would be insufficient to pay projected pensions.

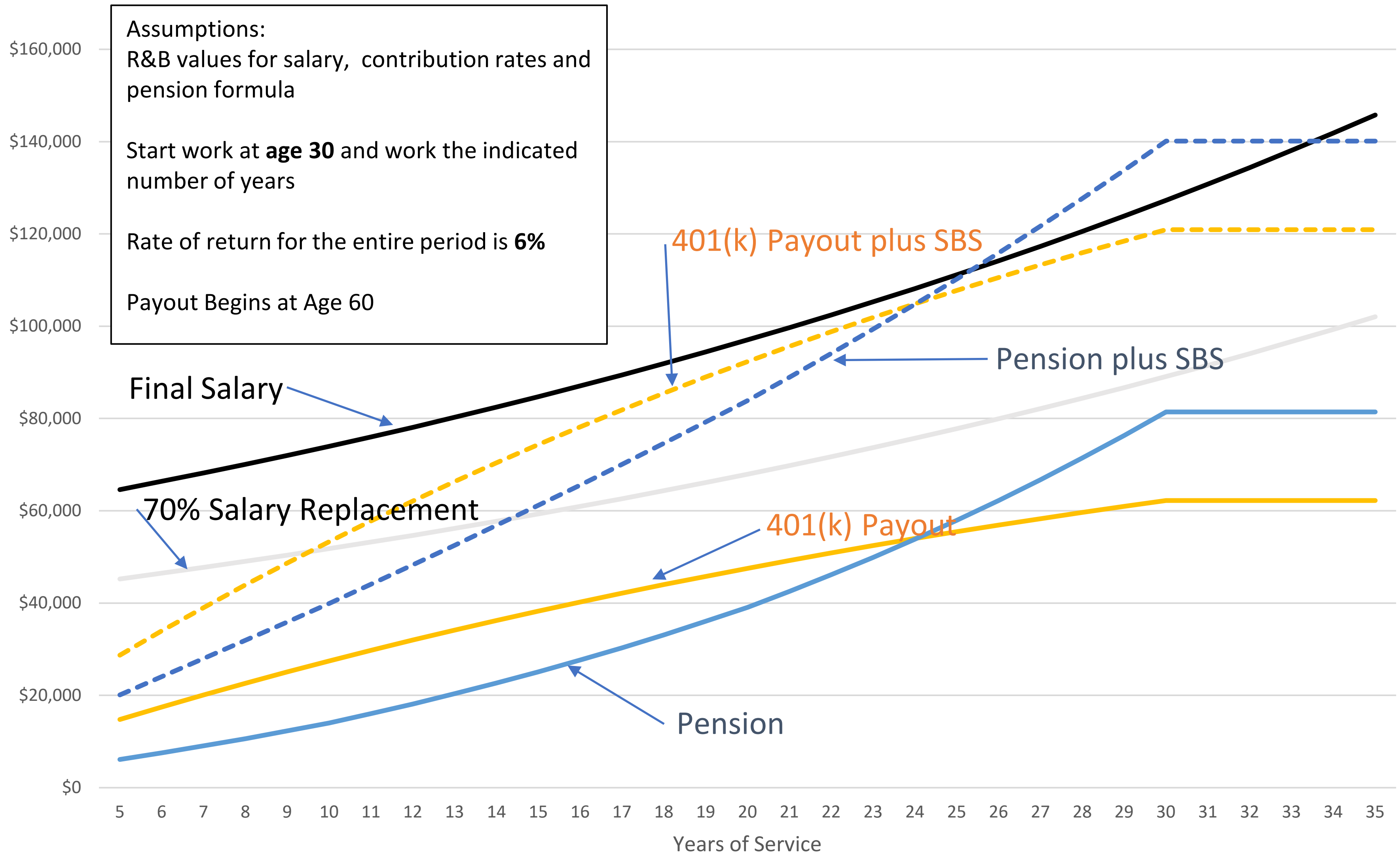
4. **Failing to consider the costs of maintaining an actuarily sound pension system is a dangerous path.**
   a. Benefits matter. But they are not the only thing that matters.
   b. Employer costs also matter.
   c. Projected contribution rates and projected rates of return on investment can make a pension system appear to be much cheaper than it can be when assumptions do not match reality.
   d. In comparing retirement plans, the big issue is risk, not merely contribution rates.

Takeaways (continued):

5. **Anything that increases salaries also increases employer and employee contributions—and eventually, retirement income.**
   a. For this reason, we should not expect to be able to return to a pension system at the former levels of contributions.
      - Contribution rates under the former pension system were designed to fund benefits based on salary schedules in place when rates were set. That schedule had 5- 6- and 7-year holds at longevity steps. Within each salary range, the maximum step was reached at 20 years of service.
      - Salary schedules now in place provide increases every two years with no cap on steps. With each step increase equivalent to a 3.25% raise, final salaries—and pensions—can be 20% or more above the amounts achievable under the old salary schedules.

6. **As legislators, you must balance employee benefits and state costs.**
   a. Unfortunately, these move in opposite directions.

Pension versus 401(k) Payout



The graph prompts many questions:

1. Does any state offer a retirement system as financially attractive as Alaska's "401(k) plus SBS" system?
    1. Have proponents of returning to a pension plan come forward with plans from other states and said "this is why Alaska's retirement plan isn't competitive"?
    2. Do employees understand how attractive Alaska's retirement system is?

2. Are considerations other than the potential amount of retirement income driving the controversy?

3. Is the push to return to a pension driven by employees who work for employers that do not offer SBS?

4. Would returning PERS workers (with SBS) to a pension plan fix a part of the retirement system that isn't broken?

5. Can the State encourage employers without SBS or Social Security to offer a retirement system in addition to the PERS 401(k) plan?

Recap

1. **Available data do not support the conclusion that Alaska's 401(k) plan is inferior to a Tier III pension, particularly regarding employee retention.**
2. **Whether a 401(k) plan or a pension is a "better" retirement system is not clear.**
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