The Washington State Merged Longitudinal Administrative Database

Jennifer Romich
*University of Washington*

Mark Long

Scott Allard

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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 lacked 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
Washington Merged Longitudinal Administrative Database (WMLAD)

Jennie Romich
University of Washington
WMLAD

1. Origin
2. Construction
3. Plans
The opinions and conclusions expressed in the paper are those of the authors alone; opinions in the talk are mine alone.

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
How did the Seattle Minimum Wage Ordinance affect ______?

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

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<th>UI</th>
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<tbody>
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Differential effects across demographic groups
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</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 State Social and Health Services Integrated Client Database
Established and Maintained by the DSHS Research and Data Analysis Division

- Dental Services
- Medical Eligibility Medicaid, State Only
- Hospital Inpatient/Outpatient
- Managed Care Services
- Physician Services
- Prescription Drugs
- Hours
- Wages
- Births
- Deaths
- Homelessness
- Housing Assistance

External

Internal

WASHINGTON STATE
Department of Social and Health Services
INTEGRATED CLIENT DATABASE

- DSHS Aging and Adult Services
  - Nursing Facilities
  - In-Home Services
  - Community Residential
  - Functional Assessments

- DSHS Behavioral Health and Rehabilitation
  - Assessments
  - Detoxification
  - Opiate Substitution Treatment
  - Outpatient Treatment
  - Residential Treatment

- DSHS Children’s Services
  - Child Protective Services
  - Child Welfare Services
  - Adoption
  - Adoption Support
  - Child Care
  - Out of Home Placement
  - Voluntary Services
  - Family Reconciliation Services

- DSHS Developmental Disabilities
  - Case Management
  - Community Residential Services
  - Personal Care Support
  - Residential Habilitation Centers and Nursing Facilities

- DSHS Economic Services
  - Food Stamps
  - TANF and State Family Assistance
  - General Assistance
  - Child Support Services
  - Working Connections Child Care

- DSHS Juvenile Rehabilitation
  - Institutions
  - Dispositional Alternative
  - Community Placement
  - Parole

- DSHS Mental Health Services
  - Child Study Treatment Center
  - Children’s Long-term Inpatient Program
  - Community Inpatient Evaluation/Treatment
  - Community Services
  - State Hospitals State Institutions

- DSHS Vocational Rehabilitation
  - Medical and Psychological Services
  - Training, Education, Supplies
  - Case Management
  - Vocational Assessments Job Skills

Department of Social and Health Services | Planning, Performance and Accountability | Research and Data Analysis Division
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
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
NOTE: DSHS will deliver de-identified data to UW

Voter Registration
Secretary of State
Name DOB Address

Unemployment Insurance
Economic Security Department
Name SSN

Birth Records
Department of Health
Name DOB Address

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

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

State Criminal Records
State Patrol
Name DOB Address
December: Anticipated Delivery of all Files

- Nov 20: Initial meeting with RDA to discuss available data and merge plan
- Dec 20: Updated application sent to WSIRB for pre-review
- Aug 23: Meeting with WSIRB reviewers
- Aug 9: Updated tri-party data-sharing agreement signed
- Jan 31: State agency formal sign-off of data submitted
- June 7: WSIRB approves project, meeting to discuss next steps
- July 7: First draft of confidentiality agreement sent to UW
- Dec 5: Tri-party data-sharing agreement signed
- May 5: Appendix G signed by all state agencies
- Nov 23: First draft of WSIRB application submitted
- Jul 13: Final WSIRB application submitted
- Jul 6: Meeting with WSIRB reviewers
- Dec 2: Initial discussion with WSIRB administrator
- Jul 27: First draft of confidentiality agreement sent to UW
- Nov 21: Statement of work and contracts with DSHS finalized
- Jan 3: Confidentiality agreements all signed, project approved through June 2018
- Jan 4: RDA begins work!

- Dec 5 - May 2016: Individual meetings with state agencies to discuss requested data and complete appendix Gs
- July - Dec: Negotiation of tri-party data-share agreement between DOL, ESD, and UW
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Approximate overlap of "persons" (i.e., "Distinct Identity Groupings") in WMLAD datasets
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?
IDS Governance: Setting Up for Ethical and Effective Use

Actionable Intelligence for Social Policy, Expert Panel Report

Prepared by

Linda Gibbs, Amy Hawn Nelson, Erin Dalton, Joel Conner, Stephanie Stepp, and Delta Johnson

MARCH 2017
Thank you.

romich@uw.edu