Lane v. Brown, No. 12-cv-00138-ST (D. Or.)

Expert Rebuttal Report of Andrew J. Houtenville, Ph.D.

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I. Background, Experience, and Compensation

In 1988, I received a Bachelor of Arts in Economics with Program Distinction from Richard Stockton College (then Stockton State College of New Jersey). In 1991, I received a Master's of Arts in Economics from the University of New Hampshire with a Concentration in Public Policy. In 1997, I received a Ph.D. in Economics with a Cognate in College Teaching from the University of New Hampshire. Upon completion of my Ph.D., I was a National Institute on Aging Post-Doctoral Fellow at Syracuse University from August 1997 to February 1999. After the post-doctoral fellowship, I took a position as Senior Research Associate at Cornell University, School of Industrial Labor Relations, Employment and Disability Institute, from March 1999 to December 2007, in which I was responsible for conducting economic research on the identification of the population with disabilities in national surveys and on the employment and economic well-being of persons with disabilities, as well as, grant writing and management. In the last two years at Cornell University, I was appointed the Associate Director of Research of the Employment and Disability Institute. From 2008 until the summer of 2009, I worked as a Senior Research Associate at New Editions Consulting, Inc. in McLean, Virginia, where I continued my research on disability matters and continued writing and managing grants. In August 2009, I began my current position as an Associate Professor of Economics and Director of Research for the Institute on Disability at the University of New Hampshire, receiving tenure in June 2014. In 2009-2010, I held an Interpersonal Agreement with the National Institutes of Health, Clinical Center, and have held Special Sworn Status with the U.S. Census Bureau in order to access restricted data. My full curriculum vitae is attached to this Report.

Over the years, I've published extensively in peer-review publications on the employment of people with disabilities. I have been the Principal Investigator of four five-year center grants, funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR, formally the National Institute on Disability and Rehabilitation Research) and numerous small grants and subawards. I have sat on numerous review panels for NIDILRR. At the University of New Hampshire, I teach graduate and undergraduate econometrics.

II. Introduction

I was asked by the U.S. Department of Justice, Civil Rights Division, to review the report submitted by Dr. Timothy Duy on April 15, 2015 (Duy, 2015) and the expert disclosure of Ralph Amador, Budget Director with the Oregon Department of Human Services, Office of Budget/Planning /Analysis (Amador, 2015). Below I describe a number of concerns about the conclusions of these reports.

III. Duy Report

The major inference of Dr. Duy is that there are limited jobs available to low-skilled workers, and thus persons with intellectual and developmental disabilities, in Oregon and rural areas of Oregon. However, a major shortcoming of Duy's analysis is the lack of comparisons to other states. Employment disparities between people with and without disabilities is a national issue. Comparing the employment of persons with disabilities to the employment of persons in other

subpopulations within a state provides little additive information about conditions in that state or the ability of persons with intellectual or developmental disabilities to find jobs with the assistance of supported employment services.

When compared to other states, people with cognitive difficulties perform quite well in the labor market in Oregon. Table 1 contains three employment status statistics for noninstitutionalized civilians ages 18 to 64 years, by state and disability status for 2013.[1] The employment-to-population ratio is the percentage of the population that is employed. The labor force participation rate is the percentage of the population that is in the labor force, where the labor force is comprised of persons who are employed or not employed and actively looking for work in the last four weeks. The unemployment rate is the percentage of the labor force that is not employed and actively looking for work in the last four weeks.

There are concerns about interpreting unemployment rate differences across subpopulations and movements in the unemployment rate over time, because it may be due to differences or changes in the number of persons looking for work and/or differences or changes in the number of persons participating in the labor force. In the same speech cited by Duy (2015), Janet Yellen, Federal Reserve Chair (then Vice Chair) stated, "[a]lternatively, the [Federal Open Market] Committee might judge that the unemployment rate significantly understates the actual degree of labor market slack. A decline in the unemployment rate could, for example, primarily reflect the exit from the labor force of discouraged job seekers. That is an important reason why the Committee will consider a broad range of labor market indicators."

For similar reasons, I prefer to use the employment-to-population ratio, when considering employment outcomes of persons with disabilities. There are reasons to believe that the job search activities, retraining activities, and rehabilitation processes used by persons with disabilities, including persons with intellectual and developmental disabilities, may take longer than four weeks, and thus not be represented in the numerator or denominator of the unemployment rate.

The main results from Table 1 are as follows:

- The relative difference of the employment-to-population ratio (in Panel A) was 91.8 percent in Oregon, better than 35 other states, including Oregon's border states, Nevada (95.4 percent), Idaho (96.6 percent) Washington (99.4 percent) and California (105.2 percent).

- The relative difference of the labor force participation rate (in Panel B) was 76 percent in Oregon, better than in 34 other states, including Washington (80.8 percent) and California (87.9 percent).

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[1] These statistics are based on the same sources underlying Table 1b of the Duy report, the U.S. Census Bureau's American Community Survey. (Note that the 2013 Oregon unemployment rate for persons with cognitive difficulty is 24.3 percent in Table 1 and Duy's Table 1b.)

- The relative difference of the unemployment rate (in Panel B) was 98.2 percent in Oregon, slightly better than in California (98.4 percent) and smaller than in 42 other states, including Washington (113.6 percent) and Idaho (126.6 percent).

Taken together, these indicators suggest that persons with cognitive difficulties participate more and/or fare pretty well in the Oregon labor market, when compared to persons with cognitive difficulties in other states, including neighboring states. Using Duy's inference, this indicates that the availability of jobs and employment opportunities for people with cognitive difficulties in Oregon are better than in other states.

The same is true when focusing the employment of persons with cognitive difficulties in rural areas for which data is available. Table 2 contains employment status statistics for noninstitutionalized civilians ages 18 to 64 years, for the period 2011-2013.

- The relative difference of the employment-to-population ratio (in Panel A) was 103.5 percent in available rural counties in Oregon, better than in available rural counties in Washington (109.4 percent) and California (111.8 percent).

- The relative difference of the labor force participation rate (in Panel A) was 84.3 percent in available rural counties in Oregon, better than in available rural counties in California (89.2 percent) and Washington (90.2 percent).

- The relative difference of the unemployment rate (in Panel A) was 94.4 percent in available rural counties in Oregon, better than in available rural counties in all the bordering states, California (94.4 percent), Washington (95.8 percent), Nevada (101.8 percent), and Idaho (104.8 percent).

Taken together, these indicators suggest that persons with cognitive difficulties in rural areas in Oregon participate more and/or fare pretty well, when compared to persons with cognitive disabilities in the rural areas of neighboring states. Using Duy's inference, this indicates that the availability of jobs and employment opportunities for people with cognitive difficulties in rural Oregon are better than in rural areas in neighboring states.

Given the relative employment success of the population with cognitive difficulties in Oregon, it is surprising that the placement of persons with intellectual and developmental disability services in Oregon in supported employment is substantially lower than in Washington State. Table 3 contains the placements in individual supported employment, group supported employment, and sheltered workshops in Oregon and Washington for the period January 2014–March 2014. In Oregon, 2,675 persons were in a sheltered workshop at some point in this period, while in Washington, only 384 persons were in sheltered workshops at the end of this period. During this same period, 1,186 persons with intellectual or developmental disabilities in Oregon were in individual supported employment, compared to 5,571 in Washington. Given that Oregon has more favorable employment indicators as described above, Washington's experience demonstrates that the economic factors cited by Dr. Duy have not been, and need not be, a barrier to providing integrated employment to persons with intellectual and developmental disabilities.

Lastly, Duy provides a description of the Oregon business cycle (periods of recession, recovery, economic growth). He provides the estimated job openings and unemployment rates trends in Oregon for two industries, retail trade and accommodations/food services. Persons with intellectual or developmental disabilities in supported employment were more likely (in 2013) to be in employed in these two industries, according to Graph 3 of the January 2014 Employment First Report. In contrast, the persons in workforce overall were more likely to be in employed in health/education services and manufacturing. Duy does not provide a comparative analysis of trends in retail trade and accommodations/food services and trends in other industries. Figures 1 and 2, below, show the national trends in unemployment rates and job openings for these four industries. While all four of these industries recessed substantially in the Great Recession, manufacturing was impacted more substantially than retail trade and accommodations/food services. Furthermore, Oregon has experienced substantial job growth over the past five years. As of this year, all of these industries, with the exception of manufacturing, have now returned to their 2007 peak as measured by the number of job openings, demonstrating that there has been a recovery in jobs in which most supported employment placements have occurred. Duy's report lacks any analysis as to whether supported employment placements were causally linked to these economic trends. Duy's report also does not explain how other states increased supported employment placements under similar economic conditions. These are major shortcomings of Duy's analysis.

IV.   Opinion Disclosure of Ralph Amador

I was also asked to review the budget models in Amador (2015), entitled "Cost Modeling of the Impacts of Executive Order 15-01 [EO] and Rhode Island Settlement Scenario [RI]." Amador Exhibit B1 describes and summarizes the ODDS costs under the two budget models developed by Mr. Amador and other State officials. Table 4 describes the key elements of the two models and highlights how they differ from one another, including certain anomalies between the two models that are not identified in the disclosure statement accompanying these tables. Table 5 runs through a series of exercises to understand the impact of these differences. Appendix Tables 1–10 contain the calculations underlying Table 5. I also reviewed the costs models for the VR services provided to ODDS clients.

As described in Table 4, the two budget models contain significant differences with regard to (1) the start dates of the program and program phases, (2) the number of clients in the initial month, (3) changes over time in the number of clients served, (4) the total number of clients served, (5) the rates charged for supported employment services, and (6) anomalies in the calculations of cost. Some of these differences appear for sheltered workshop clients and transition age clients differently. See Table 4 for more detail.

Table 5 provides the General Fund ODDS expenditures over nine years for both models when adjusting for the anomalies described in Table 4 and then looking at several scenarios to understand the impact of differences between the two models. The first row of the table contains the amounts in Amador Exhibit B1: $55,193,947 for EO and $325,733,936 for RI. In the EO model, after addressing the fact that there were zero ISE clients in September 2020, which effects all subsequent months, EO expenditures become $55,232,093. Subsequently, removing

the 75 percent reduction in discovery costs from July 2017 and onward, EO expenditures become $57,608,596.

After addressing the anomalies identified above, the expenditures are $57,608,596 for the EO Model and $171,649,457 for the RI Model. The largest change for the RI model comes when an unknown source of clients (that is inconsistent with the number of clients entering job discovery) is removed from the calculations.

In the RI model, after addressing the fact that there were zero ISE clients in August 2020, RI expenditures become $325,723,833. Subsequently removing the unknown source of ISE clients, the RI expenditures become $171,649,457.

Given this new baseline, the total number of clients served under the EO Model is 7,990 clients entering discovery, with 7,080 clients in individual supported employment at an average of 10 hours/week by June 2025. The RI model serves a total of 9,848 clients entering discovery, with 8,588 clients served in individual supported employment at an average of 20 hours/week by June 2025.

Working from this new baseline, if the start dates of the RI model are set to match the start dates of the EO model, then the RI expenditures are lowered to $146,829,223. If the number of clients of the RI model are set to match the number of clients in the EO model, then the RI model expenditures are $156,221,208. If both the start dates and the number of clients served are made equal, then the RI model expenditures are $136,375,424.

Furthermore, the EO model has clients working 10 hours a week in individual supported employment, as opposed to 20 hours under the RI model. The EO model does not take into account the cost to the State to provide day services to clients served under the EO model for the other 10 hours a week when they are not working. Based on information in Amador (2015), the average hourly rate for sheltered workshop services is $11.94 per hour. Because the rate for sheltered workshops is similar to that for facility-based day habilitation, I used this average to calculate the cost of the additional 10 hours of day services required for EO model clients. This increased the cost of the EO model to $78,191,059, which is conservative since it does not assume that clients would participate in community-based day habilitation, which is billed at a higher rate than facility-based programs (see ODHS, 2014).

Table 6 contains the nine-year General Fund budget estimates, combining ODDS services and VR services expenditures provided by Amador (2015) and when adjusted for the anomalies and setting the number and timing of clients to EO levels. The difference between the two models is reduced from $300,679,301 to $88,323,678. This represents the approximate cost, under the State's current rate model, to increase the average number of hours worked from 10 to 20 for the 7,080 clients the EO model expects to serve in individual supported employment by June 2025.

With regard to the costs of VR services provided to ODDS clients, there is a significant discrepancy between the two models that erroneously increases the difference in costs of VR services between the two models. For ODDS, the models compare the cost of serving a client in individual supported employment who works 10 hours a week (the EO model) and serving a client who works 20 hours a week (the RI model). For VR, by contrast, the model estimates the

cost to serve clients who achieve employment at 20 hours *or more*, and compares this not to the cost of persons who achieve employment at 10 hours a week, but rather to the average cost of all other clients with intellectual and developmental disabilities, the vast majority of whom are not placed in employment. This appears to have significantly increased the cost differential between the RI model and the EO model for VR services. The appropriate comparison would be between successful VR closures at 20 hours per week and successful closures at 10 hours per week.

Furthermore, some of the VR cost estimates appear to be based on a small number of clients, which could cause the problem of "influential outliers," where a few clients with extreme values cause the estimate to take on an extreme value. Amador has acknowledged that this is a problem where only a limited number of people receive services. In Exhibit A-4, Amador notes that there is only one client who achieved 20 hours of employment per week and who also received post-employment services. Amador noted that it would not be accurate to use the service costs of this one person to project average service costs for this population for this service. However, there are other examples where this issue may arise. For instance, the average monthly cost of post-employment services for sheltered workshop clients in the same period is based on only 17 clients (see Exhibit A-11 row 18). It is possible that a client or two with extreme costs could be influencing this average, since it is based on so few clients. Influential outliers can dramatically affect cost projections and need to be carefully considered.

Table 1. Employment status indicators, by state and disability status, among noninstitutionalized civilians ages 18 to 64 years, 2013 (percentages)											
Panel A: Employment			Panel B: Labor force participation			Panel C: Unemployment					
State (sorted in ascending order by relative difference)	Employment-to-population ratio		Relative difference**	State (sorted in ascending order by relative difference)	Labor force participation rate		Relative difference**	State (sorted in ascending order by relative difference)	Unemployment rate		Relative difference**
	Cognitive difficulty*	No disability			Cognitive difficulty*	No disability			Cognitive difficulty*	No disability	
North Dakota	48.6	83.1	52.4	North Dakota	52.3	85.0	47.6	Wyoming	5.3	4.9	7.8
South Dakota	42.2	83.0	65.2	Alaska	46.7	82.0	54.9	Rhode Island	19.5	8.6	77.6
Alaska	37.5	75.2	66.9	South Dakota	47.6	86.0	57.5	Alaska	19.8	8.2	82.9
Wyoming	38.4	79.4	69.6	Minnesota	45.5	86.4	62.0	New Mexico	21.4	8.6	85.3
Minnesota	37.3	82.1	75.0	Iowa	43.9	85.7	64.5	West Virginia	21.2	7.9	91.4
Iowa	37.2	82.1	75.3	Utah	40.7	80.4	65.6	D.C.	28.9	10.1	96.4
Utah	33.4	76.6	78.5	Wisconsin	42.4	85.1	67.0	Nevada	29.6	10.2	97.5
New Hamp.	32.9	80.3	83.7	Wyoming	40.6	83.5	69.1	Oregon	24.3	8.3	98.2
Wisconsin	32.5	80.1	84.5	Montana	39.6	81.6	69.3	California	27.9	9.5	98.4
Nebraska	32.9	82.6	86.1	New Hamp.	40.6	84.8	70.5	South Carolina	26.3	8.7	100.6
Montana	29.9	76.8	87.9	D.C.	38.8	81.7	71.2	New Jersey	26.2	8.5	102.0
D.C.	27.6	73.5	90.8	Connecticut	39.4	83.6	71.9	North Dakota	7.1	2.3	102.1
Kansas	29.6	79.0	91.0	Nevada	36.8	81.4	75.5	North Carolina	27.8	8.9	103.0
Connecticut	28.5	76.4	91.3	Idaho	36.2	80.2	75.6	Illinois	28.2	8.9	104.0
Colorado	28.7	77.3	91.7	Maryland	37.9	84.1	75.7	Delaware	26.2	8.2	104.7
Oregon	27.4	73.9	91.8	Colorado	37.1	82.6	76.0	South Dakota	11.3	3.5	105.4
Delaware	26.7	75.1	95.1	Oregon	36.2	80.6	76.0	Connecticut	27.8	8.6	105.5
Nevada	25.9	73.1	95.4	Massachusetts	37.3	83.8	76.8	Tennessee	26.2	8.1	105.5
Maryland	27.6	78.3	95.8	Nebraska	38.2	86.2	77.2	Nebraska	13.8	4.2	106.7
Virginia	27.1	76.9	95.8	Delaware	36.2	81.8	77.3	Michigan	29.7	9.0	107.0
New Mexico	24.6	70.1	96.1	Kansas	36.0	83.4	79.4	Kansas	17.7	5.3	107.8
Texas	26.1	74.7	96.4	New Jersey	35.1	82.0	80.1	Indiana	24.0	7.1	108.7
Idaho	26.2	75.2	96.6	Texas	34.2	79.9	80.1	Georgia	33.0	9.6	109.9
New Jersey	25.9	75.1	97.4	Virginia	35.0	81.9	80.2	New York	28.0	8.1	110.2
Massachusetts	26.8	77.9	97.6	Washington	34.2	80.6	80.8	Ohio	25.9	7.3	112.0
Washington	25.1	74.7	99.4	Illinois	34.2	82.3	82.6	Pennsylvania	26.8	7.5	112.5
Hawaii	25.2	75.7	100.1	Pennsylvania	33.7	81.8	83.3	Arkansas	26.5	7.4	112.7
Pennsylvania	24.7	75.6	101.5	Louisiana	32.0	78.0	83.6	New Hamp.	19.0	5.3	112.8
Illinois	24.5	75.0	101.5	New Mexico	31.3	76.7	84.1	Iowa	15.1	4.2	113.0
Rhode Island	24.9	76.3	101.6	Arizona	31.3	77.5	84.9	Colorado	22.7	6.3	113.1
Indiana	24.4	76.0	102.8	Hawaii	32.3	80.2	85.2	Mississippi	35.5	9.8	113.5
Ohio	24.3	75.9	103.0	Ohio	32.8	81.9	85.6	Washington	26.5	7.3	113.6
Louisiana	23.1	72.4	103.2	Indiana	32.2	81.8	87.0	Alabama	32.6	8.9	114.2
Oklahoma	23.4	75.2	105.1	California	30.6	78.6	87.9	Florida	33.0	9.0	114.3
California	22.1	71.1	105.2	Missouri	32.0	82.7	88.4	Texas	23.9	6.5	114.5
Missouri	23.9	77.1	105.3	Georgia	30.5	79.1	88.7	Minnesota	18.1	4.9	114.8
New York	22.1	73.3	107.3	New York	30.7	79.8	88.9	Virginia	22.6	6.1	115.0
South Carolina	21.9	72.7	107.4	Vermont	31.7	83.7	90.1	Utah	17.9	4.8	115.4
Arizona	21.4	71.3	107.7	Oklahoma	29.9	79.7	90.9	Missouri	25.4	6.7	116.5
North Carolina	21.5	73.5	109.5	South Carolina	29.7	79.6	91.3	Oklahoma	21.7	5.7	116.8
Michigan	21.0	73.4	111.0	Rhode Island	31.0	83.5	91.7	Hawaii	21.9	5.7	117.4
Georgia	20.4	71.5	111.2	Michigan	29.9	80.6	91.8	Arizona	31.7	8.1	118.6
Tennessee	19.9	74.1	115.3	North Carolina	29.8	80.7	92.1	Louisiana	27.9	7.1	118.9
(Continued)											

Table 1. Continued											
Panel A: Employment			Panel B: Labor force participation			Panel C: Unemployment					
State (sorted in ascending order by relative difference)	Employment-to-population ratio		Relative difference**	State (sorted in ascending order by relative difference)	Labor force participation rate		Relative difference**	State (sorted in ascending order by relative difference)	Unemployment rate		Relative difference**
	Cognitive difficulty*	No disability			Cognitive difficulty*	No disability			Cognitive difficulty*	No disability	
Maine	21.1	78.8	115.5	Florida	28.1	79.3	95.3	Massachusetts	28.0	7.1	119.1
Vermont	21.1	79.6	116.2	Maine	28.6	83.9	98.3	Maryland	27.3	6.9	119.3
Arkansas	19.0	72.7	117.1	Alabama	26.2	77.4	98.8	Wisconsin	23.5	5.8	120.8
Florida	18.8	72.2	117.4	Tennessee	27.0	80.6	99.6	Kentucky	30.9	7.6	121.0
Alabama	17.7	70.5	119.7	Arkansas	25.8	78.6	101.1	Montana	24.5	5.9	122.4
Kentucky	18.1	73.7	121.1	Kentucky	26.1	79.7	101.3	Maine	26.4	6.1	124.9
Mississippi	16.2	69.4	124.3	Mississippi	25.1	76.9	101.6	Idaho	27.6	6.2	126.6
West Virginia	16.0	70.6	126.1	West Virginia	20.3	76.7	116.3	Vermont	33.3	4.8	149.6

Source: Calculations using U.S. Census Bureau, American Community Survey 1-year Estimates, Table B18120.
* Cognitive difficulty - Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.
** The relative difference is the absolute difference between the cognitive difficulty value and no disability value, divided the arithmetic mean of these two values, times 100.

Table 2. Employment status indicators for individuals living in rural counties for which data is available*, by neighboring state and disability status, among noninstitutionalized civilians ages 18 to 64 years, 2011-2013 pooled (percentages)

	Panel A: Employment			Panel B: Labor force participation			Panel C: Unemployment		
State (sorted in ascending order by relative difference)	Employment-to-population ratio		Relative difference***	State (sorted in ascending order by relative difference)	Labor force participation rate		Relative difference***	State (sorted in ascending order by relative difference)	Unemployment rate		Relative difference***
	Cognitive difficulty**	No disability			Cognitive difficulty**	No disability			Cognitive difficulty**	No disability	
Idaho	27.4	71.9	89.6	Nevada	39.0	79.0	67.8	Oregon	30.1	10.8	94.4
Nevada	25.7	70.2	92.8	Idaho	36.0	77.6	73.2	California	35.5	12.7	94.6
Oregon	22.3	70.1	103.5	Oregon	32.0	78.6	84.3	Washington	31.5	11.1	95.8
Washington	19.8	67.6	109.4	California	29.2	76.2	89.2	Nevada	34.1	11.1	101.8
California	18.8	66.5	111.8	Washington	28.8	76.1	90.2	Idaho	23.7	7.4	104.8

Source: Calculations using U.S. Census Bureau, 2011-2013 American Community Survey 3-year Estimates, Table C18120.
* Rural counties were defined according to U.S Dept. of Health and Human Services, Office of Rural Health Policy (see ftp://ftp.hrsa.gov/ruralhealth/Eligibility2005.pdf). County-level employment statistics for those with cognitive difficulty are only available for counties with sufficient samples. The counties available were, for Oregon, Clatsop, Coos, Crook, Curry, Douglas, Hood River, Jefferson, Klamath, Lincoln, Malheur, Tillamook, Umatilla, Union, Wasco, for California, Amador, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Nevada, Siskiyou, Tehama, Tuolumne, for Idaho, Bingham, Blaine, Bonner, Cassia, Elmore, Jerome, Latah, Madison, Minidoka, Payette, Twin Falls, for Nevada, Churchill, Douglas, Elko, Lyon, Nye, and for Washington, Clallam, Grant, Grays Harbor, Island, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Whitman.
** Cognitive difficulty - Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.
*** The relative difference is the absolute difference between the cognitive difficulty value and no disability value, divided the arithmetic mean of these two values, times 100.

Table 3. Employment placements among individuals receiving intellectual and developmental disability services in Oregon and Washington, January 2014-March 2014
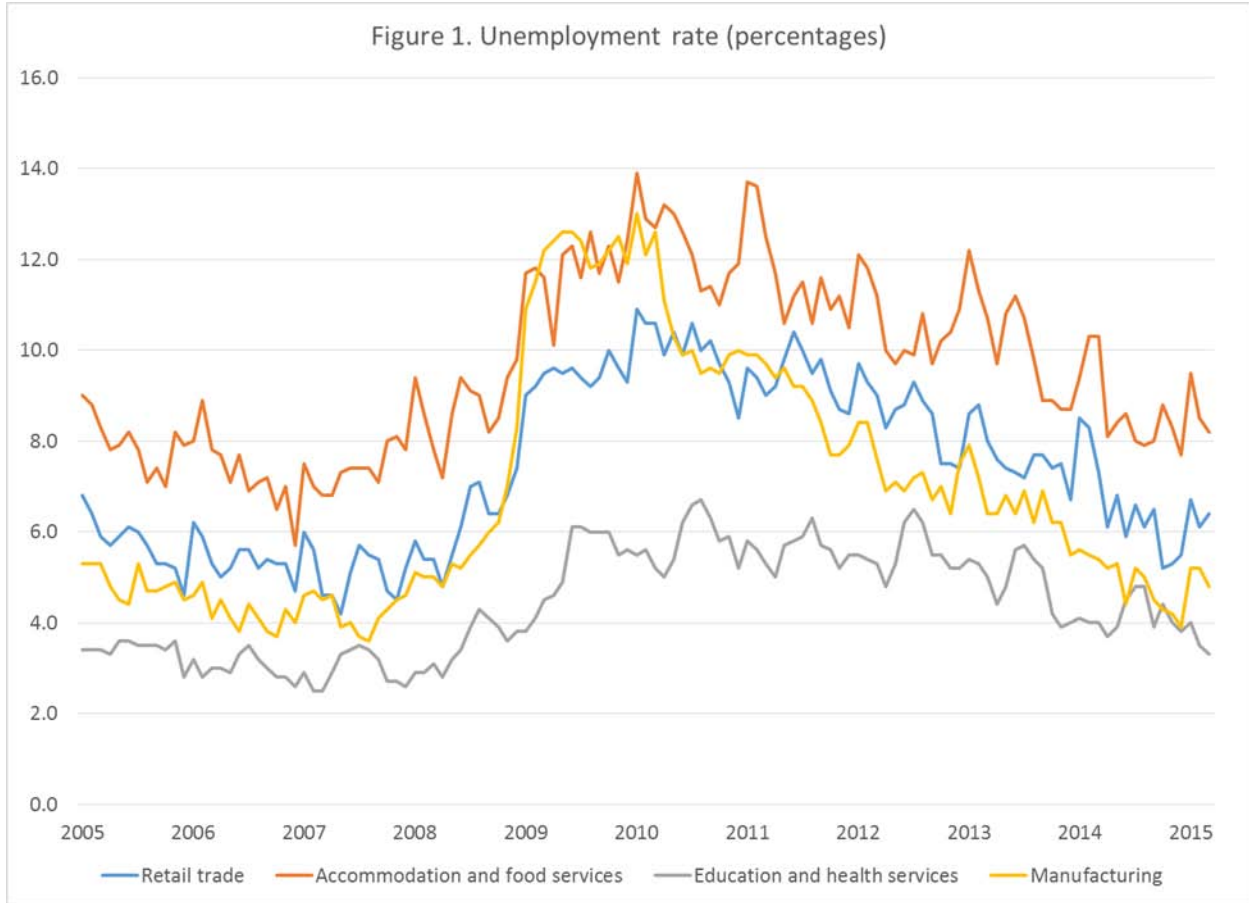
Placements	Oregon*		Washington**	
	Number	Share	Number	Share
Total	5,347	100.0	7,029	100.0
Individual supported employment	1,186	22.2	5,571	79.3
Group supported employment	1,486	27.8	1,074	15.3
Sheltered workshop	2,675	50.0	384	5.5

* Source: https://spdweb.hr.state.or.us/EOS/ORAll.aspx . Duplicated count. Individuals in Comprehensive service may access multiple services in the month.
** Source: Author's calculations using individual level file of Washington clients. Non-duplicated counts because the employment category is assigned based on an individual's category at the end of the period.
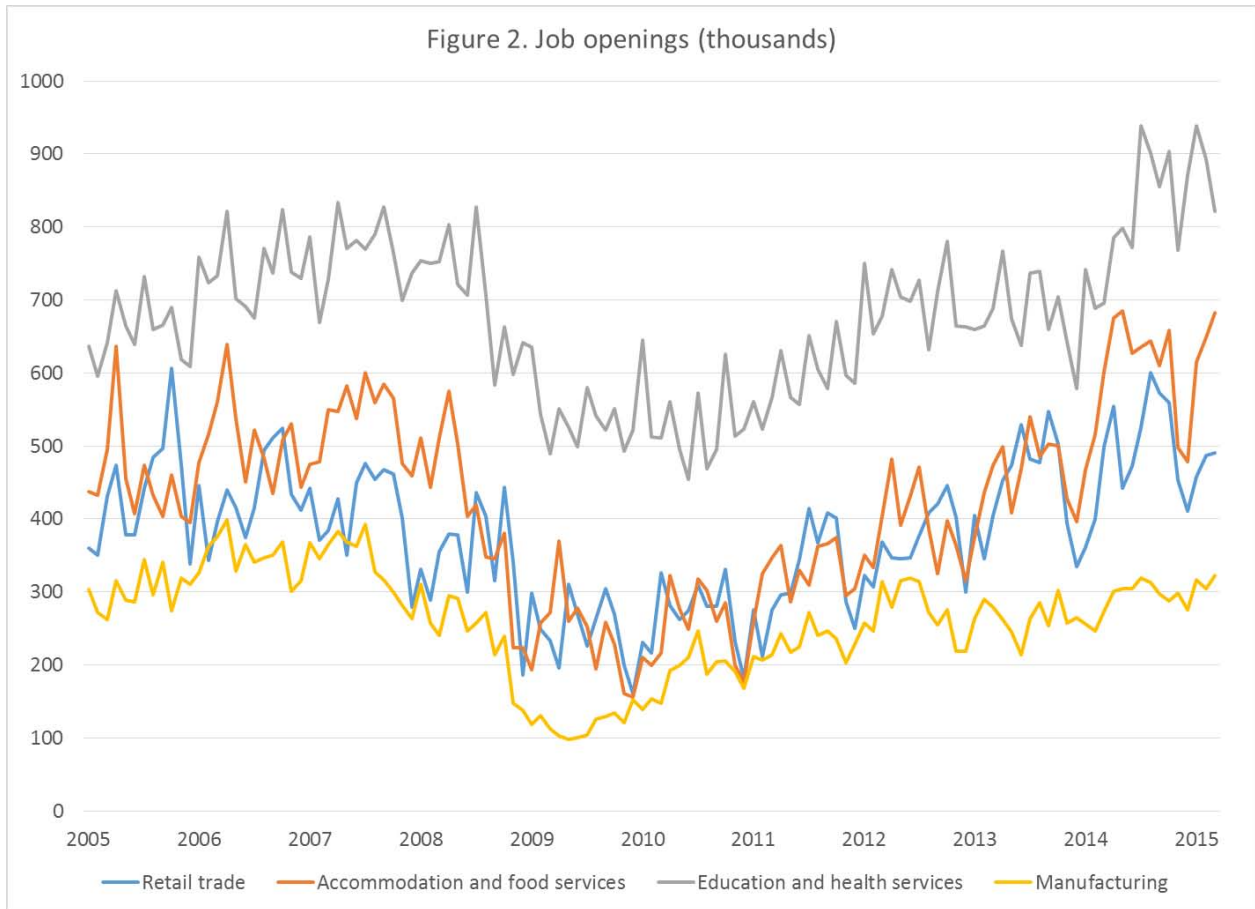
Table 4. Key elements in the ODDS cost models and how they differ (differences are highlighted)				
	Executive Order		Rhode Island	
Elements	Sheltered workshop	Transition	Sheltered workshop	Transition
Start dates				
- Discovery	August 2015	July 2015	July 2015	January 2016
- ISE	October 2016	October 2016	August 2016	February 2017
- 25/75 ISE	August 2015	July 2015	August 2018	February 2018
Number of clients, in start month				
- Discovery	49	35	30	35
- ISE	49	35	30	35
- 25/75 ISE	49	35	30	35
Change over time in number of clients				
- Discovery	Declines at a decreasing rate	Increases at a decreasing rate	Constant	Increases at a declining rate
- ISE	Increases then levels off	Increases then levels off	Increases then levels off	Increases then levels off
- 25/75 ISE	Builds steadily	Builds steadily	Builds steadily	Builds steadily
Number of clients, total				
-- Discovery	1,712	6,242	3,600	6,032
Number of clients, in last month				
- ISE	650		7,310	
- 25/75 ISE	6,394		6,338	
Rates (based on hours client obtains in ISE)				
- Discovery	Same in both models		Same in both models	
- ISE	Nearly half that of Rhode Island and no costs associated with other 10 hours		Nearly twice that of the Executive Order	
- 25/75 ISE	Half that of Rhode Island and no costs associated with other 10 hours		Twice that of the Executive Order	
Anomalies				
- Discovery	75% cost discount, starting in July 2017 / Zero clients in July 2015	75% cost discount, starting in July 2017		Zero clients in period July 2015 - Dec. 2015
- ISE	Zero clients in Sept. 2020, which affects all months going forward	Zero clients in Sept. 2016, which affects all months going forward / Small unknown source of clients starting in Sept. 2020	Large known source of clients, starting in August 2018	
- 25/75 ISE	Affected by issue directly above, starting in July 2021	Affected by issue directly above, starting in July 2021	Affected by issue directly above, starting in August 2020	

Table 5. Exercises to understand the impact of anomalies and differences on only ODDS general fund costs		
Exercises	Executive Order	Rhode Island
Baseline cost from Amador Exhibit B1	$55,193,947	$325,733,936
Address anomalies to create a new baseline		
- Zero clients issues	$55,232,093	$325,723,833
- 75% discount	$57,608,596	----------------
- Unknown sources of clients	----------------	$171,649,457
Simulations to understand the impact of differences		
- Assume RI has EO start dates	----------------	$146,829,223
- Assume RI has same # of clients as EO	----------------	$156,221,208
- Assume RI has same start dates and # of clients as EO	----------------	$136,375,424
Additional consideration		
- Add expenses for remaining obligation 10 of hours a week at $11.94 an hour (the Day Rehab. Rate)	$78,191,059	----------------

Table 6. Comparison of Combined Costs			
	Amador		
Model	VR	ODDS	Combined
EO	$117,182,886	$55,193,948	$172,376,834
RI	$147,322,199	$325,733,936	$473,056,135
Variance	$(30,139,313)	$(270,539,988)	$(300,679,301)
	Adjusted		
EO	$117,182,886	$78,191,059	$195,373,945
RI	$147,322,199	$136,375,424	$283,697,623
Variance	$(30,139,313)	$(58,184,365)	$(88,323,678)

Figure 1. Unemployment rate (percentages)

Source: U.S. Bureau of Labor Statistics.

Figure 2. Job openings (thousands)

Source: U.S. Bureau of Labor Statistics.