The Washington State Merged Longitudinal Administrative Database

Jennifer Romich
University of Washington

Mark Long

Scott Allard

Anne Althauser

Follow this and additional works at: https://repository.upenn.edu/admindata_conferences_presentations_2018

https://repository.upenn.edu/admindata_conferences_presentations_2018/51

DOI https://doi.org/10.23889/ijpdx.s3t.1066

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/admindata_conferences_presentations_2018/51
For more information, please contact repository@pobox.upenn.edu.
The Washington State Merged Longitudinal Administrative Database

Abstract
This paper describes a uniquely comprehensive database constructed from merged state administrative data. State Unemployment Insurance (UI) systems provide an important source of data for understanding employment effects of policy interventions but have also lack several key types of information: personal demographics, non-earnings income, and household associations. With UI data, researchers can show overall earnings or employment trends or policy impacts, but cannot distinguish whether these trends or impacts differ by race or gender, how they affect families and children, or whether total income or other measure of well-being change. This paper describes a uniquely comprehensive new administrative dataset, the Washington Merged Longitudinal Administrative Database (WMLAD), created by University of Washington researchers to examine distributional and household economic effects of the Seattle $15 minimum wage ordinance, an intervention that more than doubled the federal minimum wage.

WMLAD augments UI data with state administrative voter, licensing, social service, income transfer, and vital statistics records. The union set of all individuals who appear in any of these agency datasets will provide a near-census of state residents and will augment UI records with information on age, sex, race/ethnicity, public assistance receipt, and household membership. In this paper, we describe 1.) our relationship with the Washington State Department of Social and Health Services that permits this data access and allows construction of this dataset using restricted personal identifiers; 2.) the merging and construction process, including imputing race and ethnicity and constructing quasi-households from address co-location; and 3.) planned benchmarking and analysis work.

Comments
DOI https://doi.org/10.23889/ijpds.v3i5.1066

This presentation is available at ScholarlyCommons: https://repository.upenn.edu/admindata_conferences_presentations_2018/51
Washington Merged Longitudinal Administrative Database (WMLAD)

Jennie Romich
University of Washington
WMLAD

1. Origin
2. Construction
3. Plans
Project Funders:

- City of Seattle
- Russell Sage Foundation
- Laura & John Arnold Foundation
- Office of Planning, Research, and Evaluation, Administration for Children & Families (Allard, Hill, Romich)
- NICHD research infrastructure grant to the Center for Studies in Demography & Ecology

The opinions and conclusions expressed in the paper are those of the authors alone; opinions in the talk are mine alone.
How did the Seattle Minimum Wage Ordinance affect ______?

<table>
<thead>
<tr>
<th>Employment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and well-being</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How did the Seattle Minimum Wage Ordinance affect ______?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>✓</td>
<td></td>
<td>UI</td>
</tr>
<tr>
<td>Earnings</td>
<td>✓</td>
<td></td>
<td>UI</td>
</tr>
<tr>
<td>Household income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and well-being</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unemployment Insurance Data
How did the Seattle Minimum Wage Ordinance affect ______?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>![Yes]</td>
<td>![No] UI</td>
</tr>
<tr>
<td>Earnings</td>
<td>![Yes]</td>
<td>![No] UI</td>
</tr>
<tr>
<td>Household income</td>
<td>![Yes]</td>
<td>![No]</td>
</tr>
<tr>
<td>Poverty</td>
<td>![Yes]</td>
<td>![No]</td>
</tr>
<tr>
<td>Inequality</td>
<td>![Yes]</td>
<td>![No]</td>
</tr>
<tr>
<td>Health and well-being</td>
<td>![Yes]</td>
<td>![No]</td>
</tr>
<tr>
<td>Etc.</td>
<td>![Yes]</td>
<td>![No]</td>
</tr>
</tbody>
</table>

Differential effects across demographic groups
How did the Seattle Minimum Wage Ordinance affect ______?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>UI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>✓</td>
<td>UI</td>
</tr>
<tr>
<td>Earnings</td>
<td>✓</td>
<td>UI</td>
</tr>
<tr>
<td>Household income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and well-being</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Augment UI records to capture geography, household status, transfer income, race and ethnicity, and other measures.

Differential effects across demographic groups
Washington’s ICD
Washington’s ICD

Washington State Social and Health Services Integrated Client Database
Established and Maintained by the DSHS Research and Data Analysis Division

IDS CASE STUDY:
Washington State

Washington State’s Integrated Client Data Base and Analytic Capacity

by Erika M. Kitzmiller

APRIL 2014

ACTIONABLE INTELLIGENCE
FOR SOCIAL POLICY

University of Pennsylvania | 3701 Locust Walk, Philadelphia, PA 19104 | 215.892.5847  www.asip.upenn.edu
DSHS

- Capacity
- State agency status
- Enthusiasm
Construction: Components

- **Voter Registration**
  - Secretary of State

- **Drivers Licenses/State IDs**
  - Department of Licensing

- **Unemployment Insurance**
  - Economic Security Department

- **DSHS Client Records**
  - Dept. of Social & Health Services

- **Birth Records**
  - Department of Health

- **State Criminal Records**
  - State Patrol
Linking Identifiers

NOTE: DSHS will deliver de-identified data to UW

- **Voter Registration**
  - Secretary of State
  - Name, DOB, Address

- **Drivers Licenses/State IDs**
  - Department of Licensing
  - Name, DOB, Address, SSN

- **Unemployment Insurance**
  - Economic Security Department
  - Name, SSN

- **DSHS Client Records**
  - Dept. of Social & Health Services
  - Name, DOB, Address, SSN

- **Birth Records**
  - Department of Health
  - Name, DOB, Address

- **State Criminal Records**
  - State Patrol
  - Name, DOB, Address
Nov 20: Initial meeting with RDA to discuss available data and merge plan

Dec 2: Initial discussion with WSIRB administrator

Dec 20: Updated application sent to WSIRB for pre-review

Feb 13 - Mar 1: Initial meeting with DOL, ESD, and UW to discuss data sharing agreement

May 5: Appendix G signed by all state agencies

Jun 20: Confidentiality agreements all signed, project approved through June 2018

Aug 23: Meeting with WSIRB reviewers

Aug 9: Updated tri-party data-sharing agreement signed

Aug 7: WSIRB approves project, meeting to discuss next steps

Jul 6: Meeting with WSIRB reviewers

Jul 13: Final WSIRB application submitted

Oct 18: WSIRB delivers all files

Dec 5: Tri-party data-sharing agreement signed

Jan 31: State agency formal sign-off of data submitted

Jan 4: RDA begins work!

Dec 7: Statement of work and contracts with DSHS finalized

Nov 21: Statement of work and contracts with DSHS finalized

Dec 2015 - May 2016: Individual meetings with state agencies to discuss requested data and complete appendix Gs

July - Dec 2016: Negotiation of tri-party data-share agreement between DOL, ESD, and UW

Nov - Jan 2018: Re-budget requests submitted to funders to pay for $140k DSHS data merge work
Approximate overlap of "persons" (i.e., "Distinct Identity Groupings") in WMLAD datasets.
Plans: Benchmarking and Analysis

Assess the extent to which the merged administrative data includes the full population of Washington State residents.

<table>
<thead>
<tr>
<th>Washington State Population 2017 Census Estimate</th>
<th>WMLAD preliminary # of distinct identity groupings</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,405,743</td>
<td>10,681,902</td>
</tr>
</tbody>
</table>
Initial questions

• How did public assistance receipt change over the first few steps of the mandated wage increases?

• What was the impact of the Seattle Minimum Wage Ordinance on household income and poverty?
  • Also impacts on birth outcomes, state incarceration

• How did Seattle residents fare under Seattle’s transition to the $15 minimum wage?
  • Also, sex/gender groups, age groups, racial/ethnic groups, ex-offenders
WMLAD: Single shot?
Thank you.

romich@uw.edu