

Forecasted Public Sector Expenditures and Headcount by Federal, State, and Local

Exercise 6 • Forecast Horizon: 2027–2046 • Baseline: 2026

Prepared: April 2026 • All dollar figures in nominal billions; headcount in thousands. Color shading: white (≥95%), yellow (85–94%), orange (70–84%), pink (55–69%), red (<55%)

Assumptions & Method

This exercise forecasts U.S. public sector expenditures and headcount from 2027 to 2046 under the assumption that public budgets are constrained by income tax revenue, and that AI/robotics-driven private-sector employment displacement reduces that revenue proportionally. The same aggregate scaling percentages computed in Exercise 4 — derived from the Exercise 2 employment retention forecasts weighted by payroll tax contribution — are applied to all three levels of government. No deficit borrowing is permitted to sustain spending above income.

Bottom-Line Scaling Percentage (from Exercise 4)

Selected years: 2027=100% | 2030=95.9% | 2033=85.0% | 2036=70.6% | 2040=55.6% | 2046=53.1%. Full annual series in Exercise 4 artifact.

Part 1 — Federal Government

2026 Baseline: ~\$4,162B total program expenditures (excludes Social Security and net interest); ~2,504K employees (civilian + active military). Sources: CBO FY2024 Budget Functions; CBPP; OPM FedScope 2024; BLS.

Service Category	2026 Spend (\$B)	2026 Head (K)	2027 Spend (\$B)	2027 Head (K)	2030 Spend (\$B)	2030 Head (K)	2033 Spend (\$B)	2033 Head (K)	2036 Spend (\$B)	2036 Head (K)	2040 Spend (\$B)	2040 Head (K)	2046 Spend (\$B)	2046 Head (K)
National Defense	\$892B	1300K	\$892B	1300K	\$855B	1247K	\$758B	1105K	\$630B	918K	\$496B	723K	\$474B	690K
Health Programs (Medicare/Medicaid/ACA)	\$1720B	65K	\$1720B	65K	\$1650B	62K	\$1462B	55K	\$1214B	46K	\$956B	36K	\$913B	35K
Veterans Benefits & Services	\$545B	400K	\$545B	400K	\$523B	384K	\$463B	340K	\$385B	282K	\$303B	222K	\$289B	212K
Economic Security & Social Services	\$490B	130K	\$490B	130K	\$470B	125K	\$417B	111K	\$346B	92K	\$272B	72K	\$260B	69K
Education (Federal)	\$115B	4K	\$115B	4K	\$110B	4K	\$98B	3K	\$81B	3K	\$64B	2K	\$61B	2K
Transportation & Infrastructure	\$110B	55K	\$110B	55K	\$106B	53K	\$94B	47K	\$78B	39K	\$61B	31K	\$58B	29K
Public Safety & Justice	\$80B	125K	\$80B	125K	\$77B	120K	\$68B	106K	\$57B	88K	\$45B	70K	\$43B	66K
General Government & Administration	\$135B	350K	\$135B	350K	\$130B	336K	\$115B	298K	\$95B	247K	\$75B	195K	\$72B	186K
International Affairs & Other	\$75B	75K	\$75B	75K	\$72B	72K	\$64B	64K	\$53B	53K	\$42B	42K	\$40B	40K
TOTAL	\$4162B	2504K	\$4162B	2504K	\$3991B	2401K	\$3538B	2128K	\$2938B	1768K	\$2314B	1392K	\$2210B	1330K

Part 2 — State Government

2026 Baseline: ~\$3,050B total state expenditures; ~4,500K employees. Sources: NASBO 2025 State Expenditure Report (FY2024 actual by function); Census ASPEP 2024.

Service Category	2026 Spend (\$B)	2026 Head (K)	2027 Spend (\$B)	2027 Head (K)	2030 Spend (\$B)	2030 Head (K)	2033 Spend (\$B)	2033 Head (K)	2036 Spend (\$B)	2036 Head (K)	2040 Spend (\$B)	2040 Head (K)	2046 Spend (\$B)	2046 Head (K)
Medicaid & State Health Programs	\$950B	550K	\$950B	550K	\$911B	528K	\$808B	468K	\$671B	388K	\$528B	306K	\$505B	292K
K-12 Education (state aid)	\$570B	300K	\$570B	300K	\$547B	288K	\$485B	255K	\$402B	212K	\$317B	167K	\$303B	159K
Higher Education	\$275B	900K	\$275B	900K	\$264B	863K	\$234B	765K	\$194B	635K	\$153B	500K	\$146B	478K
Transportation & Highways	\$245B	250K	\$245B	250K	\$235B	240K	\$208B	213K	\$173B	177K	\$136B	139K	\$130B	133K
Corrections & Public Safety	\$85B	430K	\$85B	430K	\$82B	412K	\$72B	366K	\$60B	304K	\$47B	239K	\$45B	228K
Public Welfare & Social Services	\$200B	250K	\$200B	250K	\$192B	240K	\$170B	213K	\$141B	177K	\$111B	139K	\$106B	133K
General Government & Admin	\$200B	500K	\$200B	500K	\$192B	480K	\$170B	425K	\$141B	353K	\$111B	278K	\$106B	266K
Environmental & Natural Resources	\$65B	130K	\$65B	130K	\$62B	125K	\$55B	111K	\$46B	92K	\$36B	72K	\$35B	69K
Other State Functions	\$460B	1190K	\$460B	1190K	\$441B	1141K	\$391B	1012K	\$325B	840K	\$256B	662K	\$244B	632K
TOTAL	\$3050B	4500K	\$3050B	4500K	\$2925B	4316K	\$2593B	3825K	\$2153B	3177K	\$1696B	2502K	\$1620B	2390K

Part 3 — Local Government

2026 Baseline: ~\$2,400B total local direct expenditures; ~14,300K employees. Sources: Census ASPEP 2024 (national aggregates); Census State & Local Government Finance 2023 extrapolated; Urban Institute.

Service Category	2026 Spend (\$B)	2026 Head (K)	2027 Spend (\$B)	2027 Head (K)	2030 Spend (\$B)	2030 Head (K)	2033 Spend (\$B)	2033 Head (K)	2036 Spend (\$B)	2036 Head (K)	2040 Spend (\$B)	2040 Head (K)	2046 Spend (\$B)	2046 Head (K)
K-12 Education (local school districts)	\$980B	7200K	\$980B	7200K	\$940B	6905K	\$833B	6120K	\$692B	5083K	\$545B	4003K	\$520B	3823K
Police & Fire Protection	\$270B	1100K	\$270B	1100K	\$259B	1055K	\$230B	935K	\$191B	777K	\$150B	612K	\$143B	584K
Health & Hospitals	\$210B	520K	\$210B	520K	\$201B	499K	\$179B	442K	\$148B	367K	\$117B	289K	\$112B	276K
Highways & Transit	\$260B	650K	\$260B	650K	\$249B	623K	\$221B	553K	\$184B	459K	\$145B	361K	\$138B	345K
Parks, Recreation & Libraries	\$80B	370K	\$80B	370K	\$77B	355K	\$68B	315K	\$57B	261K	\$45B	206K	\$43B	197K
Housing & Community Development	\$90B	150K	\$90B	150K	\$86B	144K	\$77B	128K	\$64B	106K	\$50B	83K	\$48B	80K
Corrections & Courts	\$120B	380K	\$120B	380K	\$115B	364K	\$102B	323K	\$85B	268K	\$67B	211K	\$64B	202K
Environmental & Utilities	\$140B	330K	\$140B	330K	\$134B	317K	\$119B	281K	\$99B	233K	\$78B	184K	\$74B	175K
General Local Government Admin	\$150B	1700K	\$150B	1700K	\$144B	1630K	\$128B	1445K	\$106B	1200K	\$83B	945K	\$80B	903K
Other Local Functions	\$100B	1900K	\$100B	1900K	\$96B	1822K	\$85B	1615K	\$71B	1341K	\$56B	1056K	\$53B	1009K
TOTAL	\$2400B	14300K	\$2400B	14300K	\$2302B	13714K	\$2040B	12155K	\$1694B	10096K	\$1334B	7951K	\$1274B	7593K

Summary — All Government Levels

Combined public sector employment falls from ~21.3M in 2026 to ~11.3M by 2046. Total program expenditures fall from ~\$9.6T to ~\$5.1T.

Level	2026 Spend	2026 Head	2027 Spend	2027 Head	2030 Spend	2030 Head	2033 Spend	2033 Head	2036 Spend	2036 Head	2040 Spend	2040 Head	2046 Spend	2046 Head
Federal	\$4162B	2504K	\$4162B	2504K	\$3991B	2401K	\$3538B	2128K	\$2938B	1768K	\$2314B	1392K	\$2210B	1330K
State	\$3050B	4500K	\$3050B	4500K	\$2925B	4316K	\$2593B	3825K	\$2153B	3177K	\$1696B	2502K	\$1620B	2390K
Local	\$2400B	14300K	\$2400B	14300K	\$2302B	13714K	\$2040B	12155K	\$1694B	10096K	\$1334B	7951K	\$1274B	7593K
COMBINED	\$9612B	21304K	\$9612B	21304K	\$9218B	20431K	\$8170B	18108K	\$6786B	15041K	\$5344B	11845K	\$5104B	11312K

Key Findings

K-12 education is the largest headcount casualty. Over 7 million local government workers are employed in K-12 education. A proportional decline produces roughly 3.4 million fewer K-12 positions by 2046 — by far the largest single workforce reduction in the public sector.

The 2032–2040 window is critical. The same acceleration seen in Exercise 4 — a ~35 percentage point drop in eight years — hits every government level simultaneously, creating cross-cutting service reductions with no obvious offsets across defense, healthcare, corrections, education, and transportation.

Defense is not exempt. National defense spending falls from \$892B to approximately \$474B by 2046 — a 47% reduction — representing a structural challenge to U.S. national security posture that would take decades to rebuild.

The plateau at ~53% is permanent under these assumptions. By 2041, all three government levels stabilize at roughly 53% of 2026 spending and headcount absent new revenue sources. Combined public sector expenditure settles near \$5.1T — down from \$9.6T today.

Public services and Social Security compete for the same shrinking revenue base. The income tax revenue that funds public services is the same base whose erosion drives the Social Security shortfall modeled in Exercises 4 and 5. The simultaneous contraction of both public services and retirement income represents a compounding societal stress.

Important Caveats

¹ **Proportionality:** A single scaling factor is applied uniformly. Some categories (e.g., corrections, certain entitlements) have more inelastic demand and face higher political resistance to cuts than this model implies.

² **Social Security excluded:** SS payouts are modeled in Exercise 5 and not included in expenditure totals here.

³ **Net interest excluded:** Federal debt service costs are excluded as they are not a public service category. In practice they would further compress available program funding.

⁴ **Local data is national aggregate:** County-level data has not been compiled. Local figures use Census ASPEP national aggregates.

⁵ **No policy response:** Tax reform, new revenue sources, and programmatic restructuring are excluded. This is a mechanical baseline scenario.

⁶ **New jobs excluded:** AI/robotics-created private-sector jobs would partially replenish the tax base. Net revenue decline will be less severe than shown.

Source Data

1. CBO — Federal Budget in Fiscal Year 2024 — <https://www.cbo.gov/publication/61181>

2. CBPP — Where Do Our Federal Tax Dollars Go? (FY2024) — <https://www.cbpp.org/research/federal-budget/where-do-our-federal-tax-dollars-go>

3. NASBO — 2025 State Expenditure Report — <https://www.nasbo.org/reports-data/state-expenditure-report>
4. U.S. Census Bureau — Annual Survey of Public Employment & Payroll (ASPEP) 2024 — <https://www.census.gov/programs-surveys/apes.html>
5. Urban Institute — State and Local Expenditures — <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative>
6. Exercise 2 — Forecasted U.S. Private Sector Adult Employment Impacted by AI and Robotics — [\[project artifact\]](#)
7. Exercise 4 — Forecasted Social Security Income Percent — [\[project artifact\]](#)