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*Barriers to Cross-State  
Mobility in the Teaching  
Profession: Evidence from  
Oregon and Washington*

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## **Barriers to Cross-State Mobility in the Teaching Profession: Evidence from Oregon and Washington**

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State-centered policies may create barriers to cross-state mobility in the teaching profession. However, we know very little about the extent to which these barriers impede mobility. In this brief, we describe features of Oregon's and Washington's teacher labor markets that may impose barriers to mobility, including licensure procedures, seniority rules, and pension structures. Using administrative data from Oregon and Washington, we identify large disparities between levels of within-state and cross-state mobility, which suggests there are significant barriers to mobility between Oregon and Washington. Even among school districts near the state border, almost three times as many teachers make a within-state move of 75 or more miles than make any cross-state move. Lowering barriers to mobility could have a positive influence on the national teacher labor market if it makes the profession more attractive, reduces attrition from the profession, and alleviates tightness (or slack) in local teacher labor markets.

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## Introduction

In principle, the teaching profession affords educators a great deal of flexibility in terms of job location—where there are children, there is demand for teachers. However, there are reasons to expect that the level of cross-state mobility in the teaching profession is low. States play a central role in defining teacher labor market policies related to licensure procedures, seniority in making personnel decisions, and pension plan structures. This policy brief describes how these state-centric labor market features can impose costs on teachers crossing state borders and presents evidence on the level of teacher mobility between Oregon and Washington.

What role barriers to cross-state mobility play in the teacher labor market is an important policy question, particularly in light of shortages of qualified teachers recently reported in states such as California.<sup>1</sup> Barriers to mobility might exacerbate teacher shortages and increase attrition from the profession in several ways. First, limits to locational flexibility may decrease the appeal of the teaching profession to prospective entrants. Second, barriers to mobility may also lead to a loss of teaching talent when in-service teachers opt out of the profession following a move to a new state. Finally, cross-state labor market frictions may inhibit labor market adjustments, whereby employees flow from areas of relative surplus to areas of relative scarcity.<sup>2</sup> In short, lowering potential barriers to mobility may have a positive influence on the teacher labor market, and to the extent that this is true, states may benefit from considering how to lower those barriers.

While there are reasons to expect teacher mobility is restricted by state policies, very little evidence is available. To the best of our knowledge, the analysis presented here is the first to track the mobility of two adjacent states' teachers across the state border.<sup>3</sup> To be clear, the novelty of this work is primarily due to data limitations; our interest in the topic is not new. For instance, others have pointed out that barriers to mobility may exacerbate teacher shortages and that better state-level data is need to fully understand the issue (e.g., Hare et al., 2000; Coggshall & Sexton, 2008).

## How do Features of the Teacher Labor Market Create Barriers to Mobility?

### Licensure Rules

In order to ensure a minimum level of quality, many professions require individuals to obtain licensure. States often have their own unique sets of licensure procedures and requirements, and the teaching profession is no different. Reciprocity eases movement from one state to another, but it is usually limited. States often do recognize initial (or beginning) teaching credentials awarded by out-of-state institutions as well as scores on some basic skills and subject-area exams, but professional (or continuing) teaching licenses from one state are *not* generally transferable to another.<sup>4</sup> Furthermore, a teacher must clear informational and procedural hurdles to take advantage of whatever reciprocity does exist. It can be difficult to verify which licenses and exams are granted reciprocity, and transferring a license or credential to a new state may require getting several institutions to communicate with one another. An in-service teacher who has invested significant

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<sup>1</sup> See, for instance, coverage of the issue by the New York Times: <http://nyti.ms/1OZ6kQ2>.

<sup>2</sup> There is evidence that the number of newly trained and credentialed teachers exceeds by a wide margin the number of teachers who ultimately enter the profession (Goldhaber et al., 2014).

<sup>3</sup> More detailed analysis is available in our working paper: <http://cedr.us/papers/working/CEDR%20WP%202015-5.pdf>

<sup>4</sup> Initial credentials tend to be valid for a limited period of time, after which a teacher must satisfy requirements for a professional license that is continuously renewable. Satisfying these requirements can be costly and time consuming.

amounts of time and money in satisfying one state's licensure requirements is likely to be reluctant to repeat the process in a different state.<sup>5</sup>

Like most states, Oregon and Washington have unique licensure requirements, and transferring between these states requires teachers to re-establish licensure. In both states, teachers must progress from an "initial license" held during the first several years of service to a "continuing license" that can be periodically renewed for the remainder of a career. Depending on when and where a teacher was initially licensed, continuing licensure requirements may consist of the accumulation of professional experience, engaging in professional development and continuing education activities, or the demonstration of proficiency in areas such as pedagogy and content knowledge.<sup>6</sup>

For teachers holding certain continuing licenses, Oregon and Washington do offer a degree of reciprocity. Specifically, Oregon recognizes Washington's Professional Certificate as being equivalent to its Continuing Teaching License (CTL), and Washington recognizes the CTL as being equivalent to its Professional Certificate. While this reciprocity may appear to make transitions between Oregon and Washington easy, it is important to keep in mind that many teachers in these states do not currently hold either license.<sup>7</sup> Oregon established the CTL in 1999 and made it optional in 2005, and Washington established the Professional Certificate in 2000. Teachers licensed outside of these dates do not hold transferable licenses.

### **Seniority-Related Administrative Policies**

Seniority policies may discourage teacher mobility because school districts frequently use seniority in making important personnel decisions and a teacher's seniority level is not typically transferable across state lines. The National Council on Teacher Quality (2014) finds that in most states seniority plays a prominent role in layoff decisions and collective bargaining agreements (CBAs) negotiated between teachers and districts tend to give more senior teachers priority in terms of internal transfers (Koski & Horng, 2007).<sup>8</sup> To the extent that an experienced teacher values these protections and advantages, any move that would result in a loss of seniority would be less desirable.

Both Washington and Oregon use seniority as an important criterion in personnel decisions. For instance, Oregon's teacher layoff policies require districts to first compile a list of available positions and qualified staff and then establish the seniority rank of teachers as a determining factor for retention. In Oregon, seniority is calculated as experience accumulated since the first day of service within *a single* school district. The implications for an Oregon teacher of moving to a different district would be the same whether that district was in Oregon or Washington.

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<sup>5</sup> There is anecdotal evidence that some states' licensure procedures can be onerous enough to discourage teachers from seeking a position in a new state. Darling-Hammond and Sykes (2003) cite a study by the California Commission on Teacher Credentialing that documents some of the frustrations reported by out-of-state candidates seeking teaching positions in California:

*...costs of courses and exams, confusion about how to complete the many and varied requirements, and redundancy with other requirements teachers had already met elsewhere. In a survey of out-of-state teachers who had received an initial permit to teach in California, credential requirements were the leading factor in decisions to leave the state (p. 40).*

And in Minnesota, ten teachers are suing the state over claims that barriers imposed by its licensure requirements are preventing well qualified teachers with out-of-state experience from working as public educators (Sawchuk, 2015).

<sup>6</sup> These requirements are discussed in more detail by Goldhaber et al. (2015).

<sup>7</sup> A different professional licensure option recognized by most U.S. states (including Oregon and Washington) is certification by the National Board for Professional Teaching Standards (NBPTS). Very few Oregon teachers hold this license, but nearly 10% of Washington teachers are NBPTS certified (Exstrom, 2011).

<sup>8</sup> For example, the most senior teachers in a district may have priority for applying to an open position and be the last subject to involuntary transfer (to a different school).

In contrast to Oregon, Washington calculates teacher seniority based on experience accumulated within the state rather than within a particular school district. State code allows districts to collectively bargain with their teachers' unions to set regulations on whether and how to use seniority in personnel decisions, but the vast majority of Washington school districts use in-state seniority as the primary factor in determining layoffs and decisions related to within-district transfers (Goldhaber et al., 2015). The prospect of losing the advantages associated with seniority would be an important consideration for a teacher weighing job opportunities within Washington against those across the border.

## Pension Structures

In most states, a large proportion of teacher compensation is paid as future retirement benefits in the form of defined benefit (DB) pensions managed by state-level retirement systems.<sup>9</sup> Under DB pension structures, benefits tend to accrue much more rapidly toward the end of a teacher's career—a pattern of compensation often referred to as “backloading”. As such, teachers who split careers between two different pension systems are likely to accumulate substantially less retirement wealth than would have been earned had they stayed in one system (e.g., Koedel, 2011). Depending on a teacher's level of experience, age, and career length, this can create a large financial incentive to remain teaching in a single state. Below, we briefly describe the Oregon and Washington teacher pension systems and explain why splitting a career between two DB pension systems will tend to generate a significantly less pension wealth than staying in one system.

One cost associated with splitting time between two DB pension systems is related to vesting rules: teachers who separate from a pension system before becoming vested (typically after 5 years of service) are not entitled to any defined benefit.<sup>10</sup> Teachers who split time between two pension systems are less likely to become fully vested than teachers who stay in one plan, and teachers with shorter careers (e.g. less than 10 years) may fail to become eligible for retirement benefits in either plan.

A second cost associated with splitting time between two DB plans is that it tends to leave the value of the first plan vulnerable to inflation. When a teacher exits employment under a DB plan, the *nominal value* of her DB annuity stays fixed. Therefore, the *real value* of that annuity will be eroded by inflation until the teacher begins retirement. For example, under 2.5% inflation, a \$20,000 annuity earned upon separating in the year 2000 would have a real value of less than \$14,000 if retirement began fifteen years later in 2015. In contrast, the annuity of a teacher who stays in one plan will be defined by her end-of-career salary, which will be more likely to have kept pace with inflation.

The third reason that switching pension systems tends to be costly is that retirement eligibility rules in many DB plans allow employees to retire at younger ages after crossing some threshold of experience (e.g., 30 years of service). Crossing that threshold tends to dramatically increase an employee's total pension wealth. Consider a teacher who has earned a \$40,000 retirement annuity and for the sake of simplicity, assume zero inflation. If the normal retirement age is 65 and she lives until age 85, she collects a total of  $\$40,000 * 20 \text{ years} = \$800,000$  in retirement benefits. Now suppose that she has accumulated 30 years of service and can retire early at age 60; she will collect her annuity for five additional years, increasing total nominal pension wealth by 25 percent (to \$1 million). Teachers who split time between two DB plans are less likely to be eligible for early retirement in one of those plans. Leaving one plan after 10 years, for example, would require 40 total years of service in public education to reach the threshold in the second plan. At that point, a teacher would likely be of normal retirement age and eligibility for early retirement would be irrelevant.

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<sup>9</sup> Lewin et al. (2012) report that among government and state employees, an average of 8.1% of compensation is paid in the form of retirement benefits. Among large private sector employers, that figure is 4.8%.

<sup>10</sup> Employees who leave a DB plan prior to becoming vested can typically withdraw their own contributions to the plan, plus interest.

The exact cost of splitting time between different pension plans depends on teacher characteristics and pension plan parameters. In Oregon and Washington, teachers are enrolled in one of several different plans depending on date of hire. Each of these plans has DB features, and each of the Oregon plans and one of the Washington plans are hybrid plans with both defined benefit and defined contribution (DC) features.<sup>11</sup> The DB component of each plan vests with 5 years of service (with the exception of Washington's hybrid plan, which vests after 10 years), and each plan includes a provision for early retirement eligibility with the accumulation of 30 years of service. While the hybrid plan structures ameliorate some costs associated with splitting time between Oregon and Washington, we find total pension wealth to be as much as \$100,000 lower (in present value terms) for a representative teacher who splits her 35 years between the plans currently available to new hires. The costs are particularly high if she fails to accumulate 30 years of service in either plan.<sup>12</sup>

### **Is There Evidence of Barriers to Cross-State Mobility?**

To assess the extent to which teachers in Oregon and Washington cross the state border we use longitudinal administrative datasets covering the periods of 2001-2014 in Oregon and 1997-2014 in Washington. These datasets allow us to identify two types of teacher mobility: 1) teachers who move from one district to another within the same state, and 2) teachers who move to a district across the Oregon-Washington border.

We identify remarkably few teachers who take a new teaching position across the state border. Among Oregon teachers holding a classroom teaching position, we identify just 7 out of every 10,000 teachers as moving from Oregon to Washington in any given year, and 3 out of 10,000 moving the other direction.<sup>13</sup>

Taken alone, these figures are not conclusive evidence of barriers to cross-state mobility. It is possible that individuals in the teaching profession are just not very mobile; if that is true, we might then expect very few teachers to switch districts within states. As it turns out, however, we find a large disparity between the likelihood of moving to a different district within state and the likelihood of moving to a district across the state border. The table below compares the rate at which teachers make within-state moves to the rate at which teachers make cross-state moves. Oregon teachers are 24 times more likely to move to a different district in Oregon than to move to a different district that is in Washington, and Washington teachers are 64 times more likely to make a within-state move than a cross-state move.

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<sup>11</sup> Under a defined contribution plan, employee and employer contributions are placed in a personal investment account, and an employee's pension wealth is determined by how much is contributed to her account and how well her investments perform.

<sup>12</sup> For more details about Oregon's and Washington's pension systems, as well as the pension wealth calculations referenced here, see Goldhaber et al. (2015).

<sup>13</sup> U.S. Census figures from 2013 indicate that among the general population in 2012, 73 out of every 10,000 Oregonians moved to Washington in the following year, and 43 out of every 10,000 Washingtonians moved to Oregon.

Percentage of Teachers Moving to a Different School District

	Oregon Teachers			Washington Teachers		
	All Districts	Border Districts	Portland MSA Districts	All Districts	Border Districts	Portland MSA Districts
Within-State Move	1.65	1.21	1.33	1.92	1.15	1.12
Cross-State Move	0.07	0.10	0.07	0.03	0.12	0.16
(Probability of Within-State Move) : (Probability of Cross-State Move)	24:1	12:1	19:1	64:1	10:1	7:1

One limitation of simply comparing the overall rates of within-state mobility and cross-state mobility is that school districts across the state border tend to be farther away than other school districts within the same state. Therefore, it is reasonable to assume teachers will be less likely to move to districts across the state border, even in the absence of barriers to mobility. To address this limitation, we compare rates of within-state and cross-state mobility among two groups of teachers: 1) those employed in school districts directly on the state border, and 2) those employed in school districts within the Portland-Vancouver Metropolitan Statistical Area (MSA), which straddles the state line. Among teachers in these districts, there remains a large disparity between within-state and cross-state mobility. These teachers are between 7 and 19 times more likely to move to a district within the state than to a district across the border. Washington teachers in the Portland-Vancouver MSA are 7 times more likely to move to another Washington district than to an Oregon district. This is particularly striking because there are many more teaching positions just across the border than there are nearby in Washington.<sup>14</sup> In fact, in the absence of barriers to cross-state mobility, one could reasonably expect Washington teachers in the Portland-Vancouver MSA to be *more* likely to switch to a district in Oregon than to a different district within Washington.

Another way to account for the extent to which the disparity between within-state and cross-state mobility is driven by the “localness” of the teacher labor market is to look at how many teachers make long-distance within-state moves. We calculate the linear (“as the crow flies”) distance of each district-to-district move and find that teachers are significantly more likely to move a long distance within state than to make a cross-state move. Almost three times as many teachers from districts on the state border or within the Portland-Vancouver-MSA make a within-state move of 75 or more miles than make any cross state move.<sup>15</sup>

## Discussion

We find evidence of significant barriers to cross-state mobility in the teaching profession, which should be of interest to policymakers. Reforms that lower barriers to mobility could have a positive influence on the national teacher labor market if they make the profession more attractive, reduce attrition from the profession, or help local labor markets to respond to tightness or slack in the supply of qualified teachers. Importantly, state governments are in a position to lower barriers, particularly those imposed by licensure rules and pension structures, which are generally defined by state-level policy.

<sup>14</sup> In Oregon, 33% of the observations in the study sample are located in the Portland Vancouver MSA. In Washington, only 5% in the Portland-Vancouver MSA.

<sup>15</sup> The estimated driving time (as reported by Google Maps) between Vancouver and Portland approximately 15 minutes.

Regarding licensure, there may well have been, and continue to be, reasons for each state to have a unique set of rules and procedures. However, it is unclear why establishing one set of licensure procedures at the national level would be problematic. Most states already recognize credentials earned at out-of-state teacher education programs. And the fact that National Board certification is accepted by a majority of states indicates that states are able to find common ground in terms of defining who is a “highly qualified teacher” (Exstrom, 2011). A national set of standards could also save taxpayers money by lowering expenditures associated with managing state-level licensure systems.

Regarding pensions, employer-sponsored pension plans are intended to provide teachers with a degree of financial security in retirement. Defined benefit (DB) plan structures in particular are thought to enhance retirement security by shielding members from investment risk. However, due to the backloaded structure typical of traditional DB plans, and the fact that roughly 70% of teachers exit the profession before accumulating 20 years of service, many teachers get “little bang for their buck” from those plans.<sup>16</sup> And as discussed above, those who make a mid-career move to a different state are likely to have significantly lower pension wealth than if they had stayed put.<sup>17</sup> By moving away from traditional DB pension structures, states may be able to lower what can be a very large cost associated with cross-state mobility without necessarily detracting from the retirement security of the teacher workforce.

We have discussed how three features of the teacher labor market may be discouraging cross-state mobility, but determining the relative importance of each of these features will require further analysis. Future work should also study patterns of teacher mobility along other state boundaries to understand the degree to which our findings generalize to other regions of the U.S.

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<sup>16</sup> For further discussion, see Aldeman and Johnson (2015).

<sup>17</sup> Costrell and Podgursky (2010) calculate that a teacher who enters the profession at age 25 and moves to a teaching position in a different state after her first 15 years of service will have net pension wealth that is 41% to 74% lower (depending on the state) than if she had stayed in state.



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