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## Social Security Disability Insurance may Reduce Benefits by 2016: Population at Financial Risk from Reductions

#### **Carlos Siordia**

Postdoctoral Researcher, Graduate School of Public Health, University of Pittsburgh, PA, 130 N Bellfield Ave, Pittsburgh, PA 1512 (cas271@pitt.edu)

#### Abstract

In the United States (US), 10.9 million people receiving Social Security Disability Insurance (SSDI) benefit with an average pay of \$12,000 per-year. If the US House of Congress fails to enact a new bill by the end of fiscal-year 2016, SSDI benefits are estimated to be reduced by \$2,300 perperson per-year. In the pass, the US Congress has always found a way enact new bills capable of maintains benefits at existing levels. The specific aim of this project was to report the number of people potentially at risk for experiencing an economic impact if SSDI benefits are reduced. The cross-sectional analysis used data from the American Community Survey, 2009–2013 Public Use Microdata Sample file. Characteristics on a total of 153,627 actual survey participants were used to generalize findings to 2,748,735 residents of the US. Results indicate Non-Latino-Whites, the Pacific and South Atlantic geographic divisions are at the largest risk for being impacted by changes to SSDI benefits.

#### Keywords

poverty; minorities; aging; ACS; PUMS; federal benefits; insurance; policy

#### INTRODUCTION

Social Security Disability Insurance (SSDI) benefits help millions of people in the United States (US). The SSDI is managed by the Social Security Administration in the US but is not paid by Social Security taxes—it is funded by the US Treasury. SSDI provides financial benefits to US labor force participants who are unable to work due to a medical condition or to people age 65 and over without disabilities who meet the financial needs thresholds. Although SSDI provides important financial benefits, policies must be re-enacted in the US House of Congress by the end of fiscal-year 2016 to maintain current levels of assistance. Although the renewal of SSDI benefits is likely to occur, the SSDI program may find it difficult to meet long- or short-range test of financial adequacy. The SSDI Trust Fund reserves are declining and are expected to be depleted by 2016. These developments have urged legislators to address the SSDI component within Social Security's financial

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imbalances [1]. This report uses vies and methods from epidemiology, geography, and sociology to contribute toward policy discourse associate with SSDI benefits.

Reinstating financial benefits must be achieved while the SSDI faces fiscal-sustainability challenges. According to the Social Security Board of Trustees (SSBT), the SSDI trust fund is projected to be exhausted by 2016 [2]. In addition, reports provide some evidence of that a rapid expansion off SSDI recipients occurred in recent years [3]. The rapid increase in SSDI beneficiaries is sometimes presumed to be partially affected by changes in qualification protocols rather than actual needs in the population. For example, one study provided evidence that the worsening labor force may have played a role in inducing SSDI participation [4].

Although SSDI benefits offer financial protection to vulnerable populations [5], many have offered harsh criticisms of the SSDI system [6–8]. These financial concerns become even more precarious as the population structure of the US (i.e., aging of the population) shifts and Baby Boomers (people born between 1946 and 1964) enter their retirement age. In combination with population structure shits, the prevalence of disability in the population may increase in decades to come [9]. As a consequence, it is imperative that state and federal programs of financial generosity be maintained to provide fiscally responsible benefits to people in need [10]. This report sought to use the biggest national data source to identify, via demographics and geography, the largest concentration of people potentially at risk from SSDI benefit changes. It hopes to inform policy efforts seeking to maintain assistance for individuals who are truly in need.

Because there are no detailed tabulations of potential SSDI recipients by race and geographical location, the objective of this investigation was to identify the number of people at risk of experiencing financial impacts from plausible changes to SSDI benefits. Identifying the populations and geographical regions with the largest concentration of people at risk of being impacted by changes to SSDI benefits may inform public health, federal agencies, state governments, and policy makers.

#### METHODS

Analysis used the American Community Survey (ACS) Public Use Microdata Sample (PUMS) 2009–2013 five-year file. Data from the ACS informs US federal agencies how to allocate billions of dollars each year. For example, in 2008, population estimates from the ACS influence the distribution of \$562.2 billion in federal grants and \$520.7 billion in direct payments from federal agencies to local agencies [11]. The ACS is a nationally representative, large scale, transparent and valuable data source for estimating potential SSDI beneficiaries [12]. Although ACS data can be geographically referenced to Public Use Microdata Areas (PUMAs), the current analysis presents population estimates from sample data by geographic divisions used the US federal government. Figure 1 presents all 9 geographic divisions within the contiguous US.

In the US, "Medicaid" is public health insurance linked to states and "Medicare" health insurance comes from the federal government. Disabled people who are approved for SSDI

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benefits receive Medicare. According to existing policy, Supplemental Security Income (SSI) is paid to those with low-income, aged 65, blind, or disabled. Because the analysis used publicly available microdata files, three variables were triangulated to *conservatively* identify potential SSDI recipients: HINS3 (Medicare coverage); SSIP (SSI benefits in past 12 months to those aged 15); and DIS (disability status). This is a conservative estimation because it errs on the side of underestimating potential SSDI recipients rather than overestimating their population. The triangulation identifies people who are "very likely" to be SSDI recipients. In this approach, those aged 15 who were disabled and reported receiving Medicare health coverage and SSI benefits are labeled as potential SSDI beneficiaries. Internal Review Board is not required for using these de-identified data, which are readily available to anyone with an internet connection.

The sample provides an approximate count of the number of individuals who are very likely to be receiving SSDI benefits. The sample only includes people within the contiguous US, who are disabled and receive both Medicare and SSI (excludes potential spouses and/or children in family unit). A total of 153,627 actual survey participants were used from the more than 15 million observations in the microdata. When population weights are applied, characteristics on these observations can be generalized with caution to 2,748,735 individuals. Technical details on how to use ACS PUMS files are provided elsewhere [13–15]. According to the Master Beneficiary Record file and Social Security Beneficiary Statistics there were 10,988,269 "disabled workers and dependents" receiving disability insurance in 2014 (http://ssa.gov/oact/STATS/OASDIbenies.html). Clearly, the triangulation being used here is conservative in identifying potential SSDI beneficiaries.

Note all the comparisons from tables are "qualitative"—i.e., no attempt was made to determine if differences between groups or geography were statistically significant. This approach was undertaken to highlight the fact that population *estimates* are being derived from samples. More technically, information on 153,627 individuals is being used to generalize the characteristics of 2,748,735 people. This means that on average, each person is allowed to represent 18 other people—i.e., their demographic profile is replicated 18 times. As a result, population estimates are only scientifically derived approximations of what is truly occurring in the population [12]. Each of the estimates only represents the center point of a set potential estimates within some range of confidence (e.g., 95% confidence intervals) [13]. Ultimately, ascertaining the statistical significant of comparisons may be obstructive for informing policy formation—where high quality and easy-to-understand discussion may be most valuable.

#### RESULTS

A conservative estimated on the number of people who could be affected by changes in SSDI benefits is displayed in Table 1. At least 2,748,735 people in the US are at risk of being economically impacted by changes to SSDI benefits. About 20% of these individuals reside in the Pacific division and 18% in the South Atlantic division. The geographic area with the least (5%) concentration of potential SSDI beneficiaries is the New England division. As evident by Table 1, the distribution of risk from changes to SSDI benefits varies by geographic division. Geographical heterogeneity of people at risk for being impacted by

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changes to SSDI benefits is partially influence the concentration of older adults in large metropolitan areas (e.g., Los Angeles, California) and atmospherically warm states (e.g., Florida).

The sex and age distribution of the 2,748,735 individuals at risk of being impacted by any SSDI benefit changes is presented in Table 2. In both the Pacific (40%) and South Atlantic (33%) divisions, females age 65 and over make up the largest groups at risk of being impacted by changes to SSDI benefits. For most geographic divisions, both females and males age 64 and below are the largest age-group at risk of being financially impacted by potential changes to SSDI benefits. One exception is amongst females in the Pacific division, where those age 65 and over are larger than those of younger ages. Table 2 provides evidence that females and those of younger ages are groups with the greatest proportion of individuals at risk of financial impact from changes to SSDI benefits.

The ethnicity and race distribution of the 2,748,735 individuals at risk of being impacted by any SSDI benefit changes is presented in Table 3. The overwhelming amount of people at risk of being financially impacted from changes to SSDI benefits comes from the Non-Hispanic-White group. For example, 80% of those in the West North Central division are Non-Hispanic-White. Table 3 provides evidence that Non-Hispanic-Whites have the greatest proportion of individuals at risk of impact from changes to SSDI benefits.

Table 4 presents an example of how ACS PUMS data can be used to delineate geographic distribution of those at risk of being affected by SSDI benefit changes. From the 2,748,735 individuals, 504,055 (18%) reside in the South Atlantic division. Within this division, the state of Florida contains the larges (177,323) amount of people at risk of being impacted by any SSDI benefit changes. Within Florida, 50% are Non-Hispanic-White and 28% are Hispanic. Table 4 provides evidence that the proportion of individuals at risk of financial impact from changes to SSDI benefits may vary within division by state, race, and ethnicity.

#### DISCUSSION

The specific aim of the project was to identify the number of people at risk for experiencing an economic impact if SSDI benefits are reduced. Results indicate Non-Latino-Whites, the Pacific and South Atlantic geographic divisions are at the largest risk for being impacted by changes to SSDI benefits. As legislatures consider changes to SSDI benefits, they should seek mechanisms for notifying those at risk of being impacted. Both individual recipients and local state agencies should be made aware of how potential changes to SSDI could alter existing money flows from SSDI benefits. The US House of Congress is likely to find a solution for SSDI budgetary challenges by the end of 2016. This report seeks to contribute to the time-sensitive and rapidly growing debate on how to deal with challenges in the SSDI benefit system. Developing easy-to-understand information could help policy makers. If SSDI benefits are maintained, the federal fiscal deficit will continue to accumulate. If SSDI benefits are reduced, current socioeconomic challenges may be aggravated for financially vulnerable people and geographical regions in the US.

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U.S. Census Bureau Geographic Divisions.

#### Table 1

Actual and population-weighted counts of potential SSDI recipients by geographic division

	Unweighted Counts	Weighted Counts	% from 2,748,735
New England	7,232	133,508	5%
Middle Atlantic	22,041	396,970	14%
East North Central	21,099	375,951	14%
West North Central	9,009	160,084	6%
South Atlantic	28,114	504,055	18%
East South Central	8,968	157,596	6%
West South Central	18,822	331,639	12%
Mountain	8,819	151,624	6%
Pacific	29,523	537,308	20%
Total	153,627	2,748,735	100%

# Table 2

Estimates of potential SSDI recipients by sex, age, and geographic division

	Fen	nale	Ŭ,	ale	
	Age 64	Age 65	Age 64	Age 65	Row Total
New England	31%	28%	27%	15%	100%
<b>Middle Atlantic</b>	23%	38%	21%	18%	100%
East North Central	31%	27%	27%	15%	100%
West North Central	32%	25%	28%	14%	100%
South Atlantic	27%	33%	24%	16%	100%
East South Central	31%	31%	24%	14%	100%
West South Central	28%	33%	23%	16%	100%
Mountain	29%	28%	26%	17%	100%
Pacific	20%	40%	19%	21%	100%

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Estimates of potential SSDI recipients by sex, age, and geographic division

	N N	n-Hispaı	lic		
	White	Black	Other	Hispanics	Row Total
New England	73%	7%	7%	13%	100%
Middle Atlantic	57%	17%	8%	18%	100%
East North Central	70%	21%	5%	4%	100%
West North Central	80%	11%	7%	2%	100%
South Atlantic	54%	30%	5%	11%	100%
East South Central	71%	26%	2%	1%	100%
West South Central	45%	23%	6%	26%	100%
Mountain	62%	4%	12%	22%	100%
Pacific	47%	6%	22%	22%	100%

Potential SSDI recipients within South Atlantic division (n=504,055) by race and ethnicity

			Ž	n-Hispai	nic		
	Total	% from 504,055	White	Black	Other	Hispanics	Row Total
Delaware	7,054	1%	65%	24%	4%	7%	100%
DC	5,178	1%	10%	82%	4%	4%	100%
Florida 1	177,323	35%	50%	18%	4%	28%	100%
Georgia	81,583	16%	49%	44%	4%	2%	100%
Maryland	37,452	7%	48%	40%	%6	3%	100%
North Carolina	78,972	16%	57%	37%	5%	1%	100%
South Carolina	38,121	8%	51%	45%	3%	1%	100%
Virginia	53,038	11%	%09	31%	7%	2%	100%
West Virginia	25,334	5%	93%	3%	4%	1%	100%