



ASPE
ASSISTANT SECRETARY FOR
PLANNING AND EVALUATION

**OFFICE OF BEHAVIORAL HEALTH,
DISABILITY, AND AGING POLICY**

Actuarial Analysis of Long-Term Services and Supports Reform Proposals

Prepared for
the Office of the Assistant Secretary for Planning and Evaluation (ASPE)
at the U.S. Department of Health & Human Services

by
Milliman

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Office of the Assistant Secretary for Planning and Evaluation

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ACTUARIAL ANALYSIS OF LONG-TERM SERVICES AND SUPPORTS REFORM PROPOSALS

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ACRONYMS

The following acronyms are mentioned in this report.

AAA	American Academy of Actuaries
ACS	
ADL	Activity of Daily Living
ALF	Assisted Living Facility
ASPE	HHS Office of the Assistant Secretary for Planning and Evaluation
CLASS Act	Community Living Assistance Services and Supports Act
CMS	HHS Centers for Medicare & Medicaid Services
CPI	Consumer Price Index
DBA	Daily Benefit Amount
EP	Elimination Period
FICA	Federal Insurance Contributions Act
HCBS	Home and Community-Based Settings
HHC	Home Health Care
HIPAA	Health Insurance Portability and Accountability Act of 1996
LTC	Long-Term Care
LTCI	Long-Term Care Insurance
LTSS	Long-Term Services and Supports
NHEA	National Health Expenditure Accounts
OASDI	Old-Age and Survivors Insurance and Federal Disability Insurance
PFML	Paid Family and Medical Leave
RTI	RTI International
SNF	Skilled Nursing Facility
SOA	Society of Actuaries
SSDI	Social Security Disability Insurance
TBD	
WA Cares Fund	Washington State Cares Fund (established by the Washington State Long-Term Care Trust Act)
WISH Act	Well-Being Insurance for Seniors to be at Home Act

I. OVERVIEW

The U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation (ASPE), through a subcontract with RTI International (RTI), retained Milliman Inc. (Milliman) to provide analysis related to reforming long-term services and supports (LTSS) financing.

As part of this engagement, we prepared the following information:

- **Analysis of Reform Proposals.** ASPE identified three recent reform proposals that attempt to address the growing need for, and costs of, LTSS:
 - Washington State Long-Term Care Trust Act (which established the WA Cares Fund).
 - Well-Being Insurance for Seniors to be at Home Act (WISH Act).
 - Medicare Long-Term Services and Supports Act (Medicare LTSS Act).

Section II of this report describes each of the above proposals in more detail by comparing the key program features. The examination of each program feature includes a discussion of the tradeoffs of the programs' designs from the perspective of impacts to consumers, costs to the program, and program administration.

Additionally, we performed actuarial modeling on one of the proposed plans: the WISH Act. In **Section III** of this report, we present our estimate for the payroll tax required to finance this program.

- **Analysis of Alternative Reform Solutions.** ASPE also proposed new plan designs separate from the reforms described above. In **Section IV** of this report, we present our payroll tax estimates for the alternative designs. Sensitivity testing of the results is included in **Section V** of this report.

Methodology and Assumptions can be found in **Section VI** of this report.

LTSS Definition and Background

For the purposes of this report, we use the terms LTSS and long-term care (LTC) interchangeably. LTSS is a range of services and supports for individuals who need assistance with daily living tasks, such as eating, bathing, dressing, toileting, mobility, medication administration or assistance, personal hygiene, transportation, and other health-related tasks and social supports. Often, this type of assistance is needed by individuals who experience functional limitations that are due to physical or cognitive disability associated with aging. LTSS includes services provided in:

- Institutional Settings such as skilled, intermediate, and custodial care provided in an institutional facility setting, such as a nursing home or dedicated wing of a hospital.
- Home and Community-Based Settings (HCBS) such as care provided in a person's own home or in an assisted living facility (ALF) or adult family home.

Need and Rationale for LTSS Reform

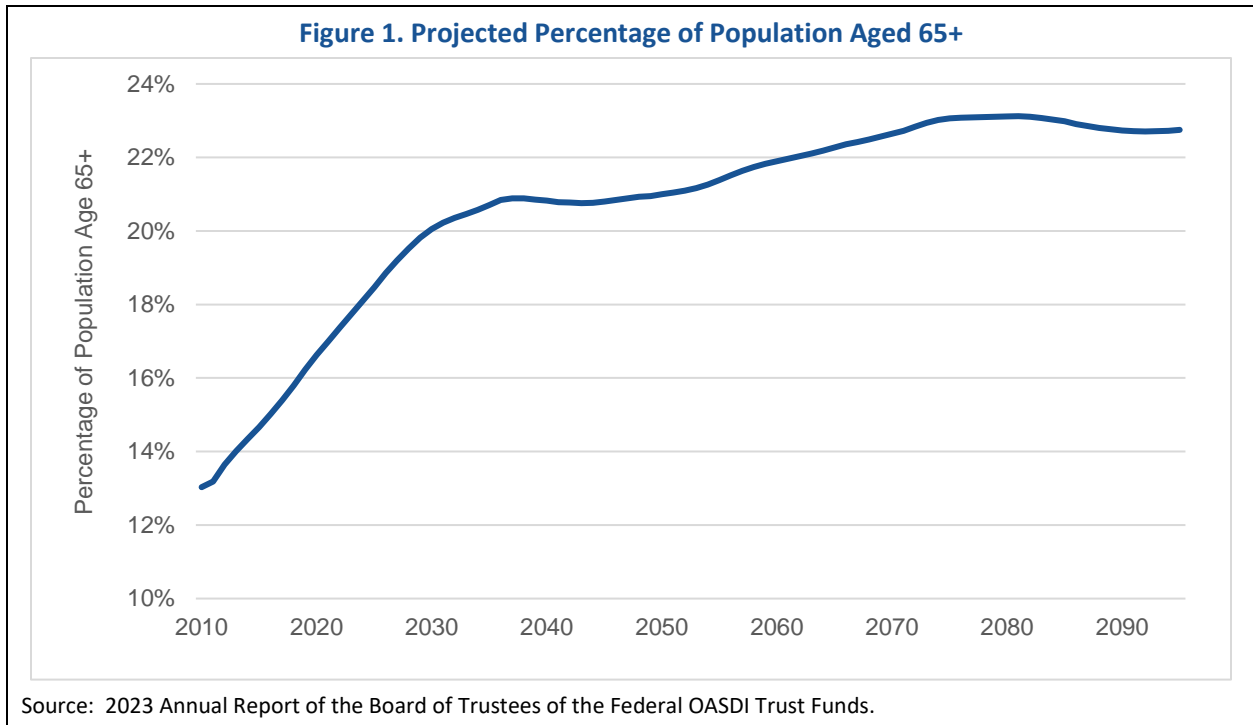
How to provide and pay for LTSS has been a concern for policymakers for decades. For example, ASPE's 1993 paper "An Analysis of Long-Term Care Reform Proposals"¹ described the status quo of LTSS demand and financing, stating:

“We are an aging population, and long-term care will comprise an ever-increasing percentage of our nation’s expenditures for health care. We do not have an adequate system for financing the services that people need, and many elderly live in fear that chronic illness will devastate them financially, leave them dependent on their children or welfare, and limit their ability to live where and how they want at the end of their lives.”

Despite being published more than 30 years ago, the paper highlights many issues that remain today. We provide commentary below including updated, high-level summary statistics on the current demand, cost, and financing of LTSS in the United States.

The Demand for LTSS

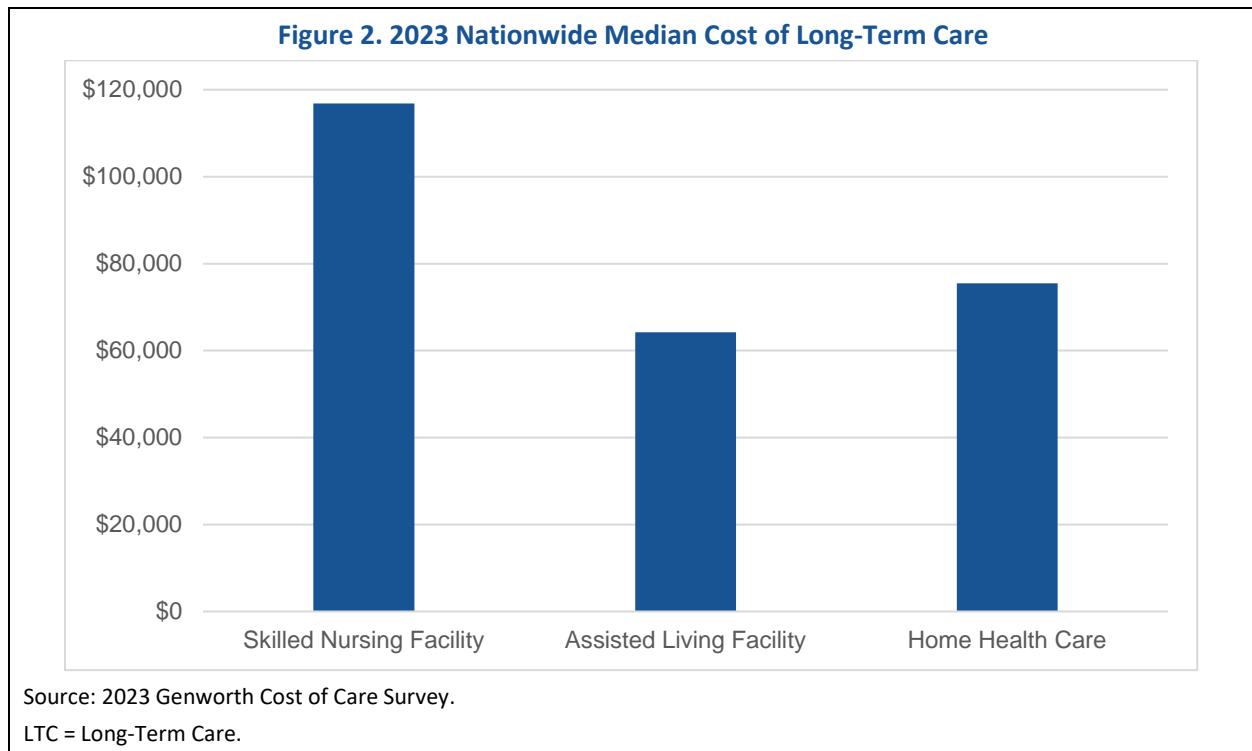
While many Americans may prefer not to think about the potential for needing (and paying for) LTSS, it is projected that most Americans turning age 65 today will require LTSS during their remaining lifetime. Specifically, ASPE and the Urban Institute estimate that 57% of 65-year-olds will have LTSS needs at the threshold for benefits under a tax-qualified long-term care insurance (LTCI) policy, set in the Health Insurance Portability and Accountability Act (HIPAA).² With a more expansive definition of LTSS need, the number of people with LTSS needs would be higher.



For a typical population, the need for LTSS increases sharply with age. As an example, in private LTC data we observe that individuals in their 80s might be 10-30 times more likely to require care compared to individuals in their 50s. While the need for LTSS services is not limited to older ages, a large portion of the cost and need comes from individuals at older ages. The sharp increase in LTSS needs as individuals age creates significant financial challenges as the United States older population continues to grow. Over the next several decades, a larger percentage of the population will be at the ages when LTSS needs are greatest. As illustrated in the figure below, the 2023 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance (OASDI) Trust Funds (Social Security) projects that the percentage of the United States population over the age of 65 will exceed 20% by 2030.³

The Cost of LTSS

The average annual cost of LTSS can vary significantly by care setting and geographic setting, among other factors. **Figure 2** shows the nationwide median annual cost of formal LTSS in the three most common care settings: skilled nursing facility (SNF), ALF, and home health care (HHC). The estimates in **Figure 2** are from the 2023 Genworth Cost of Care Survey⁴ and reflect commercially available rates (as opposed to Medicaid reimbursement rates).



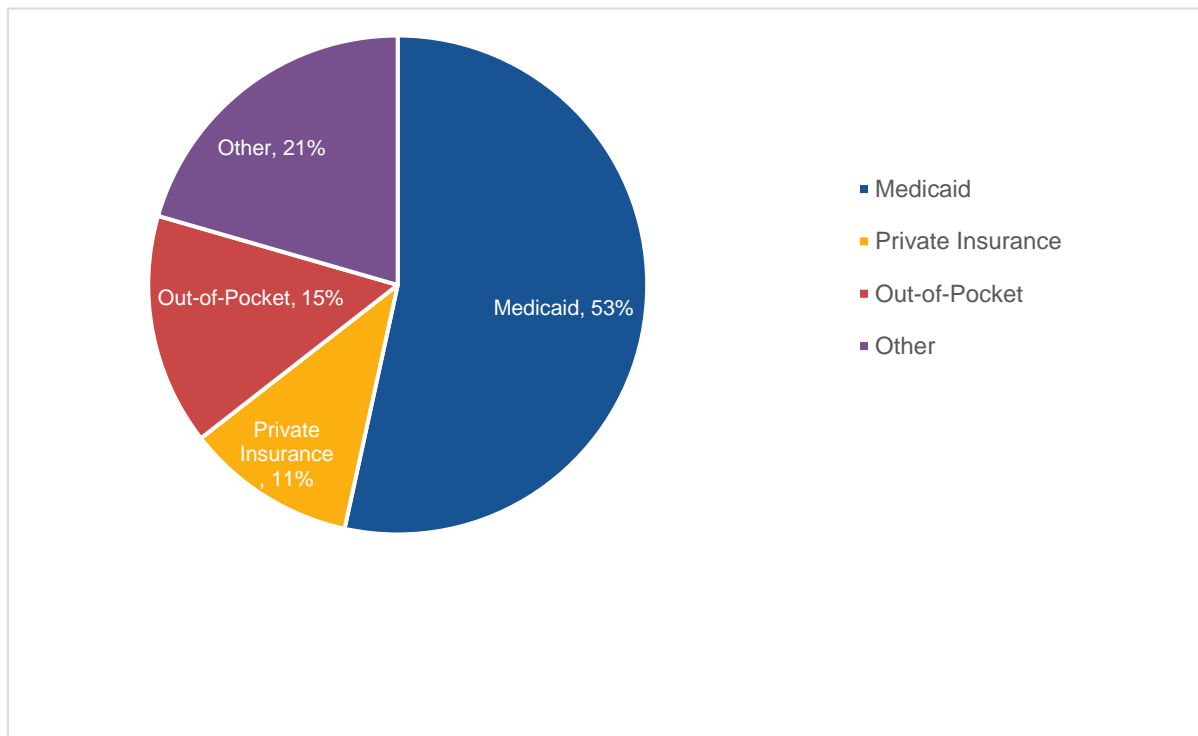
The cost of care also varies greatly by state and region. As an example, the 2021 Genworth cost of care survey notes Missouri as having the lowest cost by state of a private room at a nursing home facility at \$195 per day, while Alaska is noted as having average costs over 500% higher with an average daily cost of \$1,036.

Most older individuals require care for longer than one year. The average duration of disability is expected to be 3.6 years for women and 2.5 years for men.² Additionally, 26% of women and 17% of men will need five or more years of care. This includes both care paid by various sources--out-of-pocket, private insurance, and public programs such as Medicaid--as well as care without cost provided by family and friends.

Current LTSS Financing in the United States

Figure 3 shows the percentage each payer contributes to total national spending on LTSS. The distribution of payers in **Figure 3** comes from the 2022 National Health Expenditure Accounts (NHEA) data produced by the Centers for Medicare & Medicaid Services (CMS).⁵ Notably, Medicaid is the largest payer, accounting for more than half of LTSS expenditures. For the purposes of this report, we exclude from the total LTSS expenditures spending on nursing care, HHC, or personal care paid by Medicare because this spending is mostly for post-acute care.² Please note: NHEA data does not include private financing for home care and includes some post-acute care costs paid by Medicaid, which could result in overstated Medicaid costs and understated out-of-pocket costs. Research performed by the Urban Institute has indicated that out-of-pocket costs may exceed Medicaid costs for elderly LTSS spending.

Figure 3. 2022 National Spending for LTSS by Payer



Source: CMS 2022 National Health Expenditure Data.

Note: For the purposes of this report, we exclude from the total LTSS expenditures Medicare spending on nursing care, home health care, or personal care (assumed to be provided as part of post-acute care).

LTSS = Long-Term Services and Supports.

As shown in the figure above, the following entities pay to cover the cost of LTSS:

- **Medicaid.** Medicaid is the primary payer of LTSS in the United States. Of the \$477 billion spent on LTSS in 2022, 53% was paid for by Medicaid.⁶ As the population ages, the federal and state spending for LTSS is expected to increase. Medicaid is jointly funded by states and the Federal Government and pays for the LTC services of persons with very low incomes and limited assets. Given the significant cost of paid care, some individuals who are non-poor may “spend down” their assets and become Medicaid-eligible. Research suggests nearly 10% of the previously non-Medicaid population aged 50 and over spent down to Medicaid eligibility.⁷

Medicaid is generally the payer of last resort.⁸ This means private insurance, including LTC insurance (LTCI) or Medicare must pay for costs incurred by a Medicaid-eligible individual before Medicaid.⁹

- **Out-of-Pocket.** As shown in **Figure 3** above, individuals paying out-of-pocket are the third-largest payer of LTSS, after Medicaid and “Other.” A portion of this cost comes from individuals whose income is too high to qualify for Medicaid and may not be able to afford or qualify for private LTCI. These individuals may not be prepared to pay for the ultimate cost of LTC and could have to spend down their assets until they qualify for Medicaid.
- **Private Insurance.** Approximately 11% of national LTSS expenditures are financed through the private insurance market. Although LTC is a risk with high frequency (approximately 57% of 65-year-olds will need formal LTC in their lifetimes, as noted above) and is potentially very costly (as seen in **Figure 2**

above, median annual costs often exceed \$100,000), it is not frequently insured in the private market. Nationwide, less than 8% of the adult population age 60 and older has purchased a LTC only insurance policy as of 2022.¹⁰

One factor contributing to the low prevalence of private LTCI in the United States is the cost of purchasing a policy, where the average premium per individual was \$3,618 in 2022.¹¹ In addition to financial barriers, underwriting is used in the private market to align premiums with the underlying health risks of policyholders; therefore, individuals who apply for LTC policies are not guaranteed to be accepted for coverage.

- **Other Sources.** Other sources of funding for LTSS include worksite health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, other federal programs, Substance Abuse and Mental Health Services Administration (SAMHSA), other state and local programs, and school health.⁶

The Future of LTSS Financing in the United States

Challenges surrounding the demand, cost, and financing of LTSS remain and are projected to magnify in the future. Various initiatives and alternatives have been explored with goals of helping individuals set aside money sooner for future LTC needs, reducing the strain on state and federal Medicaid budgets, and pooling risk across larger groups of people. We summarize some of the recent developments in United States LTSS reform below.

- **Federal Activity.** Perhaps the most well-known example of a proposed federal alternative financing for LTSS is the Community Living Assistance Services and Supports (CLASS) Act¹² that was included as part of the Patient Protection and Affordable Care Act. Ultimately, the CLASS Act was not deemed to be actuarially sound¹³ and was repealed in 2013. More recently at the federal level, the Well-Being Insurance for Seniors to be at Home Act (WISH Act) was proposed. The WISH Act is discussed in more detail in **Sections II and III** of this report.
- **State Activity.** A few states have explored or are exploring state-run public LTSS programs. While most states are in the early stages of discussions on this topic (e.g., conducting feasibility studies or introducing, but not yet passing, legislation), Washington state has started the WA Cares Fund, a first-of-its-kind program that is discussed in more detail in **Section II** of this report.
- **Medicare Initiatives.** Instead of creating a new program for providing LTSS coverage, the idea of embedding a LTSS benefit into Medicare has also been explored. Starting in 2019, Medicare Advantage plans could provide certain LTC benefits as primarily health-related benefits for individuals who need assistance with activities of daily living (ADLs) or instrumental ADLs. While there are potential concerns about introducing LTC benefits as part of a Medicare Advantage plan (specifically related to anti-selection and potential increase to Medicare Advantage premiums¹⁴), several Medicare Advantage plans have been offering supplemental LTC benefits (though it is uncertain how extensive or impactful the benefits are at this point). Also in 2019, the Medicare LTSS Act was introduced in an effort to create a new federal LTC benefit as part of the Medicare program. The Medicare LTSS Act is discussed in more detail in **Section II** of this report.
- **Other Initiatives.** Many other organizations have attempted to construct solutions to address LTSS challenges. Two examples include the American Academy of Actuaries (AAA) and the Society of Actuaries (SOA). The AAA hosted a roundtable called "A National Conversation on Long-Term Care Financing" and established a list of essential criteria for LTC financing reform.¹⁵ Additionally, as part of

a 2014 think tank, the SOA published a study exploring several alternative financing options,¹⁶ which are summarized in **Figure 4**.

Figure 4. SOA Study of Alternative Financing Options	
Alternative Financing Option	Description
LTC savings program	Mandatory savings account to save for LTC or LTCI.
High-deductible health plan	Back-end LTCI plan that would provide catastrophic coverage after a waiting period of 1-3 years.
Short-term care	Front-end LTCI plan that would provide limited coverage during the first 1-2 years of an LTC event.
Medicare LTC	Federal LTC program that would borrow Medicare’s structure, where Part A would provide basic benefits and Parts B to F would provide supplemental coverage for extra premium.
Mutual LTC	Non-cancelable LTCI plan where premiums are fixed and benefits are subject to available funds.
Tax-deferred savings	Tax reform to allow tax-deferred personal savings accounts to be used to purchase LTCI or pay for LTC expenses.
National reinsurance	Catastrophic reinsurance for private LTC insurers.
Medicaid tightening	Restriction on Medicaid eligibility to make it harder for individuals with significant assets to gain coverage.
Medicaid modernization	Enabling Medicaid to pay for care in a larger range of settings, including HCBS.
Changing LTC legislation and regulations	Changes to National Association of Insurance Commissioners Model Act to provide more flexibility for LTC benefits.
Improving the way LTCI is marketed and sold	Increased education around the risks of LTC need.

HCBS = Home and Community-Based Settings; LTC = Long-Term Care; LTCI = Long-Term Care Insurance; SOA = Society of Actuaries.

II. TRADEOFFS BY PROGRAM AND FEATURE

Most Americans turning 65 today will require LTSS during their lifetime, with the average expected cost of LTSS exceeding \$120,000 in today's dollars.² With more Americans turning age 65 everyday, the following reform proposals attempt to address the growing need for, and costs of, LTSS:

- Washington State Long-Term Care Trust Act (which established the WA Cares Fund).
- Well-Being Insurance for Seniors to be at Home Act (WISH Act).
- Medicare Long-Term Services and Supports Act (Medicare LTSS Act).

While the above proposals attempt to address the common issues of LTSS financing, they take different approaches with different implications for stakeholders. For example, the WA Cares Fund will collect a payroll tax to fund a limited benefit focused on paying or supplementing the initial (“front-end”) costs of LTSS. The WISH Act proposes a similar payroll tax, but would provide a larger catastrophic or “back-end” benefit to fewer individuals who are expected to pay their LTSS costs either out-of-pocket or through other means for a period of time (ranging from one to five years) until the new benefit begins paying for services. The Medicare LTSS Act would also provide a catastrophic benefit, but instead of establishing a program tied to a payroll tax, the Medicare LTSS Act would imbed an LTSS benefit within the existing Medicare program.

In this section, we describe each of the above proposals in more detail by comparing the key program features. The examination of each program feature includes a discussion of the tradeoffs of the program’s design from the perspective of impacts to consumers, costs to the program, and program administration.

Description of LTSS Reform Proposals

Brief descriptions of each proposal can be found below, while details of each program’s specifications and design are summarized in **Exhibit 1**.

WA Cares Fund

In Washington state, the passage of the LTSS Trust Act in 2019 established the WA Cares Fund¹⁷ (RCW 50B.04¹⁸), which provides a public LTCI benefit for workers, funded through a payroll deduction. The state-based program provides a limited lifetime LTCI benefit. WA Cares Fund is financed by a flat state premium assessment paid by employees (not to exceed 0.58%) on all wages and self-employment income as applicable. Coverage is limited to workers and does not include spousal coverage. The program began collecting premium assessments July 1, 2023, and benefits will become available for qualified individuals starting July 1, 2026. Per the WA Cares Fund website, the program “provides working Washingtonians a way to earn access to LTC benefits that will be available when they need them. It will cover most of the need for some people, while for others it will provide breathing room during one of life’s most challenging stages, giving the family time to develop a plan.”

WISH Act

The proposed Well-Being Insurance for Seniors to be at Home Act, introduced by Congressman Thomas Suozzi in 2021, would create a new federal LTC social insurance plan financed by a 0.6% payroll tax on wages (0.3% from employees and 0.3% from employers). Revenue would be placed in a new federal LTC Insurance Trust Fund that would pay benefits to individuals with high (catastrophic) LTSS costs. Covered benefits include a cash amount based on the government’s calculation of the median cost of six hours per day of paid personal assistance, which is currently about \$3,600 per month. Depending on one’s lifetime earned income, payment of benefits would begin 1-5 years following the need for LTSS and continue as long as a person needs assistance. Individuals with higher lifetime incomes would have to wait up to five years before payment of

benefits began. Throughout his childhood, all four of Suozzi's grandparents lived in his house, with his mother the primary caregiver to three. These past experiences, along with the growing elderly population, were motivators for Suozzi to introduce the WISH Act,¹⁹ and the legislation's design and origin is based on a paper written by Feder, Cohen, and Favreault in 2018.²⁰

Medicare LTSS Act

The proposed Medicare LTSS Act, introduced by Congressman Frank Pallone in 2018, would create a new federal LTC benefit as part of the Medicare program. The program would reimburse covered LTSS, and beneficiaries would have great latitude in determining how program benefits were directed. A person would be eligible for program benefits after a two-year waiting period, but unlike the WISH Act, the period before benefits began would not vary by income. Benefits would be available to all those eligible for Medicare Part A and certain individuals with disabilities. The benefit's revenue source is currently undecided. The proposed program has four main goals: Assist individuals with functional limitations to maintain their personal and financial independence, protect individuals and families from high out-of-pocket costs, alleviate burdens on family caregivers, and address the unmet health care needs of and provide financial security for those with significant long term care expenditures.²¹

Tradeoffs by Program and Feature

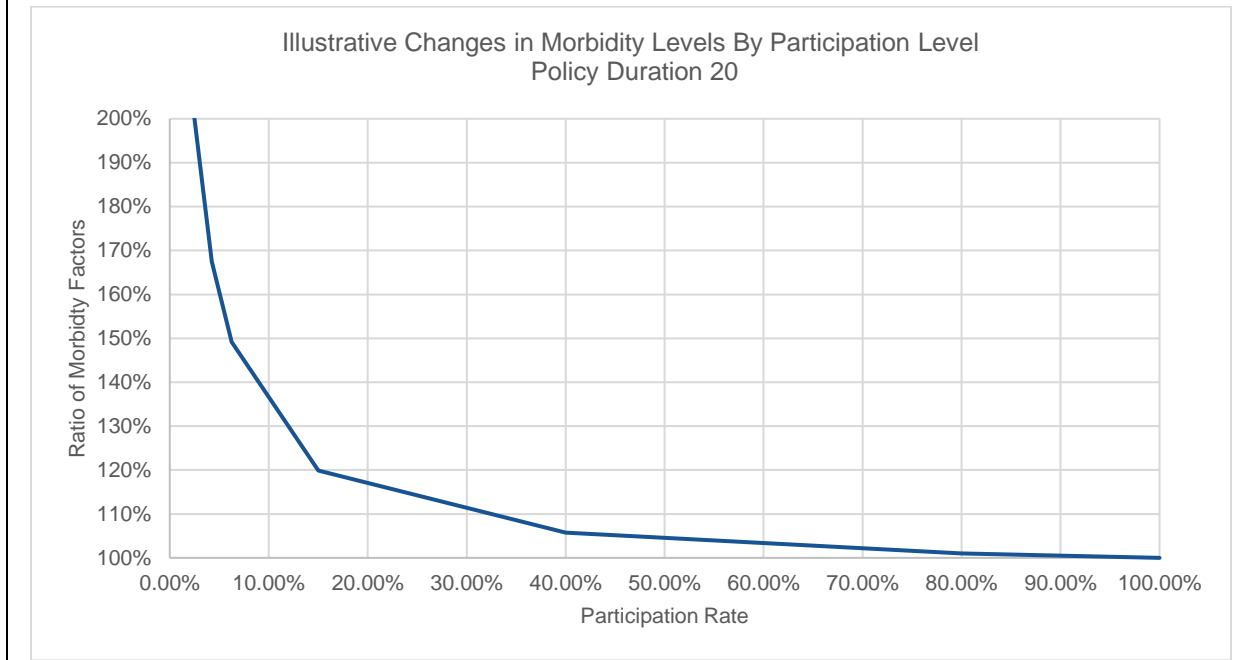
In this section, we examine each program specification from **Exhibit 1** in more detail. For each program feature, we summarize the design elements for each program and then discuss the tradeoffs of the programs' designs from the perspective of impacts to consumers, costs to the program, and program administration. Where applicable, we also compare the proposals to coverage available in the private LTCI market.

Participation Requirements

Participation requirements determine who will be covered and potentially receive benefits under a program. Typically, public programs tend to be mandatory (or mostly mandatory) while the private market tends to be voluntary. With few exceptions, The WISH Act, WA Cares Fund, and the Medicare LTSS Act have mandatory designs for their respective populations.

As participation decreases, we would expect the program's morbidity (or the levels of claims and benefits expected under the program) to increase. **Figure 5** illustrates the potential impact of participation on the population's morbidity by showing the change in morbidity selection factors (20 years following coverage inception) for a hypothetical voluntary program with no underwriting. **Figure 5** demonstrates that estimated morbidity levels, or, can vary dramatically if participation in the program is low (e.g., participation levels below 15% for this illustration). For example, at 10% participation, we observe a 135% ratio of morbidity factors, meaning we expect the participating population will have approximately 35% higher average claims than the general population if 100% of the population were participating. When program participation is higher, the variation in morbidity decreases. For example, at 70% participation, we observe a 102% ratio of morbidity factors, meaning we expect the participating population will have approximately 2% higher average claims than the general population if 100% of the population were participating. When morbidity levels are higher, a program will need to increase the program revenue (e.g., payroll tax, premiums) to offset the higher level of claims.

**Figure 5. Changes in Morbidity Levels by Participation Rate
(20 years following coverage inception)**



Mandatory programs avoid the administrative complexity of traditional underwriting. With traditional underwriting, an individual’s LTC risk is evaluated to determine if the individual is eligible for coverage or if there should be any limits or extra premiums associated with an individual’s coverage. Underwriting can help control the morbidity levels for a program when the participation rate is less than 100%.

While the WISH Act does not include traditional underwriting, it would implement an “underwriting alternative” in the form of other requirements (discussed in a later subsection and **Figure 15**). Social insurance programs typically require that enrollees pay into the system for a period of time before they are eligible to receive benefits. This is referred to as a vesting requirement. For example, Social Security and Medicare require 40 quarters of creditable earnings before a person is eligible for benefits. Vesting periods, especially when associated with a working requirement, can help control morbidity levels since individuals will need to be well enough to work before being eligible for benefits. Vesting can also generate “pre-funding” for a program, since the program will collect revenue for a number of years before it pays any benefits.

Figure 6. Description of Program Features and Tradeoffs by Program -- Participation Requirements

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Mandatory for all Washington workers, with exception of certain populations where individuals' participation is voluntary (e.g., self-employed individuals).	Mandatory for all workers.	Appears to be mandatory for Medicare enrollees.
Impact to Consumers	Mandatory programs offer little to no choice to consumers. Voluntary opt-out or opt-in for certain groups offers additional flexibility to better address individually determined LTSS needs.	Mandatory programs offer little to no choice to consumers.	Mandatory programs offer little to no choice to consumers.
Costs to Program	Voluntary opt-out or opt-in can increase selection risk. While the program is largely mandatory, voluntary opt-out is likely to add program costs and pricing uncertainty.	Mandatory public programs can avoid some of the selection issues associated with voluntary programs, which reduces costs.	Mandatory public programs can avoid some of the selection issues associated with voluntary programs, which reduces costs.
Administration	Avoids administrative complexity of traditional underwriting. Each population with voluntary options creates additional administrative needs to manage exemptions.	Avoids administrative complexity of traditional underwriting.	Avoids administrative complexity of traditional underwriting.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

WA Cares Fund will be funded through payroll deduction paid by all Washington workers except for individuals in certain exempt populations²² that have voluntary choice to opt-in or opt-out, including:

- Employees of tribal employers.
- Self-employed individuals.
- Those with private LTCI coverage (purchased on or before November 1, 2021).
- United States military veterans with a service-related disability rating of 70%+.
- Spouses and domestic partners of active-duty military.
- Non-immigrant visa holders.
- Employees of Washington employers who resides outside of Washington.

The voluntary features of WA Cares Fund offer participation choice to the populations listed above. However, every voluntary feature is likely to add program costs and pricing uncertainty. Voluntary program features can contain significant challenges with respect to selection risk, which is the risk that higher-cost individuals elect to participate, and lower-cost individuals elect to not participate. In the case of WA Cares Fund, this includes

both risks to claims (i.e., that unhealthier individuals will participate and have larger claims) and risk to revenue (i.e., that the highest wage earners will not elect to participate and that the program will not be able to collect revenue from this portion of the population). Unlike the other voluntary exemptions which will be ongoing, the private LTCI coverage exemption was a one-time offering to individuals with private LTCI coverage as of December 31, 2022. The time-limited nature of this opt-out controls some of the risks and costs associated with this voluntary feature. In addition to extra costs associated with risk selection, each population with voluntary options creates additional administrative needs to manage exemptions.

The WISH Act proposes a mandatory design where all workers are required to fund the program through a payroll tax, and after a number of years be eligible to receive benefits per program specifications. While mandatory designs offer little to no choice to consumers, they can reduce costs by avoiding some of the selection issues associated with voluntary programs. Additionally, mandatory programs can avoid the administrative complexity of processing opt-ins and opt-outs as well as the administrative complexity of traditional underwriting.

Like the WISH program, the Medicare LTSS Act proposes a mandatory design with general eligibility similar to Medicare Part A. Many of the same considerations and tradeoffs that apply to the WISH Act therefore also apply to the Medicare LTSS Act’s design.

Eligibility Age

Figure 7. Description of Program Features and Tradeoffs by Program -- Eligibility Age

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Minimum age for benefits is 18.	Minimum age for benefits is Social Security retirement age.	All those eligible for Medicare Part A and those that meet certain SSDI criteria and disability thresholds.
Impact to Consumers	Coverage of the entire adult population at risk of LTSS after vesting.	Coverage excludes certain groups from receiving benefits earlier in life when they would otherwise qualify.	Coverage excludes individuals from receiving benefits earlier in life if they do not meet SSDI thresholds.
Costs to Program	Lower eligibility age adds costs to the program (all else equal); however other program features influence the impact (e.g., vesting and eligibility trigger).	Reduces cost by: mitigating against the risk of especially long lengths of stay (e.g., early onset dementia), and adding to program “pre-funding” period.	Higher eligibility age could reduce program costs.
Administration	Eligibility age requirements will need to be part of benefit eligibility determination. More claims will be administered at younger ages.	Eligibility age requirements will need to be part of benefit eligibility determination.	Since benefit is administered through Medicare, is appropriate that requirements align with Medicare eligibility.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; LTSS = Long-Term Services and Supports; SSDI = Social Security Disability Insurance; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Eligibility age refers to the minimum age or age range that a program participant must have reached before being eligible to receive a benefit. Examples include individuals eligible at birth or those above a certain age (for example, 18, 40, or 65). As seen in **Figure 7**, each of the three featured LTSS proposals utilize different eligibility ages for potentially receiving benefits, ranging from 18 for the WA Cares Fund to normal retirement age for the WISH Act.

The WA Cares Fund’s minimum age for benefits is 18, which would allow working disabled individuals to access benefits as soon as they vest. All else equal, a lower eligibility age adds costs to the program; however, other program features influence the magnitude of these additional costs. For example, the WA Cares Fund’s vesting requirement helps to limit the impact of a lower eligibility age because individuals will need to have a work history in order to receive benefits. Similarly, the cost of a lower eligibility age will be impacted by the benefit eligibility trigger, where a more restrictive trigger reduces the cost impact of lowering the eligibility age. (Note: WA Cares Fund has yet to fully define its benefit eligibility trigger, so this influence is still undetermined for WA Cares Fund.) The lower age will result in claims needing to be administered at younger ages compared to other programs that exclude these populations.

Under the WISH Act, individuals would contribute to the payroll tax as workers, but only individuals that have reached the Social Security retirement age would be eligible to receive benefits. Limiting eligibility to higher ages can exclude certain groups, such as persons with intellectual and developmental disabilities or work disability, from receiving benefits earlier in life when they would otherwise qualify. Given the WISH Act’s lifetime coverage after the elimination period, limiting benefits to normal retirement age provides some risk mitigation against the cost of claims with especially long lengths of stay (e.g., early onset dementia). Additionally, limiting the benefit to those over a certain age would add to the “pre-funding” period established by vesting requirements where the program is collecting revenue, but most participants are not yet benefit-eligible. Conversely, determining if an individual meets eligibility age requirements would need to be part of benefit eligibility determination, which may add administrative costs.

The Medicare LTSS Act benefit would be available to all those eligible for Medicare Part A at age 65 or those eligible for Social Security Disability Insurance (SSDI). Similar to the WISH Act, limiting eligibility generally to age 65 could potentially exclude individuals from receiving benefits earlier in life if they do not meet SSDI thresholds. Since the benefit would be administered through Medicare, it seems reasonable from an administrative perspective that benefit eligibility would align with Medicare eligibility and decreasing the eligibility age may not be possible. Given the fact that the Medicare LTSS Act’s program financing is unspecified, it is yet to be seen how the eligibility age would align when individuals would start contributing to the program’s revenue.

Covered Services

Covered services refer to the services and supports that are covered under the benefit. The majority of private market plans have comprehensive coverage, meaning they cover care in both facility and home care settings. Some plans, however, offer facility-only or home-care-only coverage. **Figure 8** summarizes the covered services for the proposed programs.

Figure 8. Description of Program Features and Tradeoffs by Program -- Covered Services

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Comprehensive benefit.	Cash benefit (can be used on any and all services).	Comprehensive benefit.
Impact to Consumers	Choice of care setting to consumers but limited to designated approved providers.	Use of the benefit is completely at the discretion of the beneficiary.	Choice of care setting to consumers but limited in that it must be used for LTSS.
Costs to Program	More expensive than more restrictive benefits (e.g., facility-only or home-care-only, but less expensive than cash structure (all else equal)).	Typically more expensive than a reimbursement structure (all else equal).	More expensive than more restrictive benefits (e.g., facility-only or home-care-only, but less expensive than cash structure if cost controls are effective (all else equal)).
Administration	Administering the benefit will require the program to approve and work with providers in the state of Washington.	Limited administration required.	Administrative services will still be required to review expenditures.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

The WA Cares Fund benefit will provide reimbursement for approved services including in-home personal care, assisted living services, nursing home services, and other services defined in the law. This includes the use of the benefit for families to train and pay a family caregiver or hire someone to help with care so the family member can take a break. Comprehensive benefits, such as the WA Cares Fund benefit, offer choice of care setting to consumers. Choices are limited in the sense that benefits must be used for LTSS from an approved provider. Comprehensive benefits are more expensive than more restrictive benefits, such as facility-only or home-care-only benefits. The reimbursement structure is less expensive than a cash structure (as with the Medicare LTSS Act and the WISH Act), however (all else equal). See **Benefit Structure (Cash vs. Reimbursement)** subsection for considerations and tradeoffs related to cash benefits. Administering the benefit will require the program to approve and work with providers in the state of Washington. Currently, benefits are only eligible for providers within Washington, but if portability is added to the program, the program may have to work with providers nationwide.

While the title of and language in the WISH Act highlights home care services, the benefit would be administered under a cash structure and could be used at the discretion of the beneficiary on LTSS in any care setting, or even on non-LTSS goods and services. See **Benefit Structure (Cash vs. Reimbursement)** subsection for considerations and tradeoffs related to cash benefits.

The Medicare LTSS Act’s benefit would be used for approved services, including home care aides, nursing support, respite care, personal care assistance services, housing, home modifications, assistive technology, accessible transportation, homemaker services, and care in a SNF or ALF. Families would also be able to pay family caregivers for home care services provided. Like the WA Cares Fund benefit, comprehensive benefits offer choice of care setting to consumers, but choices are limited in the sense that benefits must be used for LTSS (which has less flexibility compared to a “pure” cash benefit, that has no restrictions on use). The Medicare LTSS Act’s structure is potentially less expensive than a pure cash structure, if cost controls and audits of expenses are effective in ensuring individuals use their cash account only to pay for approved

services. In general, cash benefits are more easily administered since there is no reimbursement process, but under the Medicare LTSS Act’s structure, administrative services would still be required to review the quarterly records of expenditures beneficiaries would be required to submit.

Benefit Structure (Cash vs. Reimbursement)

Benefit structure refers to the method in which benefit payments will be disbursed to recipients (e.g., cash or reimbursement). Most private market plans are administered under a reimbursement structure, where the program reimburses the cost of covered services up to a maximum daily, weekly, or monthly amount. Conversely, under a cash structure, the beneficiary typically receives a benefit payment regardless of services rendered as long as the beneficiary continues to meet the benefit eligibility trigger. **Figure 9** summarizes the benefit structures of the featured proposals.

Figure 9. Description of Program Features and Tradeoffs by Program -- Benefit Structure (cash vs. reimbursement)			
	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Reimbursement to approved providers.	Cash payment to beneficiaries with no restrictions.	Payment into cash account, where withdrawals are subject to review.
Impact to Consumers	LTSS is paid for out-of-pocket and approved expenses will be reimbursed. Less flexibility to consumers compared to cash.	Use of the benefit is completely at the discretion of the beneficiary (does not even have to be used on LTSS).	Benefit can be used on wide range of services and benefits, but individuals would be required to submit records of expenses.
Costs to Program	Typically less expensive than a cash structure (all else equal).	Typically more expensive than a reimbursement structure (all else equal).	Typically more expensive than a reimbursement structure and less expensive than a pure cash structure (all else equal).
Administration	More administration required than cash.	Limited administration required.	Administrative services will still be required to review expenditures.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Under the WA Cares Fund, benefit units will be paid to an LTSS provider as reimbursement for approved services provided to an eligible beneficiary. Other reimbursement structured plans require beneficiaries to pay expenses out-of-pocket and approved expenses will be reimbursed to the beneficiary. A reimbursement structure offers less flexibility to consumers than a cash structure. As discussed below, a reimbursement structured plan will generally be less expensive than a cash structure. Informal caregivers may not be able to receive payments under a reimbursement plan. Under the WA Cares Fund, however, informal caregivers have the ability to become an approved provider and get reimbursed for their services. A reimbursement structure will generally have higher administration costs due to the reimbursement process and determination of care being provided.

The cash benefit structure of the WISH Act would offer consumers the most flexibility out of the three proposed programs. Consumers would be able to use their benefit on services in any care setting at the discretion of the beneficiary, even if the payment is not used for LTSS. All else equal, a cash structure is typically more expensive than a reimbursement structure. This is driven by adverse selection (i.e., less healthy

individuals seek out richer coverage or are more likely to go on claim earlier and for longer), moral hazard (i.e., individuals do not have to be receiving formal care to receive benefits), and the fact that 100% of the benefit cap is paid in every period as opposed to a reimbursement model where only actual LTSS used is paid for, which may be less than the daily or monthly benefit limit. Conversely, there is normally cost savings from a cash structure due to lower administrative expenses. Cash benefits are more easily administered since there is no reimbursement process or determination of care being provided. Instead, the beneficiary receives a benefit payment regardless of services rendered.

The Medicare LTSS Act’s cash structure would give beneficiaries the ability to use the benefit for a wide range of services and benefits. While this is a cash benefit, individuals would be required to submit quarterly records of expenses that the program can audit to ensure the benefit is being spent on the appropriate covered services. While we would expect this structure of benefits to be more expensive than reimbursement benefits, they would likely be less expensive than pure cash benefits. The required reporting of expenses quarterly would help to lessen the moral hazard impact and create the opportunity for dollars salvage. Conversely, while there would typically be administrative cost savings from a cash benefit, the requirement to report expenses quarterly would likely increase administrative expenses compared to a pure cash benefit.

Benefit Eligibility

Figure 10. Description of Program Features and Tradeoffs by Program -- Benefit Eligibility/Trigger

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	3 ADLs.	HIPAA eligibility trigger (i.e., 2 of 6 ADLs for a period that is expected to last at least 90 days, or severe cognitive impairment).	Standard deductible: 2 of 6 ADLs or severe cognitive impairment; condition expected to last 1-2 years. Alternate Deductible: 3 of 6 ADLs for a period of at least 90 days, or severe cognitive impairment.
Impact to Consumers	Uncertain, given trigger is not yet finalized.	Allows consumer to become benefit eligible sooner compared to a “3 of 6” requirement.	The alternative deductible offers consumers with higher LTSS need the ability to pay for immediate coverage.
Costs to Program		Requiring fewer ADLs allows individuals to become benefit eligible sooner and increases the amount of benefits the program will have to pay.	Alternate deductible will create more benefits paid for a longer period of time and may result in higher program costs.
Administration		HIPAA is a commonly used and understood requirement.	Multiple benefit eligibility triggers add administrative complexity.

ADL = Activity of Daily Living; ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; HIPAA = Health Insurance Portability and Accountability Act of 1996; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Benefit eligibility refers to the criteria used to determine when a beneficiary is eligible to receive benefits. In the private market, most plans are structured so that individuals are eligible to receive benefits if they require assistance with two of six ADLs for a period that is expected to last at least 90 days, or if they have severe cognitive impairment. This is commonly referred to as the “HIPAA eligibility” criteria because it is the benefit

eligibility criteria established in HIPAA and used to determine if a private LTCL policy is tax-qualified (like life insurance, the benefits of tax-qualified LTC policies are not considered taxable income). Public program designs could use the same or similar criteria (for example, three of six ADLs), or borrow eligibility definitions from other programs, such as state Medicaid programs. As seen in **Figure 10**, each of the three featured LTSS proposals utilize different benefit eligibility requirements.

The WA Cares Fund’s eligibility determination is described as including an evaluation that the individual requires assistance with at least three ADLs; however, there is not enough information to understand the financial and consumer impact of this criteria. For example, WA Cares Fund does not define the ADLs or the universe of ADLs considered. If they are defined similar to the six HIPAA ADLs (i.e., a “three of six” requirement), the program could have a more restrictive benefit compared to the typical private market plan, but if the ADLs are defined differently, it could be a more generous benefit.

The WISH Act, like most private market LTC plans, uses the HIPAA eligibility criteria, which includes a “two of six” ADL requirement. This would allow consumers to become benefit eligible sooner when compared to a “three of six” requirement. Requiring assistance with fewer ADLs allows individuals to receive benefits sooner, which (all else equal) increases the amount of benefit payments the program will have to pay. A benefit to the program of using the HIPAA eligibility would be that the criteria is commonly used, understood, and consistent across states, which removes some potential administrative complexity. Additionally, using eligibility criteria consistent with the private market could facilitate the development of wrap-around and other complementary products.

The Medicare LTSS Act’s standard deductible benefit eligibility is similar to the WISH Act in that it would also use a “two of six” ADL structure. The biggest difference is that the program also proposes an “alternate deductible” that uses the more restrictive eligibility criteria of three of six ADLs for a period of at least 90 days, or severe cognitive impairment. Allowing higher need individuals to pay an income pro-rated deductible rather than delaying benefit payments until after a traditional elimination period is satisfied would create more benefits being paid for a longer period of time and may result in higher program costs. Additionally, there would be higher administrative costs associated with administering multiple benefit eligibility pathways.

Benefit Caps (Monthly/Daily Limits and Lifetime Limits)

Benefit caps define the maximum amount of benefits that are to be paid to a beneficiary. A benefit cap can be a daily, monthly, or yearly amount with or without a lifetime maximum benefit. **Figure 11** summarizes each proposed program’s benefit cap.

**Figure 11. Description of Program Features and Tradeoffs by Program -- Benefit Caps
(monthly/daily limits and lifetime limits)**

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	\$36,500 lifetime benefit indexed up to Washington CPI with no daily or monthly maximums.	\$3,600 monthly cash benefit indexed to wages with no lifetime maximum.	Daily benefit no less than the average hourly cost of a home health aide for 5 hours a day, adjusted for area wages, inflation, and intensity of care.
Impact to Consumers	No daily benefit maximum provides consumers the flexibility to use as much benefit per day until they exhaust their lifetime pool, but limited lifetime pool provides less coverage for LTC events that last many years.	Catastrophic coverage helps consumers pay for LTC events that last many years, but level of monthly benefits may require consumers to pay for some care out-of-pocket.	Catastrophic coverage helps consumers pay for LTC events that last many years, but level of daily benefits may require consumers to pay for some care out-of-pocket.
Costs to Program	The maximum amount of a benefit that will be paid to consumers is mostly known due to limited lifetime pool.	No lifetime benefit maximum includes the risk of covering high cost long duration LTSS.	No lifetime benefit maximum includes the risk of covering high cost long duration LTSS.
Administration	Limited lifetime pool requires administrative costs related to tracking benefits used versus lifetime limit. Administration costs for lower, pro-rated benefits will be higher as a percentage, all else equal.	Unlimited lifetime pool saves on administrative costs related to tracking benefits. Administration costs for lower, pro-rated benefits will be higher as a percentage, all else equal.	Unlimited lifetime pool saves on administrative costs related to tracking benefits. Benefit complexity (e.g., adjusting for area, intensity, etc.) may lead to administrative challenges and costs.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; CPI = Consumer Price Index; LTC = Long-Term Care; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

The WA Cares Fund benefit is structured as a \$36,500 lifetime benefit with no daily or monthly limit. The value of future benefits would be increased annually based on changes to the consumer price index (CPI) for Washington state. The limited lifetime pool provides less coverage to consumers for LTC events that last many years. Because of the limited lifetime pool, the maximum amount of a benefit that can be paid per consumer (and maximum risk to the program per person) is mostly known. There is no daily benefit maximum, which provides consumers the flexibility to use as much benefit per day until they exhaust their lifetime pool. A limited lifetime pool requires administrative costs related to tracking benefits used versus no lifetime limit.

The WISH Act provides a \$3,600 monthly cash benefit indexed to wages with no lifetime maximum. The absence of a lifetime benefit maximum would help consumers pay for LTC events that last many years, since their benefit would never exhaust. This value to consumers translates to a risk to the program that it could pay large amounts of benefits to beneficiaries, adding costs to the program. Unlimited lifetime benefits save on administrative costs related to tracking benefits used versus lifetime limits. The level of monthly benefits, however, would likely require consumers living in assisted living and nursing facilities and those using extensive amounts of home care to pay a large portion of costs out-of-pocket.

Under both the WISH Act and WA Cares Fund, pro-rated benefits would be available to some consumers who do not meet full vesting requirements. Administration costs for lower, pro-rated benefits would be higher as a percentage compared to the expenses for full benefit amounts, all else equal.

The Medicare LTSS Act benefit would provide at least the average hourly cost of a home health aide for five hours a day. The benefit would be adjusted based on area wages, inflation, and the intensity of care needed, and can be rolled over for up to three months in a year. Like the WISH Act benefit, the Medicare LTSS Act benefit has no lifetime maximum. Many of the considerations related to the WISH Act’s limited monthly benefit amount and no lifetime maximum also apply to the Medicare LTSS Act.

Inflation Protection

Figure 12. Description of Program Features and Tradeoffs by Program -- Inflation Protection			
	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Benefit adjusted annually up to Washington CPI (determined solely by the Washington LTSS council).	Benefit indexed to wages.	Benefit tied to cost of home health aide and adjusted based on area wages, inflation and the intensity of care needed.
Impact to Consumers	Inflation protection tied to CPI versus cost of LTC services may cause the value of benefits to decline over time.	May be able to better keep up with inflation of LTC service costs, compared to lower indices.	May be able to better keep up with inflation of LTC service costs, compared to lower indices.
Costs to Program	Tying benefit inflation to a lower measure helps keep program costs lower. Since benefit inflation is at council’s discretion, this could be used as a lever to control costs.	Tying benefit inflation to a higher measure produces higher program costs.	Tying benefit inflation to a higher measure produces higher program costs.
Administration	Administrative costs for inflation protection tied to an index will be higher versus a specified percentage (all else equal).	Administrative costs for inflation protection tied to an index will be higher versus a specified percentage (all else equal).	Administrative costs for inflation protection tied to an index will be higher versus a specified percentage (all else equal). Benefit adjustments/ complexity may lead to administrative challenges and costs.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; CPI = Consumer Price Index; LTC = Long-Term Care; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Beyond benefit caps, the ultimate benefit amount available to beneficiaries is also influenced by the inflation protection attached to the benefit. Inflation protection is designed to help LTC benefits keep up with the inflation of LTC service costs by increasing the level of benefits over time. Many private market policies include some form of inflation protection, either through a set annual compound or simple inflation adjustment, an adjustment tied to an index, or options where policyholders can purchase additional coverage without

additional underwriting. As seen in **Figure 12**, all three of the programs would offer benefit amounts tied to an index.

The WA Cares Fund benefit unit will be adjusted annually at a rate no greater than the Washington state CPI, as determined solely by the WA LTSS council, and any changes adopted by the council shall be subject to revision by the legislature. As noted above, CPI historically is a lower index than wage growth. Inflation protection tied to CPI could cause the value of benefits to decline over time if the cost of LTC services grow at a higher rate. If wages (and therefore the revenue base) grow at a higher rate than the benefit value, the result would be lower costs to the program. Furthermore, since benefit inflation will be determined annually at the discretion of the council, the inflation amount applied could be used as a lever by the program to manage costs and better align revenue from the payroll tax with current and future LTSS claims.

The WISH Act's benefit is indexed to wages, meaning that as wages grow, the program's benefits would grow. Inflation protection tied to wages could help the value of the benefit to keep up with inflation of LTC service costs. Additionally, since the program's revenue would be collected through a payroll tax, in theory the program's benefit and revenue could inflate in step with each other. That being said, it is not apparent in the legislation whether benefits would be indexed to total wages or perhaps to some subset of wages that might follow cost of care trends more closely, such as caregiver wages for home care costs. If this is the case, the program's benefits and revenues would not be as aligned. In general, tying benefit inflation to a higher measure like wages (compared to a historically lower index, such as CPI), produces higher program costs. Additionally, administrative costs for inflation protection tied to an index would be higher versus a specified percentage (all else equal).

The Medicare LTSS Act's daily benefit amount (DBA) would be tied to the average hourly cost of a home health aide for five hours a day, and is also described as being adjusted for inflation. Indexing benefits to wages could increase the benefit in line with inflation of LTC service costs for care received at home, but could also produce higher program costs. The benefit design is linked to average cost of care, area wages, inflation, and intensity of care -- this benefit complexity could lead to administrative challenges and costs.

Deductible/Elimination Period

In the insurance market, the number of days after becoming benefit-eligible that a beneficiary must wait before receiving benefits is commonly referred to as the "deductible" or "elimination" period. During this period, individuals are responsible for meeting their LTSS needs through unpaid care provided by family and friends and/or by paying costs out-of-pocket. As seen in **Figure 13**, the three LTSS proposals' elimination periods range from as short as zero days to as long as five years.

Figure 13. Description of Program Features and Tradeoffs by Program -- Deductible/Elimination Period

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	No EP, but benefit determination period could function similarly and last up to 45 days.	EP of 1-5 years depending on lifetime earned income.	2 years, with the option of an “alternative benefit deductible” scaled to household income.
Impact to Consumers	A shorter EP allows consumers to have access to benefits shortly after needing LTC.	Longer EP requires consumers to pay for more care out-of-pocket. Variable EP means consumers with lower lifetime earnings are able to receive benefits more quickly than high earners.	Longer EP requires consumers to pay for more care out-of-pocket. Alternative deductible allows consumers who require a higher level of care to receive benefits immediately.
Costs to Program	A shorter (or potentially, no) period where consumers have to pay for care out-of-pockets results in higher program costs (all else equal).	A longer EP lowers program costs (all else equal).	A longer EP helps lower program costs (all else equal). Alternative deductible could add costs to the program, which may be offset by the additional revenue received through this cash deductible.
Administration	Length of benefit determination period could have a financial impact on the program.	Variable EP could lead to higher administrative costs.	Additional administrative costs would be involved with administering 2 different deductibles, especially when 1 is dynamic/scaled to household income.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; EP = Elimination Period; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

There is no elimination period in the WA Cares program, but a benefit determination must be made within 45 days from receipt of a request by a beneficiary to use a benefit, and there is no language specifying whether the beneficiary will be responsible for paying for services during the determination period. If the benefit determination period is administered similar to an elimination period, individuals could have to pay for up to 45 days of LTSS out-of-pocket before the program begins reimbursing claims. The short (to potentially none) elimination period allows consumers to have access to benefits shortly after needing LTC, which results in higher program costs (all else equal).

Under the WISH Act, individuals would have an elimination period of 1-5 years depending on lifetime income earned, where those with lifetime incomes in the lowest 40th percentile would receive benefits after one year and for every 1.25 percentiles of lifetime income beyond the 40th percentile, the waiting period will extend for one month. For example, a person whose lifetime income is in the 70th percentile would wait three years, calculated as 12 months + (70-40 percentiles) / 1.25 percentiles per month = 36 months, or three years. **Figure 14** displays the resulting elimination period (in years) for several key lifetime income percentiles. The longer elimination period would require consumers to pay for more care out-of-pocket after first requiring LTC, which, in turn, would lower program costs (all else equal).

Figure 14. Elimination Period by Lifetime Income Percentile

Lifetime Income Percentile	EP (in years)
40%	1
55%	2
70%	3
85%	4
100%	5

EP = Elimination Period.

The WISH Act’s 1-5 year elimination period is a strong contrast to the WA Cares Fund’s lack of an elimination period. With the WISH Act’s variable elimination period, consumers with lower lifetime earnings would be able to receive benefits more quickly than higher earners, lessening lower income earners’ financial burden. Conversely, the highest earners would have to wait the full waiting period of five years. The variable elimination period would increase administrative costs relative to a uniform elimination period for all beneficiaries. The added complexity also makes describing program benefits to consumers difficult and adds uncertainty when planning for future health and retirement risks. For example, compared to one’s lifetime earned income at age 65, the WISH Act does not address the possibility that an individual’s situation could dramatically change depending on future health and other economic shocks later in retirement.

Like the WISH Act, the Medicare LTSS Act includes a relatively long elimination period of two years. Unique to the Medicare LTSS Act is the option of an “alternative benefit deductible” scaled to household income for individuals who meet more restrictive benefit eligibility criteria. This option would allow consumers who require a higher level of care (individuals who require assistance with three or more ADLs and substantial functional impairment) to receive care sooner in exchange for a cash deductible, which (all else equal) would add costs to the program. Many of the details for the deductible option are to be determined and legislation noted that the Commission would solicit comments on the option. In theory at least some of these costs would be offset by the additional revenue received through this cash deductible. Additional administrative costs would be involved with administering two different deductibles, especially when one is dynamic in that it is scaled to household income. An infrastructure would need to be established to collect the alternative cash deductible.

Vesting Requirements

Vesting refers to the concept that individuals need to contribute to program revenue before becoming eligible for benefits. Vesting serves multiple purposes in terms of controlling costs for the program. First, it limits the number of individuals who will qualify for benefits (and ensures they are individuals who have contributed to the revenue of the program). Second, it creates a pre-funding mechanism whereby the program will collect revenue for several years before anyone is “vested” and eligible to be paid benefits. Vesting requirements can range from paying the required tax for a set period (WISH Act and WA Cares Fund) to no vesting requirements (Medicare LTSS Act), as shown in **Figure 15**.

Figure 15. Description of Program Features and Tradeoffs by Program -- Vesting Requirements

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Individual has paid the premium assessment, either: (a) 10 years without interruption of 5+ consecutive years, or (b) 3 years of the last 6 years before benefit application. Those born before 1/1/1968 may receive partial, pro-rated benefits.	Full benefits: individuals must work/contribute to the program for 10 years. Partial benefits: Individuals who have worked 5+ quarters are eligible for pro-rated benefits.	N/A, benefit available if individual meets Medicare Part A eligibility standards.
Impact to Consumers	“3 of last 6 years” and near-retiree vesting pathways allow individuals who have not paid in for full 10 years to receive some (or full) level of benefits.	Consumers who are not able to fulfill the full work history requirement are still able to receive partial benefits at the pro-rated rate.	Given there is no required work history, more people are eligible to receive benefits.
Costs to Program	Vesting generates cost savings by limiting the number of individuals who qualify for benefits and creates a pre-funding mechanism. Offering less pro-rated benefits (compared to WISH Act) will lower costs to the program, all else equal.	Vesting generates cost savings by limiting the number of individuals who qualify for benefits and creates a pre-funding mechanism.	With no vesting requirements, more individuals will have access to benefits, resulting in higher costs to the program.
Administration	The program will need to track work histories to determine vesting status and calculate partial benefits for those born before 1/1/1968.	The program will need to track work histories to determine vesting status and calculate partial benefits. Administrative costs relative to total benefit payments may be higher for partial benefits (all else equal).	Less administrative costs would be required (all else equal) than when compared to a program with a vesting requirement.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Under WA Cares Fund, individuals born in 1968 and later must contribute through the premium assessment for either: (a) a total of ten years without interruption of 5+ consecutive years; or (b) three years within the last six years from the date of application for benefits. The individual must also have worked 500+ hours during each year from (a) or (b). Individuals born before January 1, 1968, will be eligible for partial, pro-rated benefits. Partial benefits mean more individuals would be eligible for benefits, including some potentially small benefit payments. Other individuals who work for some amount of time but do not ultimately meet vesting requirements will pay into the program but may not be eligible for any program benefits. However, the “three within the last six years” requirement ensures most of these individuals will at least be covered in the years closest to their working history.

Vesting requirements under the WISH Act have some similarities to the WA Cares Fund. Under the WISH Act, workers must work and contribute to the program for ten years to be eligible for full benefits. Consumers who would not be able to fulfill the full work history requirement would be able to receive partial benefits at the pro-rated rate, where individuals who have worked between five quarters and ten years would be eligible for pro-rated, partial benefits. Offering more pro-rated benefits compared to WA Cares Fund design will increase costs to the program, all else equal. Administrative costs relative to total benefit payments could be higher for these partial benefits (all else equal).

Unlike the other programs, the Medicare LTSS Act does not include any vesting requirements. Given that there would be no required work history to receive benefits, more people would be eligible to receive the benefits resulting in higher costs to the program.

Portability

Portability considers whether an individual could be eligible for benefits upon moving out of the program’s coverage area (for example, moving out of state for a state-based program). In the private market, there are typically no restrictions on portability of benefits within the United States. For a public program, the relevance depends on whether the program is federal or state-based. Since the WISH Act and Medicare LTSS Act would establish federal programs, individuals’ benefits would not be affected by moving across state lines within the country. It is not clear whether benefits would be portable out of the country under these proposed programs.

In 2024 legislation was passed to add a voluntary portable benefit to WA Cares Fund.²³ Beginning in July 2026, workers who move out of state can choose to continue participating (and contributing via a payroll deduction) to the WA Cares Fund. In return, out-of-state participants will be eligible for benefits starting in July 2030.

Figure 16. Description of Program Features and Tradeoffs by Program -- Portability

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Voluntary portability for individuals who move outside of Washington.	Because the program is federal, benefits would be available nationwide.	Because the program is federal, benefits would be available nationwide.
Impact to Consumers	Flexibility to retain benefits outside of Washington.	Flexibility to move throughout the country and retain benefits.	Flexibility to move throughout the country and retain benefits.
Costs to Program	Allowing portability increases the benefits the program pays.	N/A	N/A
Administration	Administrative costs connected to collecting premiums, determining benefit eligibility, and providing benefits for those living outside of Washington.	Cash-based benefits are more administratively feasible than if the program reimbursed for services when covering care in various locations.	Self-directed cash benefits may mean higher administrative costs as the program reviews expenditures incurred from various states.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; LTSS = Long-Term Services and Supports; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Providing WA Cares Fund benefits to those living outside of Washington state creates more flexibility to consumers who end up moving out of the state. Providing benefits to individuals out-of-state will create additional costs to the program from the added benefit payments, as well as additional administrative costs.

Administrative costs include costs to collect premiums, determine benefit eligibility, and providing benefits for those living outside of Washington.

Revenue Source

LTSS programs could be funded through various sources, such as taxes, subsidies, premiums, investment income, Medicaid savings, or some combination of those sources (for example, payroll tax with a modest premium for retired individuals who are no longer earning wages). **Figure 17** summarizes the revenue source description and tradeoffs for the WISH Act and WA Cares Fund. Funding sources for the Medicare LTSS Act are currently undetermined and therefore not included in the figure.

Figure 17. Description of Program Features and Tradeoffs by Program -- Revenue Source			
	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Premium of 0.58% of an individual's wages, all from employees.	0.6% payroll tax, with 0.3% from employees and 0.3% from employers.	Not specified.
Impact to Consumers	Aspects of payroll tax could be considered both regressive (the tax rate is the same for all employees) or progressive (higher earners pay a higher premium).	Aspects of payroll tax could be considered both regressive (the tax rate is the same for all employees) or progressive (higher earners pay a higher premium).	TBD
Costs to Program	The lack of revenue collected from individuals once they are done working, limits the revenue base and increases the tax rate. The wage base includes all sources of gross wages, which includes other sources of compensation such as employee wages used for 125 cafeteria plan contributions. Including a broader wage definition increases the revenue base and lowers the tax rate, all else equal, relative to the WISH Act wage base.	The lack of revenue collected from individuals once they are done working, limits the revenue base and increases the tax rate. The wage base is consistent with the FICA definition of wages, which represents a smaller revenue base than for the WA Cares Fund payroll tax and would raise the tax rate, all else equal.	TBD
Administration	Leveraging the infrastructure created to collect the Washington PFML tax.	The use of payroll tax from administrative perspective can leverage taxes that are already being levied on payroll.	TBD

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; FICA = Federal Insurance Contributions Act; LTSS = Long-Term Services and Supports; PFML = Paid Family and Medical Leave; TBD = ; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Both the WISH Act and WA Cares Fund would collect revenue through a payroll tax. Payroll taxes could be considered regressive just from a premium standpoint, as low-income and moderate-income taxpayers earn

more of their incomes in payroll than do high-income people, on average. Conversely, some could consider the program progressive since a percentage tax approach with no cap on wages is used, while the benefit amount does not vary by dollar amount paid in taxes (and is actually reduced for higher-income individuals in the WISH Act due to the variable elimination period). Taxes on wages, by definition, only applies during an individual's working career. The lack of revenue collected from individuals once they are done working limits the revenue base, which increases the tax rate, all else equal.

The exact wage base taxed does appear to be slightly different between the programs. Under the WISH Act, the wage base is consistent with the Federal Insurance Contributions Act (FICA) definition of wages, while the WA Cares Fund wage base is larger, including all sources of gross wages (such as employee wages used for 125 cafeteria plan contributions). Since the WA Cares Fund base includes a broader wage definition (compared to other taxes, such as the Medicare tax), the revenue base is greater which, in turn, lowers the tax rate (all else equal).

The use of a payroll tax from an administrative perspective can leverage taxes that are already being levied on payroll. Washington does not have a personal or corporate income tax, so funding the program through an income tax was not an administrative option. The WA Cares Fund is able to leverage the infrastructure created to collect the Washington Paid Family & Medical Leave (PFML) tax. A consistent tax rate to be applied to each workers' wages (as is planned for both the WISH Act and the WA Cares Fund) is more administratively simple than more dynamic or variable approaches.

The revenue source for the Medicare LTSS Act benefit is not yet specified. Given the benefit would be imbedded into the Medicare program, potential funding sources could be similar to Medicare Part A (which is funded primarily through payroll taxes) or Part B and D (which are funded through beneficiary premiums and general revenue).

Funding Approach

The funding approach outlines the financial process of the program and considers the timing of when premiums/taxes are collected versus when benefits and administration costs (collectively, expenditures) are paid. Programs could set the rate(s) such that there is little to no reliance on the accumulation of funds, sometimes referred to as a pay-as-you-go program where premiums/taxes each year are designed to cover expenditures in that year. Conversely, programs can use a "pre-funding" structure, where premiums/taxes are greater than expenditures in the early program years, funds are accumulated with investment earnings, and then the built-up funds help cover costs in later program years when premiums/taxes are less than expenditures. **Figure 18** summarizes the funding approach description and tradeoffs for the WA Cares Fund and WISH Act. The funding approach for the Medicare LTSS Act is currently undetermined and therefore not included in the figure.

Figure 18. Description of Program Features and Tradeoffs by Program -- Funding Approach

	WA Cares Fund	WISH Act	Medicare LTSS Act
Program Features	Premium assessment combined with investment earnings on funds deposited into a dedicated trust fund; benefits paid from trust fund.	Taxes collected and benefits paid will utilize a dedicated trust fund.	Not specified. Payments from Treasury to ensure benefits and admin are funded early in the program, to be repaid (without interest).
Impact to Consumers	Approach involves some level of generational subsidies.	Approach involves some level of generational subsidies.	TBD
Costs to Program	Costs to the program will be influenced by how the fund is invested and the investment income earned by the fund.	Costs to the program will be influenced by how the fund is invested and the investment income earned by the fund. The fund is to be managed in the same manner as the Federal OASDI Trust Fund.	TBD
Administration	A consistent tax rate to be applied to each worker's wages is more administratively simple than more dynamic or variable approaches.	A consistent tax rate to be applied to each worker's wages is more administratively simple than more dynamic or variable approaches.	TBD

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; LTSS = Long-Term Services and Supports; OASDI = Old-Age and Survivors Insurance and Federal Disability Insurance; TBD = ; WA Cares Fund = Washington State Cares Fund; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Under the WA Cares Fund, taxes will be deposited into a dedicated trust fund. Investment earnings on the fund will also be deposited into the fund. Benefits and administration costs are paid from the trust fund. Given the vesting rules for the program, it seems the program will have some element of pre-funding. This approach also would involve some level of generational subsidies, where individuals whose entire work history would not be taxed (e.g., a worker who is age 45 at the start of the program) would pay less into the program than individuals whose entire work history would be taxed (e.g., a worker who is age 18 at the start of the program), but both may be eligible for the same benefits. Costs to the program will be influenced by how the fund is invested and the investment income earned by the fund.

Similar to WA Cares Fund, the taxes under the WISH Act program would be collected and deposited in a dedicated trust fund (Federal Long-Term Care Insurance Trust Fund). Benefits and administration costs would be paid from the dedicated trust fund. Costs to the program would be influenced by how the fund is invested and the investment income earned by the fund. The Federal Long-Term Care Insurance Trust Fund would be managed in the same manner as the Federal OASDI Trust Fund.

III. WISH ACT MODELING

As discussed in **Section II** of this report, the WISH Act stipulates that the program would be financed through a 0.6% payroll tax. As part of our engagement, ASPE requested that we perform independent actuarial modeling to estimate required revenue over a 75-year time horizon for the WISH Act. **Any estimates around required program revenue are for feasibility purposes only and not intended, and should not be used, for setting the program tax rate.** Additional considerations on estimating the needed tax rate are discussed in this section.

We estimate the WISH Act could require a 2.2% payroll surtax rate over the 75-year period 2023 through 2097 under baseline assumptions in this report. We also performed various, limited testing to illustrate the sensitivity of the tax rate under different model assumptions, which indicated the results are highly sensitive to the assumptions used.

Figure 19 below shows an abbreviated summary of the WISH Act specifications. A more detailed summary of the WISH Act specifications and bill references can be found in **Exhibit 3**.

Please note the following about these results.

- Our projection model produces year-by-year cash flow projections, such that the value and scope of the program can be estimated for any of the years in the 75-year projection period window. Revenue collected under the program is assumed to be placed into a trust fund for the sole purpose of paying expected program benefits and expenses. The cash flow consists of income to the program from taxes and interest earned from the fund balance. Outgo from the program consists of benefit payments in institutional or home and community-based care settings and administrative expenses. Please refer to **Section VI** for additional details regarding the methodology and assumptions used in the actuarial modeling.
- To cover program costs beyond 75 years, we expect a higher tax rate of 4.7% could be required, once the population receiving benefits has stabilized. In practice, the tax rate could be set to the 75-year rate initially and then adjusted before the end of the 75-year period. We anticipate that this would be part of a continuous monitoring of the fund. The payroll tax rates in this section do not reflect any assumed savings or reductions in other public programs such as Medicaid. To the extent that those savings are credited to this program, the tax rate may vary.
- These results rely upon projections many years into the future. Actual expenses and related required revenue will inevitably vary from the estimates described herein. Examples of items that are difficult to project include the level of utilization of LTC services over time, duration of care needs, charge trends by site of care, emergence of new service and care modalities, wage growth and labor force participation, effectiveness of regulations and procedures to determine coverage and qualifications for benefits, and future mortality. The core economic and demographic assumptions are from the *2022 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance (OASDI) Trust Funds*. A summary of the assumptions and methodology we used to calculate our estimates can be found in **Exhibit 4**, along with a more detailed description in **Section V**.

Figure 19. Modeling Specifications for WISH Act

Plan Parameter	WISH Act
Benefit Structure	Cash
Minimum Age for Benefits	65
Benefit Eligibility	Private market (HIPAA) requirements
Benefit Maximum	\$3,600/month
Elimination Period	Variable (1-5 years)
Benefit Period	Lifetime
Daily Benefit Index	Indexed to wages in the LTC sector (assumed to be 3.6% compound inflation)
Vesting Requirements	10 years for full vesting, 1.5+ years for partial vesting
Program Revenue Source	Payroll tax on all wages
Estimated Payroll Tax	2.2%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; HIPAA = Health Insurance Portability and Accountability Act of 1996; LTC = Long-Term Care; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

WISH Act Sensitivity Testing

The estimated payroll taxes are highly sensitive to the underlying projection assumptions used in the modeling. **Based on testing various key assumptions one at a time, we observe the WISH Act tax rate increasing or decreasing by roughly 45% (i.e., increasing or decreasing by roughly 45 basis points when the tax rate is 1%).** The results of the testing should be taken into consideration when evaluating the results in this section. The sensitivity of the program results under different conditions and the program’s ability to adjust features when experience varies from what was expected is a key initial step to inform rate setting. Below we include the results of our sensitivity analysis.

Mortality Assumptions

We applied separate mortality rates to the active (or non-disabled) lives and disabled lives. Mortality rates have generally been decreasing by age over the last 100 years, and we assume future improvement of mortality rates under our baseline calculation based on OASDI projections. As mortality rates decrease, the population is expected to survive longer. A population living longer will increase the demand for LTC and related program costs, all else equal.

We ran three sensitivities, increasing and decreasing mortality rates at each age by 10% for all lives. Additionally, we ran a scenario where we remove mortality improvement. Removing mortality improvement has a significant impact on the payroll tax estimate given the WISH Act’s catastrophic design.

Figure 20. WISH Act Payroll Tax Estimates for Various Mortality Assumptions

Test	Payroll Tax Estimate	Change in Estimate from Baseline
WISH Act baseline calculation	2.2%	
WISH Act +10% Mortality	1.9%	-0.2%
WISH Act -10% Mortality	2.5%	0.3%
WISH Act without mortality improvement	1.3%	-0.8%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Economic Assumptions

In terms of economic assumptions, we performed sensitivities on both wage growth and net investment earned rates.

As wages increase, the premium base increases and the premium rate necessary to fund program benefits decreases. While it is possible that increased wages could also impact the benefit inflation (which are indexed to home care wages for the WISH Act), we ignore this potential impact in the wage sensitivities shown here. The baseline wage growth is taken from the 2022 OASDI Trustees Report intermediate assumption, assumed to be 3.55% on an ultimate basis. We conducted sensitivity runs using both the low and high Trustees Report assumptions (2.35% and 4.77% in the ultimate year, respectively).

The investment rate determines the level of investment income earned on the program fund balance. As the investment rate earned by the fund increases, the necessary revenue funded through the premium assessment decreases. Alternatively, if investment rates decrease, less is earned on the program fund balance, requiring increased funding through the premium assessment. We tested increasing or decreasing the net investment earned rates by 100 basis points for each year of the projection.

Figure 21. WISH Act Payroll Tax Estimates for Various Wage Growth/Investment Returns

Test	Payroll Tax Estimate	Change in Estimate from Baseline
WISH Act baseline calculation	2.2%	
WISH Act - higher wage growth	1.4%	-0.8%
WISH Act - lower wage growth	3.3%	1.1%
WISH Act - higher net investment earned rates	1.8%	-0.4%
WISH Act - lower net investment earned rates	2.6%	0.4%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Benefit Assumptions

Variations in benefit payments can be caused by many factors including price inflation, average length of stay, incidence rates, etc. We modeled two aggregate changes to benefit payments to illustrate the impact of increasing and decreasing benefit payments by 20%.

Figure 22. WISH ACT Payroll Tax Estimates for Various Benefit Levels

Test	Payroll Tax Estimate	Change in Estimate from Baseline
WISH Act baseline calculation	2.2%	
WISH Act - higher benefit payments	2.6%	0.4%
WISH Act - lower benefit payments	1.7%	-0.4%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

WISH Act Alternatives

We also modeled alternative designs to remove some of the more costly and complex attributes of the WISH Act in favor of less expensive and simpler designs:

- Changing the cash benefit to one that reimburses for paid LTSS services. As noted in **Section II**, while a cash benefit can offer more flexibility to consumers it can also be significantly more expensive.
- Changing the elimination period to two calendar years for everyone instead of the WISH Act’s variable design where the elimination period ranges from one to five calendar years depending on an individual’s lifetime earned income.
- Changing the lifetime benefit period to three years.
- Simplifying the vesting requirements of ten years total with no opportunity for partial vesting for less than ten years of payments (with the exception of some “near-retirees” who would be granted the opportunity to receive partial benefits during a transition period).
- Including a monthly premium for individuals aged 65+ that varies by income level for one of the alternatives. For purposes of this report, we took a simplified approach and assumed a \$35 monthly premium where 100% of vested individuals age 65+ will pay this premium, including those who are still working, those who are currently receiving program benefits, and those who have exhausted benefits. We assume individuals age 60+ as of 2023 will not be eligible to pay premiums or receive benefits.

As shown in **Figure 23** below, these changes decreased the estimated payroll tax by 60%-70%, resulting in estimated payroll taxes of 0.8% to 0.7%.

Figure 23. Modeling Alternative Specifications for WISH Act

Plan Parameter	WISH Act - Alt 1	WISH Act - Alt 2
Benefit Structure	Reimbursement	Reimbursement
Minimum Age for Benefits	65	65
Benefit Eligibility	Private market requirements	Private market requirements
Benefit Maximum	\$3,600/month	\$3,600/month
Elimination Period	2-year	2-year
Benefit Period	3-year	3-year
Daily Benefit Index	3.6% compound inflation	3.6% compound inflation
Vesting Requirements	10 years total*	10 years total*
Program Revenue Source	Payroll tax on all wages	Payroll tax on all wages + income-related premium assessment
Estimated Payroll Tax	0.8%	0.7%

Note:
 * We assume individuals will be eligible for full program benefits after contributing to the program for 40 quarters. We assume individuals aged 55-59 in 2023 will also be eligible for partial, pro-rated benefits if they contribute between 20 and 40 quarters. We assume individuals age 60+ in 2023 will not pay the payroll tax and will not be eligible to receive benefits.
 ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

IV. ALTERNATIVE MODELING

In addition to WISH Act modeling, ASPE requested Milliman conduct modeling on a number of plan designs for a nationwide program that would provide a LTCI benefit for workers funded through a payroll deduction, and in some circumstances, an additional income-related premium. We segmented our modeled plan designs into two categories:

- **Front-End Alternatives.** Front-End designs utilize shorter elimination periods (e.g., 90-day) and shorter benefit periods (e.g., one-year). Typically, front-end designs prioritize providing a small benefit to a large pool of people. The WA Cares Fund is an example of a front-end design.
- **Back-End or Catastrophic Alternatives.** In contrast to front-end designs, catastrophic designs feature longer elimination periods (e.g., two years or more) and longer benefit periods (e.g., three years or more). Typically, back-end designs prioritize providing a larger catastrophic benefit to a smaller pool of people (i.e., those who have survived a longer elimination period). The WISH Act is an example of a catastrophic design.

Please note, the estimates provided throughout this report are prepared to assist in evaluating the feasibility of benefit features for a new LTC benefit program using design elements as requested by ASPE. Any estimates around required program revenue are for feasibility purposes only and not intended, and should not be used, for setting the program tax rate.

Front-End Modeling

Per ASPE’s request, we modeled two front-end plan designs. **Figure 24** below shows an abbreviated summary of the front-end plan specifications. A more detailed summary of the plan specifications and bill references can be found in **Exhibit 2**. As shown in the table below, the estimated payroll tax associated with these plans ranges from 0.4% to 0.6%.

Plan Parameter	Front-End Alt 1	Front-End Alt 2
Benefit Structure	Reimbursement	Reimbursement
Minimum Age for Benefits	65	65
Benefit Eligibility	Private market (HIPAA) requirements	Private market (HIPAA) requirements
Benefit Maximum	\$100/day	\$150/day
Elimination Period	90-day	180-day
Benefit Period	1-year	1-year
Daily Benefit Index	3.6% compound inflation	3.6% compound inflation
Vesting Requirements	10 years total*	10 years total*
Program Revenue Source	Payroll tax on all wages	Payroll tax on all wages
Estimated Payroll Tax	0.4%	0.6%

Note:

* We assume individuals will be eligible for full program benefits after contributing to the program for 40 quarters. We assume individuals aged 55-59 in 2023 will also be eligible for partial, pro-rated benefits if they contribute between 20 and 40 quarters. We assume individuals age 60+ in 2023 will not pay the payroll tax and will not be eligible to receive benefits.

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; HIPAA = Health Insurance Portability and Accountability Act of 1996.

Front-End Alt 2 provides a 50% larger daily benefit maximum, but also requires twice as long of an elimination period. The combination of these changes in benefit design result in Front-End Alt 2 having a larger estimated payroll tax relative to Front-End Alt 1.

Catastrophic Modeling

Per ASPE’s request, we modeled 13 catastrophic plan designs, including 3 plan designs inspired by the WISH Act. A detailed summary of the plan specifications and bill references can be found in **Exhibit 2**. Most of the variations to catastrophic plan designs build on the plan design for Catastrophic - Alt 1, which is summarized below.

Figure 25. Catastrophic Design Modeling Summary	
Plan Parameter	Catastrophic - Alt 1
Benefit Structure	Reimbursement
Minimum Age for Benefits	65
Benefit Eligibility	Private market (HIPAA) requirements
Benefit Maximum	\$150/day
Elimination Period	2-year
Benefit Period	3-year
Daily Benefit Index	3.6% compound inflation
Vesting Requirements	10 years total*
Program Revenue Source	Payroll tax on all wages
Estimated Payroll Tax	1.1%

Note:
 * We assume individuals will be eligible for full program benefits after contributing to the program for 40 quarters. We assume individuals aged 55-59 in 2023 will also be eligible for partial, pro-rated benefits if they contribute between 20 and 40 quarters. We assume individuals age 60+ in 2023 will not pay the payroll tax and will not be eligible to receive benefits.
 ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; HIPAA = Health Insurance Portability and Accountability Act of 1996.

In the subsections below we highlight the impact of adjusting several plan parameters relative to the design established in the figure above. For each specification adjustment, we isolate the impact of that plan feature by comparing to another modeled plan design consistent in every feature except for the feature being isolated.

Additional Transition Benefit

Several of the alternatives (Catastrophic Alts 2, 4, 6, 8, and 10) add an additional transition benefit of \$10,000 (indexed to wages) to individuals after a one-year elimination period. For modeling purposes, we made the simplifying (and conservative) assumption that the benefit would be paid immediately in the form of a cash lump sum upon completing the initial elimination period. For these plan designs, we observe that the additional transition benefit increases the tax rate by approximately ten basis points (relative to identical plan designs that do not include this additional benefit).

Figure 26. Payroll Tax Impact of Additional Transition Benefit

Plan Design	Core Plan Features	Estimated Payroll Tax	Payroll Tax Impact of Additional Benefit
Catastrophic - Alt 1	\$150/day, 3 year benefit; Payroll tax financed	1.1%	
Catastrophic - Alt 2	Alt 1 + \$10k cash benefit after 1-year EP	1.1%	0.1%
Catastrophic - Alt 3	\$150/day, 4 year benefit; Payroll tax financed	1.3%	
Catastrophic - Alt 4	Alt 3 + \$10k cash benefit after 1-year EP	1.4%	0.1%
Catastrophic - Alt 5	\$150/day, 3 year benefit; Payroll tax & premium financed	0.9%	
Catastrophic - Alt 6	Alt 5 + \$10k cash benefit after 1-year EP	1.0%	0.1%
Catastrophic - Alt 7	\$150/day, 4 year benefit; Payroll tax & premium financed	1.1%	
Catastrophic - Alt 8	Alt 7 + \$10k cash benefit after 1-year EP	1.2%	0.1%
Catastrophic - Alt 9	\$200/day, 3 year benefit; Payroll tax & premium financed	1.2%	
Catastrophic - Alt 10	Alt 9 + \$10k cash benefit after 1-year EP	1.3%	0.1%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; EP = Elimination Period.

Please note that the “payroll tax impact” in many tables cannot be independently calculated using the numbers in the tables alone due to rounding and advanced decimals not shown.

Daily Benefit Maximum

The DBA alternatives consider the tax rate impact of lowering or raising the DBA. Catastrophic - Alt 1 assumes a \$150 DBA. A higher or lower DBA will directly impact the lifetime maximum benefit amount (i.e., pool of money). For two plans, we modeled the impact of adjusting from a \$150 daily benefit maximum to a \$200 daily benefit maximum. For these plans, we observe that the higher daily benefit maximum increases the tax rate by approximately 40 basis points (relative to identical plan designs with a \$150 daily benefit maximum).

Figure 27. Payroll Tax Impact of Adjusting Benefit Maximum

Plan Design	Core Plan Features	Estimated Payroll Tax	Payroll Tax Impact of Benefit Maximum
Catastrophic - Alt 5	\$150/day , 3 year benefit; Payroll tax & premium financed	0.9%	
Catastrophic - Alt 9	\$200/day , 3 year benefit; Payroll tax & premium financed	1.2%	0.4%
Catastrophic - Alt 6	\$150/day , 3 year benefit + \$10k cash benefit after 1-year EP; Payroll tax & premium financed	1.0%	
Catastrophic - Alt 10	\$200/day , 3 year benefit + \$10k cash benefit after 1-year EP; Payroll tax & premium financed	1.3%	0.4%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; WISH Act = Well-Being Insurance for Seniors to be at Home Act.

Benefit Period

The lifetime maximum benefit alternatives consider the impact of increasing the length of time that benefits are paid once the beneficiary becomes eligible to receive benefits. In **Figure 25**, the lifetime maximum benefit is expressed in terms of the number of years that benefit payments will occur. Catastrophic - Alt 1 assumes a three-year benefit period, but we also modeled alternatives featuring a four-year benefit period. For these plans, we observe that the higher benefit period increases the tax rate by approximately 20 basis points (relative to identical plan designs with a three year benefit period).

Figure 28. Payroll Tax Impact of Adjusting Benefit Period

Plan Design	Core Plan Features	Estimated Payroll Tax	Payroll Tax Impact of Benefit Period
Catastrophic - Alt 1	\$150/day, 3 year benefit ; Payroll tax financed	1.1%	
Catastrophic - Alt 3	\$150/day, 4 year benefit ; Payroll tax financed	1.3%	0.2%
Catastrophic - Alt 2	\$150/day, 3 year benefit + \$10k cash benefit after 1-year EP; Payroll tax financed	1.1%	
Catastrophic - Alt 4	\$150/day, 4 year benefit + \$10k cash benefit after 1-year EP; Payroll tax financed	1.4%	0.2%
Catastrophic - Alt 5	\$150/day, 3 year benefit ; Payroll tax & premium financed	0.9%	
Catastrophic - Alt 7	\$150/day, 4 year benefit ; Payroll tax & premium financed	1.1%	0.2%
Catastrophic - Alt 6	\$150/day, 3 year benefit + \$10k cash benefit after 1-year EP; Payroll tax & premium financed	1.0%	
Catastrophic - Alt 8	\$150/day, 4 year benefit + \$10k cash benefit after 1-year EP; Payroll tax & premium financed	1.2%	0.2%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

Program Revenue Source

Several of the alternatives (WISH Act Alt 2 and Catastrophic Alts 5-8) add an income-related monthly premium (indexed to wages) that enrollees would pay once they turn age 65. The costs of the alternatives assume an average monthly premium amount of \$35. As discussed above, we made the simplifying assumption that all enrollees pay the premium, although individuals with low lifetime earnings would pay no/small premiums, and those with higher lifetime earnings would pay more. We assume 100% of vested individuals age 65+ will pay this premium, including those who are still working, those who are currently receiving program benefits, and those who have exhausted program benefits. We assume individuals age 60+ as of 2023 will not be eligible to pay premiums or receive benefits. For these plan designs, we observe that the addition of a premium decreases the tax rate by approximately 20 basis points.

Figure 29. Payroll Tax Impact of Adjusting Program Revenue Source

Plan Design	Core Plan Features	Estimated Payroll Tax	Payroll Tax Impact of Revenue Source
Catastrophic - Alt 1	\$150/day, 3 year benefit; Payroll tax financed	1.1%	
Catastrophic - Alt 5	\$150/day, 3 year benefit; Payroll tax & premium financed*	0.9%	-0.2%
Catastrophic - Alt 2	\$150/day, 3 year benefit + \$10k cash benefit after 1-year EP; Payroll tax financed	1.1%	
Catastrophic - Alt 6	\$150/day, 3 year benefit + \$10k cash benefit after 1-year EP; Payroll tax & premium financed*	1.0%	-0.2%
Catastrophic - Alt 3	\$150/day, 4 year benefit; Payroll tax financed	1.3%	
Catastrophic - Alt 7	\$150/day, 4 year benefit; Payroll tax & premium financed*	1.1%	-0.2%
Catastrophic - Alt 4	\$150/day, 4 year benefit + \$10k cash benefit after 1-year EP; Payroll tax financed	1.4%	
Catastrophic - Alt 8	\$150/day, 4 year benefit + \$10k cash benefit after 1-year EP; Payroll tax & premium financed*	1.2%	-0.2%

Note:

* We assume individuals aged 65+ will pay a monthly premium of \$35. We assume 100% of vested individuals age 65+ will pay this premium, including those who are still working, those who are currently receiving program benefits, and those who have exhausted benefits. We assume individuals age 60+ as of 2023 will not be eligible to pay premiums or receive benefits.

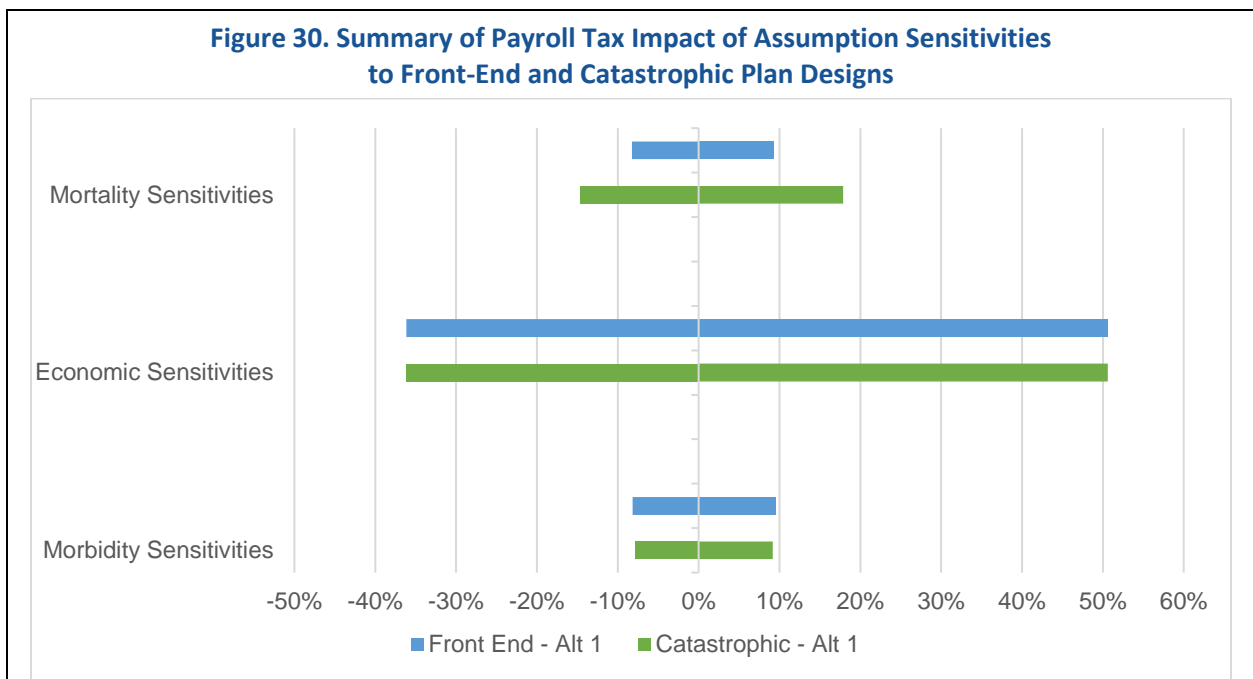
ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

V. SENSITIVITY TESTING

The estimated payroll taxes presented in **Section IV** are highly sensitive to the underlying projection assumptions used in the modeling. This section examines sensitivity tests of key assumptions to highlight the potential impact on the modeled premium assessment and fund balance. The tests were selected to illustrate the modeling sensitivity of various assumptions only and are not intended to be bounds.

Figure 30 below summarizes the multiplicative impact to the level premium assessments produced by our sensitivity tests for two of our modeled plan designs: Front-End - Alt 1 and Catastrophic - Alt 1. A wider bar represents greater sensitivity for that assumption. **Figure 30** shows the premium assessment rate is highly sensitive to the underlying modeling assumptions for both front-end and catastrophic designs. **Specifically, testing various key assumptions one at a time, we observe the tax rate increasing or decreasing by up to 50% (e.g., economic sensitivities could increase the 0.4% Front-End tax rate by approximately 50%, for a tax rate as high as 0.6% = 0.4% * (1 + 50%)), similar to the WISH Act sensitivity testing discussed in Section III.**

The results of the testing should be taken into consideration when evaluating the feasibility of offering a new LTC benefit program. The sensitivity of the program results under different conditions and the program's ability to adjust features when experience materializes differently from what was expected is a key initial step to inform rate setting.



Details on the mortality, economic, and morbidity tests modeled are included in the remainder of this section.

Mortality Sensitivities

We applied separate mortality rates to the active (or non-disabled) lives and disabled lives. Mortality rates have generally been decreasing by age over the last 100 years, and we assume future improvement of mortality rates based on OASDI projections. As mortality rates decrease, the population is expected to survive longer. A population living longer will increase the demand for LTC, all else equal.

We ran two sensitivities, increasing and decreasing mortality rates at each age by 20% for all lives. The tests of changes to mortality increase or decrease the tax rate by approximately 15%-20% across both plan designs. As

shown in Figure 30 as well as in comparing **Figures 31 and 32** below, the Catastrophic design is more sensitive to changes in mortality assumptions relative to the Front-End design. The figures below show the impact to the tax rate on an additive basis.

Figure 31. Mortality Assumption Sensitivities: Front-End - Alt 1

Test	Payroll Tax Estimate	Change in Estimate from Front-End - Alt 1
Front-End - Alt 1 (\$100/day, 1 year benefit; 90 day EP)	0.4%	
Front-End - Alt 1 - Higher mortality	0.4%	> -0.1%
Front-End - Alt 1 - Lower mortality	0.4%	< 0.1%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

Figure 32. Mortality Assumption Sensitivities: Catastrophic - Alt 1

Test	Payroll Tax Estimate	Change in Estimate from Catastrophic - Alt 1
Catastrophic - Alt 1 (\$150/day, 2 year benefit; 2-year EP)	1.1%	
Catastrophic - Alt 1 - Higher mortality	0.9%	-0.2%
Catastrophic - Alt 1 - Lower mortality	1.2%	0.2%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

Economic Sensitivities

In terms of economic assumptions, we performed sensitivities on both wage growth and net investment earned rates.

As wages increase, the premium base increases and the premium rate necessary to fund program benefits decreases. While it is possible that increased wages can result in price inflation, we ignore this potential impact in the wage sensitivities shown here. The Baseline wage growth is taken from the 2022 OASDI Trustees Report intermediate assumption, assumed to be 3.55% on an ultimate basis. We conducted sensitivity runs using both the low and high Trustees Report assumptions (2.35% and 4.77% in the ultimate year, respectively). The wage growth sensitivity tests changed the tax rate by approximately 35%-50%. The figures below show the impact to the tax rate on an additive basis.

The investment rate determines the level of investment income earned on the program fund balance. As the investment rate earned by the fund increases, the necessary revenue funded through the premium assessment decreases. Alternatively, if investment rates decrease, less is earned on the program fund balance, requiring increased funding through the premium assessment. We tested increasing or decreasing the net investment earned rates by 100 basis points for each year of the projection. The net investment earned rate tests changed the tax rate by approximately 15%-20%. The figures below show the impact to the tax rate on an additive basis.

Figure 33. Economic Assumption Sensitivities: Front-End - Alt 1

Test	Payroll Tax Estimate	Change in Estimate from Front-End - Alt 1
Front-End - Alt 1 (\$100/day, 1 year benefit; 90 day EP)	0.4%	
Front-End - Alt 1 - Higher wage growth	0.3%	-0.1%
Front-End - Alt 1 - Lower wage growth	0.6%	0.2%
Front-End - Alt 1 - Higher net investment earned rates	0.3%	-0.1%
Front-End - Alt 1 - Lower net investment earned rates	0.5%	0.1%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

Figure 34. Economic Assumption Sensitivities: Catastrophic - Alt 1

Test	Payroll Tax Estimate	Change in Estimate from Catastrophic - Alt 1
Catastrophic - Alt 1 (\$150/day, 3 year benefit; 2-year EP)	1.1%	
Catastrophic - Alt 1 - Higher wage growth	0.7%	-0.4%
Catastrophic - Alt 1 - Lower wage growth	1.6%	0.5%
Catastrophic - Alt 1 - Higher net investment earned rates	0.9%	-0.2%
Catastrophic - Alt 1 - Lower net investment earned rates	1.2%	0.2%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

Morbidity Sensitivities

Variations in benefit payments can be caused by many factors including price inflation, average length of stay, incidence rates, etc. We modeled two sensitivities to illustrate the impact of increasing and decreasing incidence rates by 20%. Incidence refers to the rate at which the population requires the use of LTSS. The level of incidence over the projection period will have a direct impact on the cost of financing a public LTSS benefit. If incidence rates decrease, fewer people will require LTSS and funding requirements will be lower. We ran sensitivities at +20% and -20% load to baseline incidence, which changed the tax rates by approximately ten basis points. The figures below show the impact to the tax rate on an additive basis.

Figure 35. Morbidity Assumption Sensitivities: Front-End - Alt 1

Test	Payroll Tax Estimate	Change in Estimate from Front-End - Alt 1
Front-End - Alt 1 (\$100/day, one year benefit; 90 day EP)	0.4%	
Front-End - Alt 1 - Higher incidence rates	0.4%	< 0.1%
Front-End - Alt 1 - Lower incidence rates	0.4%	> -0.1%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

Figure 36. Morbidity Assumption Sensitivities: Catastrophic - Alt 1

Test	Payroll Tax Estimate	Change in estimate from Catastrophic - Alt 1
Catastrophic - Alt 1 (\$150/day, 3 year benefit; 2-year EP)	1.1%	
Catastrophic - Alt 1 - Higher incidence rates	1.2%	0.1%
Catastrophic - Alt 1 - Lower incidence rates	1.0%	-0.1%

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

VI. METHODOLOGY AND ASSUMPTIONS

Exhibit 4 provides a summary of the demographic, economic, morbidity, and other assumptions used in the analysis contained in this report. The following section provides more information related to assumptions and methodology to support the summary provided in **Exhibit 4**.

We project LTC beneficiaries and costs using Milliman’s modeling software, MG-ALFA®. The projection starts with the 2016 population of the United States by age, sex, and region, and is projected forward through 2097. The projected nationwide population is estimated based on the number of births, deaths, and net immigration in each future year.

To calculate the LTC beneficiaries and costs for the projected population in each year, the model utilizes Milliman’s proprietary *LTC Guidelines (Guidelines)* calibrated from an insured basis to the estimated nationwide population characteristics. The *Guidelines* provide frequencies, continuance curves, utilization assumptions, and claims costs developed from a large number of product designs based on data from the past two decades. The *Guidelines* incorporate both private and public sector data sources. The *Guidelines* are updated triennially to reflect the most comprehensive and current information available in the market.

The projection is for the 75-year period 2023-2097. A 75-year projection has been established by the Social Security Administration and CMS as the standard projection period for determining the financial status of a public insurance program. The 75-year period covers the expected lifetime of the vast majority of residents just entering their working ages. Thus, a 75-year projection period covers all the working years and all of the benefit years of those just beginning their participation. The model produces year by year cash flow projections, such that the value and scope of the program can be estimated for any of the years in the 75-year projection period.

Revenue to the program consists of taxes, premiums, and interest earned on the account balance. Expenditures to the program consist of benefit payments for covered services and administrative expenses. We projected each of these items on a year-by-year basis for 75 years.

Covered Services

LTC refers to a range of services and supports for individuals who need assistance with daily living tasks, such as bathing, dressing, ambulation, transfers, toileting, medication administration or assistance, personal hygiene, transportation, and other health-related tasks. Often, this type of assistance is needed by individuals who experience functional limitations due to age or to physical or cognitive disability. For the purposes of this report, we assume covered benefits include services provided in:

- **Institutional settings.** Includes skilled, intermediate, and custodial care provided in an institutional facility setting, such as a nursing home or dedicated wing of a hospital. Coverage includes both the services rendered and the room and board in an institutional setting.
- **HCBS.** Includes care provided in a person’s own home or in a community-based setting, such as an ALF or adult family home. Coverage includes both the services rendered and the room and board in a community-based setting.

Demographic Assumptions

The demographic assumptions relate to the projection of the country's population. The covered population is of fundamental importance in the estimation of costs. The income to the program depends on the number of contributors and the outgo of the program depends on the number of beneficiaries. Estimates of the number of contributors and of the number of beneficiaries are based on the population projection.

The estimate of the resident population starts with the census count of the resident population for the United States by age and sex as of 2016. We use a 2016 starting population to build up a stable disabled population to reflect LTC prevalence at the time of first program payments. The model projects the United States population by estimating the number of births, deaths, and net immigration for each future year.

We reviewed the projected population over the 75-year horizon for consistency with forecasts in the *2022 Old-Age, Survivors, and Disability Insurance (OASDI) Trustees Report*. Our review included examining for each year the projected total population count and the distribution of the population by attained age (i.e., less than 20, 20-64, and 65+).

Starting Population

The estimate of the 2016 starting population is from the 2022 OASDI Trustees Report. This source was used to tabulate population estimates by age and sex and is the starting point for the population projection. We reviewed the projected 2017-2021 population from our model compared with the latest data, as these are the most recent years with actual historical data reflected in the 2022 OASDI Trustees Report.

Immigration

We project individuals who move into/out of the country on a net basis (i.e., net immigration equals individuals moving into the United States from another country minus individuals moving out of the United States to a different country). Our projection for this estimate is based on the 2022 OASDI Trustees Report. The age-gender distribution for this population is based on ACS data that is specific to individuals moving into and out of the United States. We do not model or track the legal status of immigrants or emigrants.

Births

The number of births are estimated using birth rates from the Centers for Disease Control and Prevention's National Vital Statistics Report on births. These birth rates are trended according to the nationwide fertility rate projection provided in the 2022 OASDI Trustees Report. We model births by applying these fertility rates to the projected female population in the United States by age and projection year.

Deaths

We applied separate mortality rates to the active lives (i.e., individuals not currently meeting the benefit trigger) and disabled lives:

- **Active life mortality.** Current and projected United States active life mortality rates by age and sex were calculated using multiple sources, including the *Guidelines*, 2022 OASDI Trustees Report (after backing out disabled life mortality), SOA 2012 Individual Annuity Mortality table (after backing out disabled life mortality), and SOA Intercompany data.
- **Disabled life mortality.** Current and projected United States disabled life mortality rates by age, sex, duration, and care setting were calculated from the *Guidelines*.

Mortality improvement rates by age and sex were estimated from the 2022 OASDI Trustees Report. The Trustees Report mortality rates are projected through 2100. We assume mortality improvement applies to both active and disabled lives.

Economic Assumptions

Economic parameters concerning trends in the labor force, wages, and costs of LTC services are of primary importance for the projection of the income and outgo of the program. Because the plans we modeled would be financed through a payroll tax, the labor force participation and wage level will directly affect annual program income. The index used to trend benefits is important because it affects program liabilities in the future. The interest rate assumption is important because it affects the interest income earned on the fund account balance.

We reviewed the projected workers and wages over the 75-year horizon for consistency with data from the 2022 OASDI Trustees Report. Our review included examining the estimated total count of workers and total wages against recent experience and future projections from the 2022 OASDI Trustees Report.

Labor Force Participation and Unemployment

The United States labor force participation rates and unemployment rates by age, sex, and projection year are from the 2022 OASDI Trustees Report. These data are used to project the labor force and unemployment rate in each year of the projection period. The labor force is calculated to estimate the payroll tax base in each year. The labor force calculations do not consider workers' legal status.

Wages

Projections of United States average taxable earnings through 2100 are found in the 2022 OASDI Trustees Report. Taxable earnings are the amount of covered earnings subject to the Social Security payroll tax. We convert the taxable earnings into covered earnings using the ratio of taxable earnings to covered earnings from the 2022 OASDI Trustees Report. Covered earnings represent the wage base subject to the Medicare tax after adjusting for the Social Security wage limit. Estimated average covered earnings (calculated as described above) are multiplied by the labor force in a given year to determine the tax base in that year.

For the plans modeled, benefits were indexed to wage growth, which we tied to the growth in wages from the 2022 OASDI Trustees Report.

Cost of Care

Cost of care assumptions were based on average observed commercial rates reported in the 2021 Genworth Cost of Care Survey and research from our *Guidelines*. At the time of our analysis the 2023 Genworth Cost of Care Survey had not yet been released and the 2021 Genworth Cost of Care Survey was the most recently released survey available. If the actual average cost of care for program beneficiaries differs from the commercial rates due to factors such as incorporation of fee schedules or individuals choosing to use more or less expensive care, the resulting payroll tax could vary from the results presented in this report. The cost of care assumptions combined with the program's benefit features are used to determine benefit salvage (as described in the **Morbidity Assumptions** subsection).

Vesting

In order to become eligible for benefits, a worker must become vested (or in other words, become insured). To vest under the plans modeled, an individual must work and contribute to the program for a specified number of years. For some plans modeled, individuals aged 65+ must also pay premiums to maintain their vested status. The figure below displays the vesting and premium requirements we assumed throughout our modeling.

Figure 37. Vesting and Premium Requirements*		
Age in 2023	Vesting Requirements	Premium Structure (for alternatives where a premium is collected)
60+	We assume these individuals will not pay the payroll tax and will not be eligible to receive benefits.	We assume premiums will not be collected from these individuals upon their reaching age 65.
50-59	We assume these individuals will be eligible for full program benefits after contributing to the program for 40 quarters. Additionally, we assume individuals in this cohort will be eligible for partial, pro-rated benefits if they have at least 20 creditable quarters of payroll tax payment. The pro-rated formula is: Number of creditable quarters x 1/40th of the total benefit amount. Individuals working beyond age 65 can continue to accrue pro-rated benefits up to the maximum.	For alternatives where a premium is charged, we assume individuals age 65+ will pay a monthly premium of \$35. We assume 100% of vested individuals age 65+ will pay this premium, including those who are still working, those who are currently receiving program benefits, and those who have exhausted benefits.
<50	We assume these individuals will be eligible for full program benefits after contributing to the program for 40 quarters. We did not model partial benefits for individuals in this cohort who have contributed <40 quarters.	

* We assumed individuals would be required to work at least 125 hours per quarter (or 500 hours per year) to receive vesting credit.
ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation.

We used the 2006 Social Security Earnings Public Use Microdata File (2006 is the most recent year the Microdata File was assembled) as our starting point to estimate the percentage of individuals that would become vested by age, sex, and projection year. This data provides annual earnings information (i.e., a lifetime earnings profile) for a 1% random sample of all Social Security numbers issued before January 1, 2007.

To find the percentage of the working population meeting the requirements in **Figure 37**, we observed the work histories of the random sample of data. For each age, the percentage of individuals who had recorded income for eight years total is tabulated. We used eight instead of ten years in this tabulation because becoming insured under this program provides an added incentive to continue working for those who are almost insured. For each year of the program, we vary the number of years of work history to be included in this tabulation. For example, in year ten of the program, we only considered work history for individuals going back ten years to estimate vesting percentages. Because of this, the vesting percentages by age and gender vary in each program year. We used the American Time Use Survey to determine the percentage of workers who work more than 500 hours per year (approximately 95%) and applied this percentage to the vesting percentages by age, gender, and program year.

We adjusted our vesting assumptions for several subsets of the population:

- We observed that females' work histories changed significantly over the course of the data collection period (1951-2006), with the last 5-10 years (i.e., 1996-2006) approximately equal to males' work histories. As such, we set the female vesting percentages equal to the male vesting percentages.
- We did not vary vesting assumptions for individuals who migrate into the United States from another country. This may be a conservative assumption because we are implicitly assuming individuals are able to apply their full work histories as they move into the United States from elsewhere. However, our testing of this assumption generally showed smaller impacts to the calculated tax rate and seemed appropriate given that we do not know how many individuals moving into the country lived in the United States previously and would move into the country with some relevant work history.
- As shown in **Figure 37**, we assumed individuals aged 60+ in 2023 will not pay the payroll tax and will not be eligible to receive benefits.
- As shown in **Figure 37**, we assumed individuals aged 50-59 in 2023 are eligible to receive partial, pro-rated benefits if they have at least 20 creditable quarters of payroll tax payment. We used the following pro-rated formula:

$$\text{Number of creditable quarters} \times 1/40\text{th of the total benefit amount}$$

Individuals working beyond age 65 can continue to accrue pro-rated benefits up to the maximum. For this population, we separately tabulate the percentage of individuals by number of years of recorded wages, since the years of wages will determine the pro-rated benefit amount. After segmenting this population by years vested, we apply a prorating adjustment to the assumed benefit for each cohort. For example, for individuals we project will have six years (or 24 quarters) of vesting credits, we multiply their projected benefits by 60% (= 24/40).

Interest Rates

The interest rates used in modeling investment income on the program's fund balance come from the 2022 OASDI Trustees Report's Intermediate scenario. Annual interest rates start at 2.3% in 2023, grow to 4.7% by 2031, and remain at 4.7% for the remaining years of the projection.

Lifetime Income Percentiles

Under the WISH Act, individuals would have an elimination period of 1-5 years depending on lifetime income earned, where those with lifetime incomes in the lowest 40th percentile would receive benefits after one year and for every 1.25 percentiles of lifetime income beyond the 40th percentile, the waiting period will extend for one month. For example, a person whose lifetime income is in the 70th percentile would wait three years, calculated as 12 months + (70-40 percentiles) / 1.25 percentiles per month = 36 months, or three years. The figure below displays the resulting elimination period (in years) for several key lifetime income percentiles.

Figure 38. Elimination Period by Lifetime Income Percentile

Lifetime Income Percentile	EP (in years)
40%	1
55%	2
70%	3
85%	4
100%	5

ASPE = HHS Office of the Assistant Secretary for Planning and Evaluation; EP = Elimination Period.

To model this plan design, we assumed an even distribution of vested individuals by income percentile at the beginning of each calendar year (e.g., each year we assumed 40% of vested individuals would be eligible for one-year EP).

Morbidity Assumptions

To calculate the LTC beneficiaries and costs for the projected population in each year, we started with data and research from the *Guidelines*. The *Guidelines* provide claim frequencies, continuance curves, utilization assumptions, and claims costs from a large number of fully insured LTC product designs sold over the past two decades. The *Guidelines* incorporate both private and public sector data sources and are periodically updated to reflect the most comprehensive and current information available in the market. The first set of *Guidelines* was developed in 1992 and is updated regularly, with the most recent edition completed in 2020.

As discussed below, we adjusted the *Guidelines* data from an insured basis to the estimated nationwide population. We assumed there would be incidence improvement equal to approximately half of longevity improvement.

Given the plans modeled would be first-of-its-kind social insurance LTC programs in the United States, there is no data source to use for comparison at this time. To review our projections for reasonableness, we reviewed model output for various claim statistics by projection year (such as claim incidence and prevalence rates) based on our judgement and observations of projections for other of LTC programs.

Benefit Eligibility Criteria

A person's ability to perform ADLs and/or cognitive ability in addition to physical abilities are frequently used as indications of the need for LTC services (and serve as the foundation for benefit eligibility criteria for many LTC programs). The plans modeled as part of this report included a HIPAA eligibility "trigger," defined as needing assistance with two or more ADLs where the individual is expected to meet the definition for at least 90 days, or severe cognitive impairment.

Incidence

Incidence refers to the rate at which the population first requires the use of LTC. The *Guidelines* incidence rates are representative of a fully insured population. A fully insured population will have different morbidity from the population under this program for a few reasons, including:

- Insured data may have inherent anti-selection as it reflects individuals who choose to purchase coverage and may have reason to believe they will need care in the future.
- Insured data reflects a higher-income population, which is generally composed of individuals with lower annual incidence rates, all else equal.

- Most individuals insured in the private market had to complete underwriting, ensuring they were relatively healthy at least when they first purchased coverage. There is no underwriting qualification associated with any of the plans modeled, although individuals will need to be at least healthy enough to satisfy vesting requirements.

We calibrated the incidence rates to a general population using a variety of data sources, including selection factors from the *Guidelines* and other industry general population prevalence studies. While general population data exists, morbidity data reflecting a “public option” program does not exist and was not used for this actuarial study. It is unknown how individuals will react to having a public benefit available.

Benefit Salvage

Maximum benefits may not be paid fully each day due to the estimated cost of care being lower than the benefit limit (“dollars” salvage) or services not being provided every day (“days” salvage, such as for HHC services). Days salvage was estimated based on the *Guidelines*. Given the low benefit maximums for the plans modeled relative to the median nationwide cost of care observed in the 2021 Genworth Cost of Care Survey, we assumed dollars salvage to be 100%.

Participation and Adverse Selection

Universal mandatory programs assure that the experience of the group will be close to population averages, because everyone will be in the program. Voluntary programs or programs with voluntary components, however, are subject to anti-selection (i.e., those with higher-than-average costs will be more likely to enroll). For all plan designs, we assumed participation would be mandatory, including tests where a premium was required for individuals aged 65+. **To the extent participation was no longer mandatory, we would expect the required payroll tax for the program to also vary--potentially significantly depending on the potential level of anti-selection.**

Administrative Expenses

We assumed administrative expenses to be 3.5% of premiums and 3.5% of benefits based on our high-level review of other government programs and programs offering LTC benefits. This assumption is intended to reflect the average, long-term administrative needs of the program and may not be consistent with how expenses will fluctuate on an annual basis.

VII. CAVEATS AND LIMITATIONS

This information is prepared for the internal use of RTI and ASPE and should not be distributed, in whole or in part, to any external parties without the prior permission of Milliman. We do not intend this information to benefit or create a legal liability to any third party even if we grant permission to distribute this information to such third party.

This information is provided as draft for discussion purposes only and should not be relied upon.

Any reader of this report should possess a certain level of expertise and background in actuarial projections related to financing LTSS/LTC benefits to assist in understanding the significance of the assumptions used and their impact on the illustrated results. The reader should be advised by, among other experts, actuaries or other professionals competent in the area of actuarial projections of the type in this report, so as to properly interpret the estimates. The information included in this report should only be considered in its entirety.

This report compares program parameters and tradeoffs across three LTSS reform proposals and provides illustrative payroll tax rate impacts under different benefit designs for a new nationwide LTC program. It may not be appropriate, and should not be used, for other purposes. In completing this analysis, we relied on publicly available information on the three reform proposals, which we accepted without audit. However, we did review this information for general reasonableness. Our summary may not be appropriate if this information is not accurate.

Many assumptions were used to construct the estimates in this report. Actual results will differ from the projections in this report. Experience should be monitored as it emerges, and corrective actions should be taken when necessary.

Milliman has developed certain models to estimate the values included in this report. The intent of the models is to estimate required program revenue and probabilities of incurring program benefits. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice.

Guidelines issued by AAA require actuaries to include their professional qualifications in all actuarial communications. Chris Giese and Annie Gunnlaugsson are members of AAA and meet the qualification standards for performing the analyses herein.

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