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Economic Impact of an Expansion of the Medicaid Aged and Disabled Waiver on West Virginia's Economy

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Executive Summary

Currently the Medicaid Aged and Disabled Waiver (ADW) program serves over 7,000 West Virginians. However, there remain well over 2,000 applicants for the ADW waiting to enter the program. The purpose of this report is twofold. First, we estimate the annual impact on West Virginia's economy of the spending associated with the ADW program given its current utilization. Second, we estimate the additional impact that expanding the ADW to accommodate these 2,000-plus individuals would have on West Virginia's economy.

For fiscal year 2012, direct program related expenditures for the context of this analysis in West Virginia on the ADW program were approximately $163 million. Of that spending, $47 million was state government spending, while the remainder was provided by the US federal government. Our estimates indicate that this spending generates significant economic benefits for the state of West Virginia, which are summarized as follows:

- Current ADW spending generates a total of $285 million in business volume for the state annually.
- ADW spending supports approximately 3,665 jobs in the state.
- ADW spending generates nearly $121 million in employee compensation annually.
- The business volume and employee compensation associated with the ADW generates around $5.5 million in total tax revenues for the state each year.

We also consider the effect of expanding the ADW program in West Virginia such that everyone on the waiting list for the program is accommodated. To do this would require approximately $44.9 million in additional spending in fiscal year 2013, of which $13.0 million would be state government spending. Our estimates indicate that fully expanding the program in this manner would generate the following economic benefits for the state:

- Full ADW expansion would generate a total of $78.4 million in additional business volume annually.
- Full ADW expansion would support approximately 1,006 additional jobs in the state.
- Full ADW expansion would generate more than $33 million in additional employee compensation annually.

- The business volume and employee compensation associated with full ADW expansion would generate $1.5 million in total tax revenues annually.

An important consideration associated with the ADW program is the fact that over 70 percent of the funding is provided by the US Federal Government, with the remainder coming from the state government. The following estimates relate to the $47 million that the state currently spends on the ADW program:

- Approximately $5.5 million is returned to the state in new tax revenues, offsetting the original $47 million expenditure by approximately 11.5 percent.
- Net spending by the state on the ADW program (gross spending [$47 million] minus new tax revenues [$5.5 million]) generates an overall impact on business volume of nearly $7 for every dollar spent.
- One job is supported for every $11,400 of state ADW spending.

It should also be noted that our estimates represent short-run effects. Elderly and disabled adults who have access to home-based care are less likely to be hospitalized in the future and fewer hospitalizations will result in system-wide cost savings in the long-run. However, further research is required to more rigorously examine these potential long-run benefits.

1 Introduction

Long-term services and supports (LTSS) are a diverse array of services used by individuals of all ages with functional limitations and chronic illnesses who need assistance to perform routine daily activities such as bathing, dressing, preparing meals, and administering medications.[1] The provision of LTSS to seniors and adults with physical and mental disabilities is an increasingly important issue among policymakers, service providers, and family caregivers in many states. West Virginia is no exception given the anticipated aging-in-place of the population as the over-65 population is expected to grow by about 2.5 percent annually from 2013-2018, while the under-65 population is expected to shrink.[2] At the same time advances in therapeutic treatments and medical technology have made it possible for individuals with disabilities to live longer and more independently. The financial and administrative responsibility of providing LTSS to the aged and disabled population falls primarily on private individuals (family members) and state and local governments. Some financial support is provided by non-profit charitable organizations as well. According to the Institute of Medicine, in 2011, $210.9 billion was spent on LTSS, which represented about 9.3 percent of personal health care spending. About two-thirds of that spending was financed by state Medicaid programs, and nearly 22 percent came from out-of-pocket spending by individuals and their families.[3] All of these factors contribute to increasing pressures on state governments to develop programs that allow for the effective, efficient, and coordinated delivery of LTSS to their citizens. In recent years, the focus of LTSS policy and program development has shifted from institutional care as the normal site for delivery of these services toward home and community-based services (HCBS).

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[1] Woodcock, C.H. "Long-term Services and Supports: Challenges and Opportunities for States in Difficult Budget Times", National Governors Association Technical Report, http://www.nga.org/files/live/sites/NGA/files/pdf/1112LTSSBRIEF.PDF, accessed December 3, 2013

[2] *West Virginia Economic Outlook 2014,* West Virginia University Bureau of Business & Economic Research, http://www.be.wvu.edu/bber/outlook_pdfs/WV-Economic-Outlook-2014.pdf, accessed December 4, 2013.

[3] http://www.iom.edu/Activities/Aging/AgingDisabilityForum/2013-JUN-12.aspx, accessed December 3, 2013

This shift in policy focus and program development has been fueled by demographic trends, consumer preferences for home and community-based care, federal grants, the Americans with Disabilities Act (ADA), and changes in federal Medicaid laws. Effective balancing of institutional and community-based LTSS in a fiscally responsible manner presents a challenge for state governments. A primary tool for developing home and community-based services is the Section 1915(c) HCBS waiver program. The Medicaid HCBS waiver program was authorized under Section 1915(c) of the Social Security Act and allows states the flexibility to design programs that assist Medicaid beneficiaries by providing an array of services that permit them to live in their homes, rather than in nursing facilities. The potential benefits of such a program are numerous. From a cost perspective, an HCBS waiver program is likely to result in LTSS cost-savings in the long-run, but achieving such savings typically requires a significant short-term investment. Research has demonstrated that hospitalization rates significantly decline after disabled older adults who previously lacked assistance for their activities of daily living disabilities were provided community-based LTSS.[4,5] From a holistic perspective, HCBS waiver programs have the potential to provide services that are person-centered and promote choice, independence, and community integration.

The HCBS waivers address the needs of a variety of populations but can be placed into four broad categories: developmental disabilities, including autism; elderly and disabled; medically fragile and palliative care; and brain injury. Waivers may also cover mental illness, HIV/AIDS, and transitioning from institution to home- and community-based care. The number and type of HCBS waivers vary considerably by state. For example, based on a recent study of HCBS 1915(c) waivers conducted by the Center for Medicare and Medicaid Services (CMS), Colorado had 13 HCBS 1915(c) waivers in 2012, while Arizona and Rhode Island had none. West Virginia has three HCBS waivers that cover mental retardation and developmental disability (MR/DD), aged and disabled persons (ADW), and traumatic brain injury (TBI).

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[4] Sands, L, et al. 2006. Rates of acute care admissions for frail elder adults living with met versus unmet activity of daily living needs. *Journal of the American Geriatrics Society,* 54:339-344.

[5] Xu, H, et al. 2010. Volume of home- and community-based Medicaid waiver services and risk of hospital admissions. *Journal of the American Geriatrics Society,*58(1): 109-115.

The purpose of this study is twofold: to provide an estimate of the economic impact of the ADW program in West Virginia given its current utilization (the baseline impact), and to evaluate the economic impact of an expansion of this waiver program that would accommodate the current waiting list. To the extent that this research more fully illustrates the benefits of the ADW program on the West Virginia economy, this study provides important information as policymakers weigh the value of expanding the ADW program against other budgetary concerns.

It should be noted that the economic impact estimates presented herein do not consider any economic impact associated with obtaining the funding for the ADW program initially. That is, we do not consider any negative impact that might be associated with raising taxes to fund the ADW program. Likewise, we do not consider any economic benefits that could be enjoyed if the money that is directed to the ADW program were instead spent on some alternative program. Further research is required to fully understand all of the various potential economic impacts that are involved in setting government tax and spending policy.

In Section 2, we provide background information on the ADW program. In Section 3 we provide our economic impact analysis. And in Section 4 we offer concluding remarks.

2 Background on the Medicaid Aged and Disabled Waiver

The Medicaid HCBS waiver program was established with the passage of section 2176 of the Omnibus Budget Reconciliation Act of 1981 which created section 1915(c) of the Social Security Act. This section gave states the opportunity to apply for a waiver of Medicaid rules governing institutional care. In 2005, HCBS became a formal Medicaid State plan option. Waiver services are meant to complement and/or supplement services that are available through Medicaid and other public programs. States are given considerable freedom in designing their HCBS waiver programs and can provide a combination of standard medical services and non-medical services. Standard services typically include case management, homemaker/chore services, adult day care, transportation, personal care services, and respite/companion services.

States are also given the latitude to determine the target groups of Medicaid beneficiaries to be served under the waiver program. Many of the first HCBS waivers targeted the aged and disabled populations but have evolved to now target Medicaid eligible individuals with a variety

of conditions and chronic disorders, such as traumatic brain injury and developmental disabilities. Forty-eight states and the District of Columbia offer services through HCBS waivers. In 2012, there were approximately 287 active HCBS waiver programs throughout the country. Waivers are initially approved for a three-year period with five-year renewal options.

West Virginia currently has three approved and operating HCBS waivers. The West Virginia ADW was first approved in 1985 with the most recent renewal occurring in 2010. Absent renewal, the current waiver is set to expire on June 30, 2015. This waiver provides case management, participant-directed goods and services, and personal assistance/homemaker services for individuals over 65 and physically disabled individuals aged 18 to 64. The West Virginia Mental Retardation and Developmentally Disabled waiver was also first approved in 1985 and most recently renewed in 2010. Finally, the West Virginia Traumatic Brain Injury (TBI) waiver was approved in 2011, with an effective date of February, 2012. It provides case management, cognitive rehabilitation therapy, participant directed goods and services, and personal attendant services to individuals with brain injuries aged 22 and older.

Applicants to the ADW program must meet certain eligibility criteria to obtain services. The primary eligibility standards are based on age, level of impairment, financial income, and assets. Applicants aged 18-64 years must be disabled according to the Social Security Administration's standards. Applicants aged 65 and older undergo a medical review. If it is determined that they are in need of nursing home level of care, then they medically qualify for the waiver. Applicants for ADW program must meet the financial requirements for West Virginia institutional Medicaid. The income level is 300 percent of the federal poverty level. In 2013, this means that the applicants' monthly income cannot exceed $2,130. The Medicaid asset limit is $2,000. Assets do not include home, car, and some personal items such as wedding rings.[6]

States also have the discretion to choose the number of individuals to serve under the waiver. However, once this number is approved by CMS, the state is limited to serving up to this designated number, regardless of demand. As a result, there can be a waiting list or "unmet

[6] West Virginia's Aged and Disabled Waiver: Qualifications and Services, http://www.payingforseniorcare.com/medicaid-waivers/wv-aged-and-disabled.html, accessed December 3, 2013.

demand" for waiver services. States do have the flexibility to serve greater or fewer numbers of individuals, but this requires submitting an amendment to the waiver agreement to CMS for approval. Table 1 summarizes data provided by the West Virginia Department of Health and Human Resources (DHHR) Bureau for Medical Services (BMS) regarding the ADW funding history with respect to approved slots and ADW participants for State Fiscal Year (SFY) 2007 to SFY 2012.

Table 1: Trends in ADW Participation in West Virginia, 2007-2012

	2007	2008	2009	2010	2011	2012
ADW Participants[1]	4,752	5,592	6,527	5,865	7,722	8,201
Change in ADW Participants	229	840	935	-662	1857	479
Slots in Excess of Initial Projection[2]	2,050	1,950	3,350	2,607	2,108	1,367

Notes:
(1): Unduplicated waiver count taken from the annual report on HCBS waiver services submitted to CMS (CMS 372 report).
(2): Represents the number of slots added through waiver amendments in excess of the initial waiver 5 year projections. The figures for State Fiscal Year (SFY) 2007 – SFY 2010 are based on initial slot projections for BY 2006 - BY 2010. The figures for SFY 2011- SFY 2012 are based on initial slot projections for BY 2011 – BY 2015

In Table 1 we report the number of ADW participants annually over the last six years as well as the number of ADW slots that were provided through amendment that were in excess of those in the initial waiver 5-year projections. As illustrated, the ADW program experienced a consistent increase in the number of participants through the period with the exception of 2010. That year seems to be an anomaly in that it was the only year that West Virginia was unable to appropriate additional funds to the ADW program and because of increased per-participant costs. However, the large rise in 2011 more than compensated for the 2010 decline to return participation to the long-run pattern of growth. The program also consistently realized a large number of slots that have been approved through amendments that are in excess of initial waiver 5-year projections. That figure ranges from as high as 3,350 in 2009 to 1,367 in 2012.

Despite the increases in the number of approved slots from 2007-2012, there still remains unmet demand for the ADW program. Data from the WV Medicaid Waiver Report for SFY 2013 indicate that there were 2,263 individuals on the managed enrollment list at the end of SFY 2013. The managed enrollment list is effectively a waiting list for those who are determined to be medically eligible for the ADW program but cannot receive services through the program because there are no available slots. One purpose of this report is to evaluate the economic impact of additional investment into the ADW program to "clear the waiting list."

A critically important feature of the 1915(c) HCBS waiver program is that it is budget or cost neutral. This means that states must demonstrate that providing waiver services to the target population is no more costly than cost of the services the individuals would receive in an institutional setting. States continue to receive federal support, known as Federal Medical Assistance Percentages (FMAPs), for the cost of services provided under the Medicaid waiver programs. The FMAP is the share of the state Medicaid benefit costs paid by the federal government. In West Virginia, the FMAP was 72.62 percent in Federal Fiscal Year (FFY) 2012 and 72.04 percent in FFY 2013. It will decline to 71.09 percent in FFY 2014. The FMAP is based on a three-year average of a state's per capita personal income compared to the national average. If a state experiences an increase in its share of the U.S. average per capita income, then its FMAP declines. Per capita personal income growth in West Virginia was greater than the US average in 2011 and 2012. Low population growth can also contribute to a lower FMAP because low population growth effectively increases per capita personal income.

Table 2 below summarizes data provided by the West Virginia DHHR BMS about ADW services and expenditures for SFY 2010 to SFY 2012.

Table 2: Trends in ADW Services and Expenditures in West Virginia, 2010-2012

	2010		2011		2012	
ADW Services	Recipients	Dollars (000's)	Recipients	Dollars (000's)	Recipients	Dollars (000's)
Case Management	5,318	$3,884.0	6,831	$4,427.3	7,123	$4,954.6
Homemaker	5,865	$82,406.0	7,554	$95,403.8	8,124	$118,671.9
Personal Options	124	$58.8	123	$74.6	143	$89.9
RN Assessment	4,126	$508.8	5,632	$709.7	5,636	$720.3
RN Services	5,237	$1,543.2	6,488	$1,824.4	6,932	$2,110.1
Transportation	4,550	$4,583.7	5,650	$4,035.0	6,127	$5,851.6
Total	5,865	$92,984.5	7,722	$106,474.9	8,201	$132,128.5

Note that that sum of all rows exceeds the total number of recipients (reported in the final row) because a single individual may receive multiple services. Personal options are provided to the fewest recipients. Personal options are a relatively new component of the ADW program. It is a consumer-directed option that allows participants to select some of their own care providers and is growing in popularity.[7] The single largest service category in terms of expenditures is homemaker services. Total expenditures for the ADW program increased 42 percent from $92.9 million in SFY 2010 to $132.1 million in SFY 2012.

[7] West Virginia's Aged and Disabled Waiver: Qualifications and Services, http://www.payingforseniorcare.com/medicaid-waivers/wv-aged-and-disabled.html, accessed December 3, 2013.

3 Economic Impact of the Aged and Disabled Waiver Program

The economic impact of the ADW program stems directly from the state's spending in the local economy. However, the premise of our modeling approach is that the economic impact of the ADW program does not end with the expenditures from the state and federal governments, but that the overall economic impact of a policy may be much larger than the direct expenditure of the program. In the case of the ADW program, for example, the state contracts with home healthcare companies to provide services to clients in their homes. Those companies may buy supplies from local medical supply stores, or subcontract other services. These "second-round" expenditures constitute the indirect economic impact of the program. Secondly, the employees or owners working in the healthcare industries and in the other firms that supply inputs into the process have earned additional income that they would not have otherwise received in the short-term. These employees in turn spend a portion of their additional income on other goods and services in the region, which generates additional economic activity in the local area. These dollars spent by households employed in the direct and indirect economic activities are termed the induced economic impact.

If we combine these successive rounds of spending, we can define the total economic impact as the additional employment, employee compensation or payroll, and business volume associated with the ADW program. This idea that the total economic impact of investment in the program may be much larger than the initial direct investment is termed the "multiplier effect." After first quantifying the direct economic impact associated with a proposed policy, our approach uses a sophisticated economic modeling system to quantify these indirect and induced economic impacts to arrive at the overall economic impact of a policy.[8]

In this section, we begin by describing the methodology used to estimate the direct effect of the ADW. This allows us to create a baseline scenario for the present impact of ADW on the state's economy, given the participation and spending level as of fiscal year 2012. We also conduct a sensitivity analysis of this baseline scenario to assess how sensitive our primary result is to one

[8] This study uses the IMPLAN 3.1 modeling software, an industry-standard input-output model of the economy. More information about IMPLAN 3.1 can be found at http://www.implan.com.

key assumption related to the number of individuals in the ADW program that were Medicaid eligible upon intake into the ADW program. Second, we estimate the additional economic impact of expanding the ADW program to accommodate the 2,263 people on the waiting list at the end of fiscal year 2013.

3.1 Economic Impact of ADW Utilization in Fiscal Year 2012

The ADW program served 8,201 participants in fiscal year 2012, at a total cost of approximately $188 million.[9] As our baseline economic impact scenario, we calculate the economic impact of this ADW spending in 2012 on the West Virginia economy. Data on the number of participants in the program and program costs related to ADW were provided by the state's BMS. Participants who become eligible for ADW also become eligible for the entire array of medical services, known as acute care costs, paid for under the larger Medicaid program. However, some ADW participants already were eligible for Medicaid, but these costs are now reported as falling under the ADW program. Thus the costs reported by BMS include both direct ADW program costs, as well as additional costs for non-home healthcare medical services paid for by the state's Medicaid program.

Our economic impact analysis includes all expenditures on the ADW program itself as well as the portion of the Medicaid acute care spending associated with participants who were not previously eligible for Medicaid (see Table 3). We make this distinction because the Medicaid costs of people who were already eligible would have been incurred regardless of whether the ADW program was operating, and thus cannot be attributed to the ADW program. The BMS does ask applicants to the program whether they are currently on Medicaid, but once they are accepted to the program, a breakdown of costs for these participants is not recorded. Because of this, the BMS does not have a firm estimate of the percentage of people in ADW who were eligible for Medicaid before entering ADW. For our baseline scenario we assume that this percentage is identical to new applicants who were on the waiting list as of the end of fiscal year 2013, approximately 44 percent. We use this percentage to weight the acute care expenditures

[9] Fiscal year 2012 covers spending from July 2011 to June 2012. It is the latest year for which full spending data is available.

and then add them to ADW program costs to obtain our direct spending. However, this percentage may not accurately reflect the number of current participants who were already eligible for Medicaid. Previous studies of prior Medicaid eligibility indicated that as many as 75 percent of current ADW participants were not eligible for Medicaid prior to entering the ADW program. To account for this uncertainty, we calculate three alternative scenarios for the economic impact of the program using various alternatives. These results are described in Section 3.2.

Table 3: ADW Program Expenditures, FY 2012

	Direct Expenditures
ADW Program Spending (millions)	$132.1
Medicaid Spending due to ADW (millions)*	$31.3
Total Program Spending (millions)	$163.4
*Assuming approximately 44 percent of ADW participants were previously Medicaid-eligible	

The total program spending figure is the direct impact on the state's economy of the ADW program. This spending represents a relatively small portion of the state's $3 billion Medicaid budget. As described above, these expenditures produce indirect and induced impacts, which together with the direct program spending constitute the total economic impact of the ADW program. Table 4 reports the results of the impact analysis. In our baseline scenario, our estimate indicates that the direct spending by the ADW program results in an additional $122 million of indirect and induced economic impact in the economy for a total economic impact of $285 million in 2012. The spending supports more than 3,600 jobs with about $121 million in employee compensation. State spending results in about $5 million being returned to the state through tax revenues.

Table 4: Estimated Economic Impact of ADW Utilization, FY 2012

	Direct Impact	Indirect and Induced Impact	Total Impact
Business Volume (millions)	$163.4	$122.0	$285.4
Employment		3,665	3,665
Employee Compensation (millions)		$120.8	$120.8
Selected State and Local Taxes (millions)		$5.5	$5.5

The majority of the state's ADW program revenue comes from a matching program with the federal government. Currently more than 70 percent of the program's costs are paid with federal tax dollars. Because of this matching, a dollar of state spending garners an additional $2.46 from the federal government, and thus the economic impact relative to the cost to the state is magnified. Table 5 reports the return on investment to the state for its contributions to the ADW program. These results indicate that the net state investment in the ADW program, which is total spending minus new tax revenue gained as a result of the program, is about $42 million. For that spending, the state realizes almost $7 of economic impact for every dollar spent. The state spends approximately $11 thousand for every job that is supported in the economy, with each job having an average compensation of almost $33 thousand. These results represent a single year of the economic impact of the ADW program.

Table 5: State Return on Investment, FY 2012

	Return on Investment
State ADW spending (millions)	$47.2
State taxes collected as a result of ADW program (millions)	$5.5
Economic impact per dollar of state expenditure (net taxes collected)	$6.8
ADW expenditure per job supported	$11,400

3.2 Fiscal Year 2012 Economic Impact: Sensitivity Analysis

As mentioned above, a precise estimate of the number of ADW participants who were also Medicaid-eligible when they entered the program does not exist. Because these participants were already on Medicaid, their acute-care expenditures should not be considered when calculating the economic impact of the ADW program. In this section we estimate the economic impact of the ADW program under various alternative assumptions about the percentage of participants who were already Medicaid-eligible. The baseline scenario is 44-percent eligibility. This is the percentage of new applicants on the waiting list as of the end of fiscal year 2013 who were Medicaid-eligible. However, this percentage may well over-estimate the number of people in the ADW program who were Medicaid-eligible upon intake. BMS undertook an assessment of this population approximately four years ago and determined that about 25 percent of the ADW participants were Medicaid-eligible. This forms the basis of the lower-limit of the sensitivity analysis. Due to time limitations, it was not possible to conduct a similar assessment for this report but an anecdotal assessment suggests that the current number of ADW participants that were Medicaid-eligible upon intake to the ADW program is approximately 35 percent; hence, we include this percentage in the sensitivity analysis. Table 6 details the alternative scenarios.

As a rule, the higher the percentage of Medicaid-eligible participants, the lower the economic impact, because acute care expenditures for these participants are eliminated from the impact analysis. However, the expenditures are not discounted on a one-to-one basis; a 10-percent reduction in the number of Medicaid-eligible participants will not increase the total impact by 10 percent. This is because we continue to count expenditures specifically related to the ADW program for these participants in our direct spending figure.

Table 6: Estimated Economic Impact under Alternate Medicaid-Eligibility Assumptions

	Baseline (44-percent eligibility)	25-percent Eligibility	35-percent Eligibility
Business Volume (millions)	$285.4	$303.7	$293.9
Employment	3,665	3,900	3,775
Employee Compensation (millions)	$120.8	$128.6	$124.4
Selected State and Local Taxes (millions)	$5.5	$5.9	$5.7

Our first scenario assumes a low level of Medicaid eligibility with only 25 percent of ADW participants entering the program with a Medicaid card. As expected, the economic impact in this scenario is larger than in our baseline scenario. The direct spending of $173 million results in a total economic impact of almost $304 million, which is 6 percent larger than in the baseline scenario. The employment impact of the ADW program rises to almost four thousand jobs, with almost $129 million in employee compensation. Total state tax revenue rises to almost $6 million.

Our second scenario assumes a mid-range of Medicaid eligibility with 35 percent of ADW participants entering the program with a Medicaid card. The economic impact in this scenario is 3 percent larger than in our baseline scenario, with direct spending of $168 million. Correspondingly the total economic impact of almost $294 million is also 3 percent larger than the baseline scenario. Under this scenario the employment impact of the ADW program is 3.8 thousand jobs, with more than $124 million in employee compensation. Total taxes taken in by the state related to this program is about $5.7 million.

This analysis suggests that the assumption of how many participants are Medicaid-eligible has a relatively small effect on the impact results. Moving from 25 percent eligibility to 44 percent eligibility decreases the overall economic impact by only 6.4 percent. This is an indication that the acute care costs are a relatively small portion of the per-participant costs for ADW recipients.

These results indicate that this analysis is capturing the large majority of economic impact of the ADW program regardless of the assumption of Medicaid-eligibility.

3.3 Economic Impact of Expanding the ADW Program

As discussed above, the ADW program is currently facing high demand for enrollment. As of the end of fiscal year 2013, there were 2,263 applicants to the program that were on the waiting list for services. Not everyone on the waiting list will qualify for the ADW program, so the number of potential participants in the program is somewhat smaller than the waiting list indicates. Also, there is likely to be some attrition due to the death of some applicants, or medical deterioration that would prevent an applicant from utilizing home healthcare. This study does not forecast demand for the ADW program, however, considering the recent growth in wait-listed applicants, the number of wait-listed applicants is a fairly accurate representation of expected program participants. In this subsection, we calculate the potential economic impact to the state's economy if the program were expanded to serve these 2,263 applicants on the waiting list. This represents a 30-percent increase in the number of ADW participants over fiscal year 2013. As discussed above, the state's Medicaid program receives a matching contribution from the federal government. As in the above scenario, program dollars spent by the state in expanding ADW would bring in additional dollars to the state from federal taxpayers and magnify the economic impact.

To estimate the economic impact of expanding the ADW program we take a dual approach. First, we assume that the program will be expanded fully to accommodate all of these 2,263 people in 2013. Alternatively, with the understanding that it may be difficult to fully accommodate all of these individuals in one year given significant budgetary constraints, our second approach assumes that the program is expanded over a five-year horizon, meaning that one-fifth of applications would be accepted in 2013, another one-fifth in 2014, and so on, until all of the applications are accepted by 2017. In both scenarios we assume that per-participant

costs continue to rise through the forecast period at the rate experienced between 2004 and 2012,[10] and that the Federal Medical Assistance Percentage remains at 71.1 percent.

Table 7: Estimated Impact of Expanding the ADW: One-Year Full Expansion

	Impact in 2013
Program Expenditures	
Per-participant Expenditure	$19,826
Number of New Participants	2,263
Total Expenditure (millions)	$44.9
State Portion of Expenditure (millions)	$13.0
Federal Portion of Expenditure (millions)	$31.9
Economic Impact	
Business Volume (millions)	$78.4
Employment	1,006
Employee Compensation (millions)	$33.2
Selected State and Local Taxes (millions)	$1.5

Results from our first scenario, which assumes full expansion in 2013, are reported in Table 7. Given the expected rise in per-participant expenditures to $19,826, we forecast that the program costs to accommodate wait-listed participants would amount to an additional $44.9 million, of which, the state's share would be approximately $13.0 million. We estimate that the 2013 economic impact of the expansion of the ADW program to be nearly $78.4 million in business volume and that such an expansion would support 1,006 jobs during the year. These workers would earn a total of $33.2 million in employee compensation. The spending would generate approximately $1.5 million in state and local tax revenue from increased economic activity, which will, in effect, offset approximately 11.5 percent of the $13 million that West Virginia would spend to expand the program.

[10] Per-participant cost data prior to 2004 are unavailable.

Results from our second scenario, which assumes a five-year rollout, are reported in Table 8. We report the results on an annual basis for each year of the rollout, as well as totals that capture expenditures over the entire five-year period. We estimate that the program costs to accommodate wait-listed participants would amount to an additional $146 million of spending in total over the five-year period. Of this, the state's share of the spending would be approximately $42 million over the five-year period. Using these numbers, we estimate that the expected total five-year economic impact of the expansion of the ADW program to be nearly $256 million. A gradual expansion of the program would increase jobs over time, resulting in support for approximately 1,140 jobs at the end of its five-year implementation period. These workers would earn a total of $108 million in employee compensation over the five-year period. The spending would generate approximately $5 million in state and local tax revenue from increased economic activity. As in the above scenario, this additional revenue that is generated to the state will, in effect, offset 11.5 percent of the $42 million that West Virginia would spend to expand the program over this period.

Table 8: Estimated Impact of Expanding the ADW: Five-Year Rollout

	2013	2014	2015	2016	2017	Total
Program Expenditures						
Per-participant Expenditure	$19,826	$20,483	$21,141	$21,799	$22,456	
Number of New Participants	453	905	1,358	1,810	2,263	
Total Expenditure (millions)	$9.0	$18.5	$28.7	$39.5	$50.8	$146.5
State Portion of Expenditure (millions)	$2.6	$5.4	$8.3	$11.4	$14.7	$42.4
Federal Portion of Expenditure (millions)	$6.4	$13.2	$20.4	$28.1	$36.1	$104.1
Economic Impact						
Business Volume (millions)	$15.7	$32.4	$50.1	$68.9	$88.8	$255.9
Employment	201	416	644	885	1,140	
Employee Compensation (millions)	$6.6	$13.7	$21.2	$29.2	$37.6	$108.3
Selected State and Local Taxes (millions)	$0.3	$0.6	$1.0	$1.3	$1.7	$4.9

4 Conclusions

The West Virginia Aged and Disabled Waiver program plays an important role in the state, both through the services it provides to the state's elderly and disabled populations, as well as its impact on the state's economy. At current levels of spending, we estimate that the program generates $285 million in economic activity in the state and supports more than 3,000 jobs annually. Because of federal matching funds, each dollar West Virginia spends on the program garners more than $2.5 of federal money, magnifying the impact of the program in the state's economy.

As the state considers expanding the ADW program, this study can provide insight into the expected impact of any new spending. We estimate that full expansion of ADW to accommodate everyone on the waiting list for the program will require the state to spend an additional $13 million in 2013, but it will create nearly $78.4 million in business volume and support 1,006 jobs. Also, this spending will return an additional $1.5 million in tax revenue to the government, offsetting the original expense by 11.5 percent.

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