Data & Methodology

Using data from the 2014 ACS I develop a probit model which generates a likelihood of a young person being employed from the noninstitutionalized population. Young person for the purpose of the bill is described as a person from 16-25 inclusive. The dependent variable is employed, which in the ACS takes on 4 categorical variables N/A, Employed, Unemployed, or Not in Labor force. I define employed as 1 if employed, 0 otherwise. The independent variables are education, family size, sex, race, and a categorical income variable. Figure 1 shows the distribution of family incomes with young people using the categorical income variable, and shows the categories. Using this model generates probabilities of a young person being employed. The distribution of employment status is shown in table 1. Tables 2-4 show the distribution by years of schooling, sex, and race. Table 5 shows the results of the probit regression. After the probit model is created predict is used to give the probability for each young person being currently employed. The universe of potential job applicants includes all not employed young people, that is, those unemployed and those not in the labor force. I run two different scenarios for distributing the jobs into each PUMA. First to those that are most similar to young people who already have jobs (the highest probability persons from the model) and second to those with the lowest likelihood of having jobs. This gives the potential range of the distribution of the jobs depending on how the state plans are implemented. Tables 6 and 7 shows how the jobs are distributed when assigned to those with the lowest probability, and tables 8 and 9 show how the jobs are distributed when assigned to those with the highest probability.

family income distribution of family heads with youth

Figure 1: family income distribution of family heads with youth in dollars

Table 1: Employment Status of Young People

	U 1	
Status	Number of Youth	% of Youth
Employed	21,956,925	53.71
Unemployed	3,688,257	9.02
Not in labor force	15,236,461	37.27

Table 2: Years of Schooling of Young People

	3	
Years of Schooling	Number of Youth	% of Youth
N/A or no schooling	177,859	.44
Nursery school to grade 4	50,950	.12
Grade 5, 6, 7, or 8	595,503	1.46
Grade 9	1,697,728	4.15
Grade 10	3,911,218	9.57
Grade 11	5,014,105	12.26
Grade 12	13,881,787	33.96

1 year of college	9,099,535	22.26
2 years of college	1,918,384	4.69
4 years of college	4,067,782	9.95
5+ years of college	466,792	1.14

Table 3: Sex of Young People

Sex	Number of Youth	% of Youth	
Male	20,791,906	50.86	
Female	20,089,737	49.14	

Table 4: Race of Young People

Race	Number of Youth	% of Youth
White	31,459,578	76.95
Black	6,610,882	16.17
American Indian/Alaska Native	430,638	1.05
Asian and/or Pacific Islander	2,281,313	5.58
Other race, non-Hispanic	99,232	0.24

Table 5: Result of Probit Model

	employed	
1bn.educ		0.263
	(39.48)**	
2.educ		-0.155
	(43.51)**	
3.educ		-0.865
	(257.78)**	
4.educ		-0.753
	(233.50)**	
5.educ		-0.432
	(135.45)**	
6.educ		0.35
	(110.98)**	
7.educ		0.455
	(143.69)**	
8.educ		0.698

	(211.33)**	
10.educ		0.723
	(223.59)**	
11.educ		0.61
	(158.66)**	
2bn.famsize		-0.783
	(851.46)**	
3.famsize		-1.104
	(1,229.65)**	
4.famsize		-1.188
	(1,280.30)**	
5.famsize		-1.22
	(1,210.10)**	
6.famsize		-1.213
	(1,020.05)**	
7.famsize		-1.236
	(801.25)**	
8.famsize		-1.239
	(592.22)**	
9.famsize		-1.231
	(442.13)**	
10.famsize		-1.137
	(293.46)**	
11.famsize		-1.33
	(235.34)**	
12.famsize		-1.204
	(187.95)**	
13.famsize		-1.256
	(130.15)**	
14.famsize		-1.51
	(101.35)**	
15.famsize		-0.965
	(45.98)**	
16.famsize		-1.581

	(48.14)**	
17.famsize		-1.868
	(45.47)**	
18.famsize		-1.347
	(39.20)**	
19.famsize		-3.16
	(30.31)**	
20.famsize		-0.611
	(10.26)**	
1bn.finccut		1.086
	(853.47)**	
2.finccut		1.527
	(1,455.41)**	
3.finccut		1.754
	(1,615.23)**	
4.finccut		1.913
	(1,724.54)**	
5.finccut		1.985
	(1,715.13)**	
6.finccut		1.744
	(1,066.37)**	
2.sex		-0.011
	(24.83)**	
2bn.racesing		-0.156
	(253.42)**	
3.racesing		-0.214
	(99.39)**	
4.racesing		-0.379
	(391.40)**	
5.racesing		-0.082
	(19.00)**	
2bn.statefip		0.079
	(17.34)**	
4.statefip		0.056

	(24.69)**	
5.statefip		0.078
	(27.69)**	
6.statefip		-0.117
	(63.44)**	
8.statefip		0.198
	(81.38)**	
9.statefip		0.077
	(28.09)**	
10.statefip		0.101
	(23.16)**	
11.statefip		-0.156
	(28.11)**	
12.statefip		-0.042
	(21.72)**	
13.statefip		-0.024
	(11.35)**	
15.statefip		0.281
	(74.17)**	
16.statefip		0.154
	(44.50)**	
17.statefip		0.002
		-0.75
18.statefip		0.183
	(79.27)**	
19.statefip		0.331
	(115.02)**	
20.statefip		0.189
	(66.60)**	
21.statefip		0.149
	(58.17)**	
22.statefip		0.043
	(17.37)**	
23.statefip		0.266

	(64.77)**	
24.statefip		0.044
	(18.78)**	
25.statefip		0.127
	(54.74)**	
26.statefip		0.096
	(45.31)**	
27.statefip		0.363
	(146.37)**	
28.statefip		-0.013
	(4.65)**	
29.statefip		0.187
	(79.37)**	
30.statefip		0.246
	(57.21)**	
31.statefip		0.314
	(91.51)**	
32.statefip		0.092
	(32.15)**	
33.statefip		0.238
	(61.28)**	
34.statefip		-0.021
	(9.53)**	
35.statefip		0.117
	(37.59)**	
36.statefip		-0.089
	(45.49)**	
37.statefip		0.052
	(24.66)**	
38.statefip		0.424
	(87.19)**	
39.statefip		0.195
	(92.95)**	
40.statefip		0.145

	(55.62)**
41.statefip	0.044
	(16.63)**
42.statefip	0.09
	(43.55)**
44.statefip	0.024
	(5.72)**
45.statefip	0.093
	(37.36)**
46.statefip	0.461
	(92.93)**
47.statefip	0.06
	(26.16)**
48.statefip	0.083
	(44.09)**
49.statefip	0.278
	(102.49)**
50.statefip	0.174
	(31.00)**
51.statefip	0.112
	(50.60)**
53.statefip	0.024
	(10.76)**
54.statefip	-0.051
	(15.06)**
55.statefip	0.315
	(130.77)**
56.statefip	0.319
	(58.02)**
_cons	-0.821
	(223.84)**
N	41,288,508
* p<0.05; ** p<0.01	

Table 6: lowest likelihood job distribution by sex and race

Job Recipient	Male Youth	Female Youth	White Youth	Black Youth	AI/AN Youth	Asian Youth	Other race
No			247,658,919				647,276
Yes	102,683	271,325	267,029	74,533	8,790	22,521	1,135

Table 7: lowest likelihood job distribution by income

Job Recipient	Family Inc 0-5k	Fam Inc 5-10k	10k-25k	25k-50k	50k-100k	100k-250k	250k+
0	12,532,897	10,789,787	43,540,353	68,839,446	92,411,667	69,803,697	11,837,625
1	274,332	43,732	32,848	16,413	5,210	1,192	281

107486 families out of poverty

Table 8: highest likelihood job distribution by sex and race

Job Recipient	Male Youth	Female Youth	White Youth	Black Youth	AI/AN Youth	Asian Youth	Other race Youth
No	151,740,785	158,451,150	247,702,798	41,663,870	2,698,204	17,480,939	646,124
Yes	111,655	262,353	223,352	83,747	12,415	52,211	2,283

Table 9: highest likelihood job distribution by income

		•					
Job Recipient	Family Inc 0-5k	Fam Inc 5-10k	10k-25k	25k-50k	50k-100k	100k-250k	250k+
0	12,675,312	10,783,057	43,482,914	68,796,771	92,383,987	69,797,431	11,836,000
1	132,567	50,418	90,010	58,902	32,778	7,434	1,899

75143 families out of poverty

Summary of Bill

The bill establishes a fund initially endowed with \$5.5 billion to be used by the Secretary of Labor to employ young americans. Young for the purpose of the act is defined as those in the ages of sixteen to twenty-four inclusive. \$4 billion gets used to provide summer and year round employment for low-income youth, while the other \$1.5 billion is used for competitive grants which are to be granted to local entities to carry out work based training and education to provide necessary skills to gain future employment. The \$4 billion dollars gets divided between states and then further between Public Use Microdata Areas (PUMA) within each state. .5% of the funds gets divided equally between the states, for the initial endowment this comes to \$20 million for each State. The remaining \$3 billion is divided between the states on the basis of the relative amount of youth to the overall amount of youth, the relative amount of unemployed relative to the overall unemployment level, and the relative number of disadvantaged young adults compared to the overall number. A disadvantaged young adult is one who is 16-24 and lives in a household whose income is one which does not exceed the higher of the poverty line for their family size, or 70% of the lower living standard income. The lower living standard income was established in the Workforce Innovation and Opportunity Act as a regional

minimum standard of living and is used in many other employment programs to determine eligibility. It helps alleviate some of the many problems with using the federal poverty line. After the money is allocated in this way to the states, the money is allocated within the State to each PUMA. The money is divided between PUMAs by calculating the relative number of youth, unemployed, and unemployed youth compared to the total for the state. For example the formula yields \$300 million dollars that go to California, then the formula allocates \$1.7 million to the Lancaster PUMA which has .41% of the State's youth and .43% of the State's unemployment.

While the money is allocated formulaically, the state's and local boards must submit plans for how they plan to correctly use the funds in order to receive the money. In general the funds must be made available to provide summer and year round employment opportunities for youth. The priority is to identify opportunities that are in emerging or in-demand occupations in the local area, in the public or nonprofit sector in order to meet community needs, or opportunities that lead to activities that will provide industry-recognized certificates or credentials. No more than 5% of the funds allocated to each area can be used for administrative purposes, the rest of the money must make its way into the hands of disadvantaged youth, which means more can be spent on administration duties if young americans are employed to do so. While the bill does not provide specifics on how each local area would identify or create these opportunities, past experience shows that administering programs like this through community colleges and workers centers has provided lasting impacts on the communities (Benner).

The allocation of the remainder of the funds, the \$1.5 billion in grants, would work differently. Here the bill specifies that in order to receive a grant the application must be in partnership with a chief elected official and the local board for the local area involved, or be an entity eligible for a grant under section 166 of the Workforce Innovation and Opportunity Act. Then the bill lists potential entities for partnerships, which also seems like likely candidates for groups that would administer the first \$4 billion. These include employers or employer associations, adult education providers or postsecondary educational institutions including community colleges, community-based organizations, joint labor-management committees, work-related intermediaries, and labor organizations that sponsor training or employment upgrade programs. In the applications specifics must be included for how the eligible entity will

provide unemployed low-income youth with skills that will lead to employment, along with a laundry list of other criteria which will help determine the ideas which would have the most impact, which in this sense means lifting the youth in America's most marginalized regions out of unemployment. The goal is to give unemployed young adults entry into, and retention in, unsubsidized employment and attainment of industry recognized credentials.

Conclusion

. tab poor [fweight=newperwt]

	poor	Freq.	Percent	Cum.
	•	 ,680,223	84.84	 84.84
1 47,110,327			15.16	100.00
Total 310,790,550)

. tab newpoor [fweight=newperwt]

newpoor	•	Percent	Cum.
0 263,74	1,117	84.86	84.86
1 47,049	9,433	15.14	100.00
+			
Total 310,7	790,550	100.00	

[.] egen moneyspent = sum(job_money*newperwt) if jobrecipient
(2984932 missing values generated)

. disp moneyspent[1]

4.004e+09

```
. tabulate job_money if familyhead [fweight=newperwt]
job_money | Freq. Percent Cum.
     0 | 134,978,048 99.72 99.72
   Total |135,359,416 100.00
. egen totalfam = sum(newperwt) if familyhead == 1
(1628547 missing values generated)
. egen p0 = sum(newperwt) if poor & familyhead == 1
(2777694 missing values generated)
. egen newp0 = sum(newperwt) if newpoor & familyhead == 1
(2778637 missing values generated)
. egen p1 = sum((povgap*newperwt)/povline) if familyhead == 1
(1628547 missing values generated)
. disp p1/totalfam
.09090795
. egen newp1 = sum((newpovgap*newperwt)/povline) if familyhead == 1
(1628547 missing values generated)
. disp newp1/totalfam
.08942542
. egen p2 = sum((povgap/povline)^2*newperwt) if familyhead == 1
(1628547 missing values generated)
. egen newp2 = sum((newpovgap/povline)^2*newperwt) if familyhead == 1
(1628547 missing values generated)
```

. disp p2[7]/totalfam[7]

.06774926

```
. disp newp2[7]/totalfam[7]
.06608817
. bysort sex: tab jobrecipient [fweight=newperwt]
-> sex = Male
jobrecipien |
    t | Freq. Percent Cum.
    0 | 151,863,785 99.93 99.93
   1 | 98,934 0.07 100.00
  Total |151,962,719 100.00
-> sex = Female
jobrecipien |
    t | Freq. Percent Cum.
-----+-----+------
    0 | 158,545,397 99.82 99.82
    -----+----+
  Total |158,827,831 100.00
. bysort racesing: tab jobrecipient [fweight=newperwt]
-> racesing = White
jobrecipien |
   t | Freq. Percent Cum.
-----+----+
    0 | 247,900,762 99.91 99.91
    1 | 232,372 0.09 100.00
  Total |248,133,134 100.00
```

-> racesing	j = Black			
jobrecipier t	Freq.	Percent		
0 41 1	,648,369 103,487	99.75 0.25	99.75 100.00	
		 66 100.0		
-> racesing				lative
•	Freq.	Percent 		
0 2, 1	,699,930 10,754	99.60 0.40	99.60 100.00	
		4 100.0		
-> racesing				der
jobrecipier t	Freq.	Percent		
		99.81 0.19		
Total ′	17,545,77	'3 100.0	00	
->				
•	Freq.		Cum.	
0	647,916	99.82 0.18		

```
. bysort finccut: tab jobrecipient [fweight=newperwt]
-> finccut = 0
jobrecipien |
    t | Freq. Percent Cum.
    0 | 12,528,094 97.79 97.79
    1 | 282,791 2.21 100.00
  Total | 12,810,885 100.00
-> finccut = 1
jobrecipien |
    t | Freq. Percent Cum.
-----+-----+-----
    0 | 10,788,585 99.57 99.57
    1 | 46,631 0.43 100.00
-----+-----
  Total | 10,835,216 100.00
-> finccut = 2
jobrecipien |
   t | Freq. Percent Cum.
    0 | 43,533,198 99.89 99.89
   1 | 47,178 0.11 100.00
  Total | 43,580,376 100.00
-> finccut = 3
jobrecipien |
    t | Freq. Percent Cum.
```

```
0 | 68,875,691 99.99 99.99
   1 | 4,493 0.01 100.00
-----+-----
  Total | 68,880,184 100.00
-> finccut = 4
jobrecipien |
   t | Freq. Percent Cum.
   1 | 275 0.00 100.00
-----+-----+
  Total | 92,479,260 100.00
-> finccut = 5
jobrecipien |
   t | Freq. Percent Cum.
   0 | 69,907,623 100.00 100.00
Total | 69,907,623 100.00
-> finccut = 6
jobrecipien |
   t | Freq. Percent Cum.
   -----+-----
  Total | 11,860,359 100.00
-> finccut = .
jobrecipien |
   t | Freq. Percent Cum.
```

0	436,647	100.00	100.00
+-			
Total	436,647	100.00	

end of do-file

. tab poor [fweight=newperwt]

	poor	Freq.	Percent	Cum.
0 263,680,223			84.84	84.84
1 47,110,327			15.16 	100.00
Total 310,790,550			100.00)

. tab newpoor [fweight=newperwt]

	•	Percent	Cum
0 264,05	51,538	84.96	84.96
1 46,73	9,012	15.04	100.00
+			
Total 310,	790,550	100.00	

- . egen moneyspent = sum(job_money*newperwt) if jobrecipient (2984881 missing values generated)
- . disp moneyspent[1]
- 4.004e+09

. tabulate job_money if familyhead [fweight=newperwt]

job_money	•		
-	978,048	99.72	
10500	381,368	0.28	100.00
+			

```
. egen totalfam = sum(newperwt) if familyhead == 1
(1628547 missing values generated)
. egen p0 = sum(newperwt) if poor & familyhead == 1
(2777694 missing values generated)
. egen newp0 = sum(newperwt) if newpoor & familyhead == 1
(2782518 missing values generated)
. egen p1 = sum((povgap*newperwt)/povline) if familyhead == 1
(1628547 missing values generated)
. disp p1/totalfam
.09091602
. egen newp1 = sum((newpovgap*newperwt)/povline) if familyhead == 1
(1628547 missing values generated)
. disp newp1/totalfam
.0902409
. egen p2 = sum((povgap/povline)^2*newperwt) if familyhead == 1
(1628547 missing values generated)
. egen newp2 = sum((newpovgap/povline)^2*newperwt) if familyhead == 1
(1628547 missing values generated)
. disp p2[7]/totalfam[7]
.06775827
. disp newp2[7]/totalfam[7]
.06749599
. bysort sex: tab jobrecipient [fweight=newperwt]
```

```
jobrecipien |
   t | Freq. Percent Cum.
-----+-----+------
    0 | 151,817,705 99.90 99.90
   -----+-----+
  Total |151,962,471 100.00
-> sex = Female
jobrecipien |
   t | Freq. Percent Cum.
-----+-----+------
   0 | 158,591,477 99.85 99.85
   1 | 236,602 0.15 100.00
-----+-----+------
  Total |158,828,079 100.00
. bysort racesing: tab jobrecipient [fweight=newperwt]
-> racesing = White
jobrecipien |
   t | Freq. Percent Cum.
-----+----+
    0 | 247,803,665 99.87 99.87
   Total |248,132,673 100.00
-> racesing = Black
jobrecipien |
   t | Freq. Percent Cum.
-----+----+
    0 | 41,711,674 99.90 99.90
```

1 | 40,472 0.10 100.00

-> sex = Male

Total 41,752,146 100.00
jobrecipien t Freq. Percent Cum.
+
Total 2,710,711 100.00
jobrecipien t Freq. Percent Cum.
0 17,538,172 99.96 99.96 1 7,741 0.04 100.00
jobrecipien t Freq. Percent Cum.
0 648,444 99.90 99.90 1 663 0.10 100.00
Total 649,107 100.00
. bysort finccut: tab jobrecipient [fweight=newperwt]
iobrecipien

t Freq. Percent Cum.	
0 12,805,289 99.95 99.95 1 7,034 0.05 100.00	
Total 12,812,323 100.00	
jobrecipien t Freq. Percent Cum. +	
0 10,699,199 98.75 98.75	
1 135,360 1.25 100.00	
Total 10,834,559 100.00	
jobrecipien t Freq. Percent Cum. +	
0 43,351,159 99.48 99.48 1 228,491 0.52 100.00	
+	
jobrecipien t Freq. Percent Cum. +	
0 68,869,963 99.99 99.99 1 10,169 0.01 100.00	
+	

```
jobrecipien |
   t | Freq. Percent Cum.
-----+----+-----
   1 | 314 0.00 100.00
-----+-----
  Total | 92,479,257 100.00
-> finccut = 5
jobrecipien |
   t | Freq. Percent Cum.
   0 | 69,907,623 100.00 100.00
-----+-----+------
  Total | 69,907,623 100.00
-> finccut = 6
jobrecipien |
   t | Freq. Percent Cum.
-----+-----+
   -----+-----+------
  Total | 11,860,359 100.00
-> finccut = .
jobrecipien |
   t | Freq. Percent Cum.
-----+----+
  0 | 436,647 100.00 100.00
  Total | 436,647 100.00
```