

MINNESOTA'S DATA LANDSCAPE

Types of data systems

1. Population-level data

- Census data, American Community Survey
- Used by: MN Demographic Center, Wilder Research
 - Example: Number of people to eliminate the disparity between adults of color and whites working: <http://mspwin.org/indicators/indicator-2/#0-11984-g>

2. State data sets

- K-12
- Postsecondary
- Wage detail, at DEED
- SLEDS: K-12, postsecondary data, links with DEED wage detail, at OHE
 - <http://sleds.mn.gov/>
 - <http://mn.gov/deed/data/data-tools/graduate-employment-outcomes/>

3. Workforce program reporting systems

- Workforce One: program reporting at DEED
 - Reported on DEED report card: <http://mn.gov/deed/about/what-we-do/agency-results/perform-measures/report-card.jsp>. Connect to wage detail. Can match into SLEDS.
- Customer Registration System: customer information at One Stops, at DEED
- Private systems: MACC CommonWealth; other

4. Case management

- NAZ Connect

5. Continuous Improvement and analysis

- GTCUW benchmarking: comparing workforce program outcomes to 300 programs nationally
- GTCUW outcomes tool (via Tableau): pulls data from Workforce One (including wage detail) and allows providers to analyze with interactive tools
- Net impact evaluation – report completed by DEED every 4 years
- The Blueprint: Compilation of effective workforce practices that lead to good outcomes <http://mspwin.org/wp-content/uploads/2016/01/Blueprint-DRAFT-10-30-15.pdf>

6. Labor market information

- Bureau of Labor Statistics, DEED: employment and projections, job vacancy survey

7. Job postings, resume postings, real time, etc.

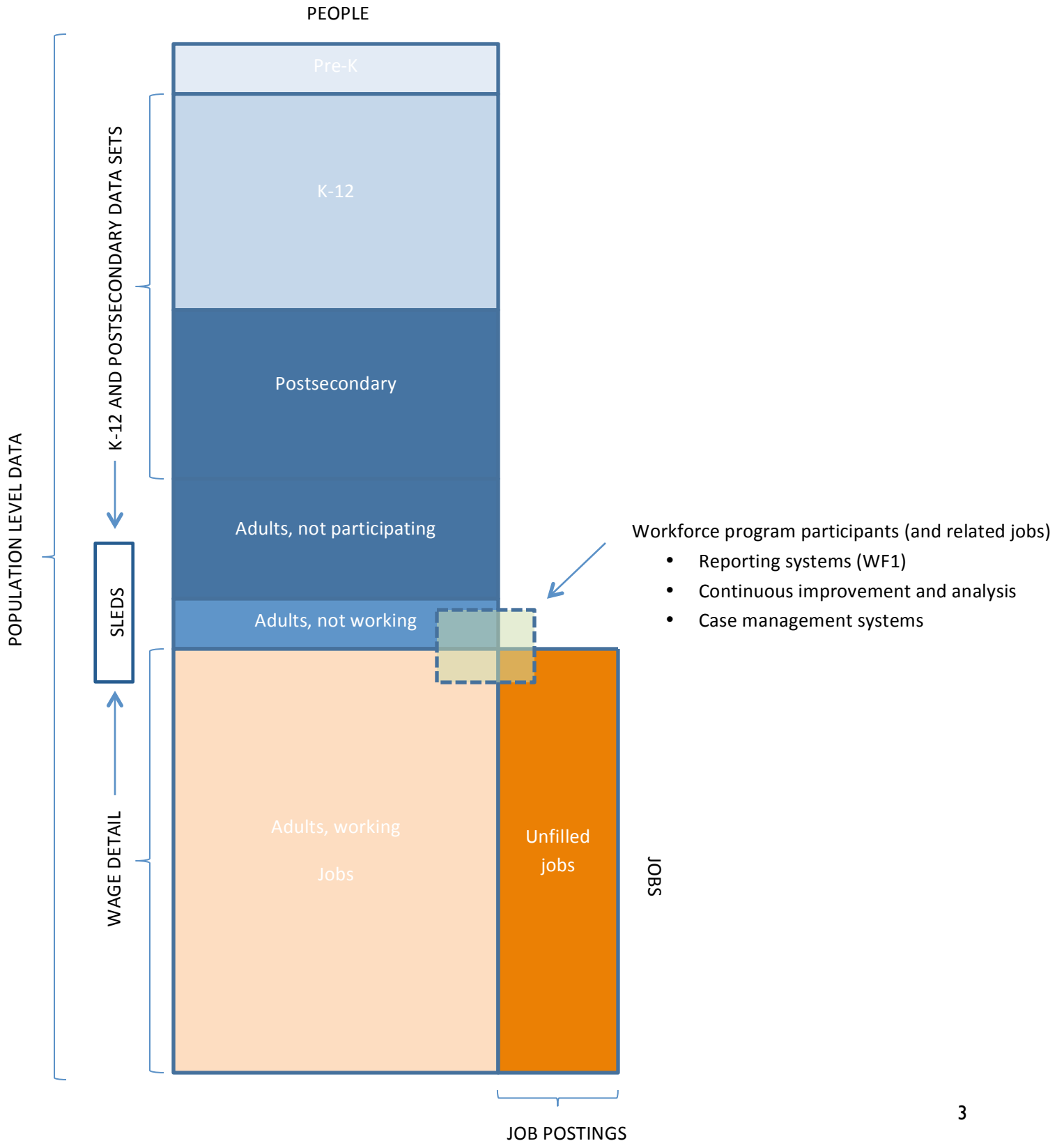
- Real Time Talent: Wanted Analytics
- Potential: Digerati's WorkFountain tool: job matching service
- MinnesotaWorks.net: DEED job board
- Career pathway/occupation progressions: MSPWin's analysis of occupation progressions and job postings/projections using BLS and Wanted Analytics <http://mspwin.org/wp-content/uploads/2016/01/MSPWIN-Career-Pathway-Maps-DRAFT-10-30-15.pdf>

8. Dashboards – A mix of population and program-level data

- MSP Regional Indicators Dashboard 2015
http://www.greatersp.org/clientuploads/Publications/Regional_Dashboard_Final.pdf
- Minnesota Dashboard – State of Minnesota <http://mn.gov/mmb/mn-dashboard/>

Rough conceptual of Minnesota's data landscape

Note: Concept only. Adults working and jobs are same box in visual but actual number between these two will vary (i.e. some people work more than one job). Other boxes may also have duplicate counts (i.e. some working adults are enrolled in postsecondary).



Q&A on various data systems

Workforce One (WF1)

1. What data does it collect and where is it located?

Client tracking system for Minnesota's state- and federally-funded workforce training programs. Data includes program enrollment, program activities, and program exit, along with comprehensive demographic, social and economic characteristics of participants. The data systems is maintained by MN.IT staff located at DEED.

2. What is purpose of this data system?

This is a client tracking system, developed by DEED and DHS, and used by 2,000 state, city, county, and non-profit employees to track employment and training services to more than 100,000 customers across Minnesota's counties and One Stop network.

3. Does this data system link to any other data systems?

WF1 establishes and enhances connections to other systems such as SWIFT (The State of Minnesota's accounting system) Minnesota Works (Minnesota's job bank), Unemployment Insurance, and Minnesota Department of Human Services' public assistance eligibility system (known as MAXIS) which allows case managers to make informed decisions about what services to offer.

- a. Do you have a recent real-life example of how this linkage occurs and the benefit?

A custom extract of WF1 data are loaded into SLEDS, to allow for evaluation of education and workforce linkages.

- b. Are more linkages planned?

4. Who manages this data system (agency/org and contact person(s))?

WF1 was created through a partnership of two Minnesota state agencies – the Department of Human Services (DHS) and the Department of Employment and Economic Development (DEED). Annie Tietema is the WF1 Product Owner and she may be reached at annie.tietema@state.mn.us.

5. What is underlying software of this data system?

WF1 is a web-based client management application. As a web application, WF1 is accessible to authenticated users anywhere with an Internet connection.

6. Who uses this data system regularly? Any other intended audiences?

WF1 is used by 2,000 state, city, county and non-profit employees to track employment and training services to more than 100,000 customers across Minnesota's counties and One Stop network. Program administrators, grant monitors, and performance management staff at DEED also use the data system to track programs and their outcomes.

7. Is there a place online or a handout where people can find out more about your data system?

Yes, see attached. (Will include the attachment in the version I send Bryan.)

Customer Registration System (CRS)

1. What data does it collect and where is it located?

Data includes volume and activities patterns of customers in the WorkForce Centers across Minnesota. Data on customer demographics (race, ethnicity, gender, age, educational status, veterans status, are also collected.

2. What is purpose of this data system?

Client tracking system for Minnesota's WorkForce Center customers, includes instances of services, computer usage, workshop registration and attendance.

3. Does this data system link to any other data systems?

CRS has some connections to MinnesotaWorks.net

- a. Do you have a recent real-life example of how this linkage occurs and the benefit?
 - b. Are more linkages planned?
4. Who manages this data system (agency/org and contact person(s))?

CRS is managed by DEED. Dave Niermann is the contact; he may be reached at david.niermann@state.mn.us.

5. What is underlying software of this data system?

CRS was created by Saturn; data are on Microsoft Windows 2003 server. Work will begin soon on replacing CRS with a new system called Cybrarian.

6. Who uses this data system regularly? Any other intended audiences?

CRS is used to generate federal Wagner-Peyser report, WIOA mandated Cost Allocation Process (CAPs) for the Minnesota WorkForce Center System, and other planning and evaluation. Program administrators and performance management staff at DEED also use the data system to track customer usage trends and their outcomes.

7. Is there a place online or a handout where people can find out more about your data system?

WorkForce Center and MinnesotaWorks usage statistics are updated monthly at:
<http://mn.gov/deed/data/research/mnworks-usage.jsp>

WorkForce Center (Job Service) annual report: <http://mn.gov/deed/images/job-service-annual.pdf>

MinnesotaWorks.net (MNW)

1. What data does it collect and where is it located?

MinnesotaWorks.net is the state's no-fee job matching system for job seekers and employers. MNW collects employer information (name, address, contact information) and job seeker information (name, address, education, email address, birthdate, military status, current employment status, migrant worker status, gender, ethnicity, race, and disability).

2. What is purpose of this data system?

This is a labor exchange system to provide employers a no-cost option to post jobs and search for potential employees, and job seekers to post resumes and search for jobs, and for the two parties to connect and fill current job openings.

3. Does this data system link to any other data systems?

MNW has some connections to WF1 and CRS.

- a. Do you have a recent real-life example of how this linkage occurs and the benefit?
 - b. Are more linkages planned?
4. Who manages this data system (agency/org and contact person(s))?

MNW is managed by DEED. Julie Toskey is the contact; she may be reached at julie.toskey@state.mn.us.

5. What is underlying software of this data system?

MNW is an internet-based, self-service system.

6. Who uses this data system regularly? Any other intended audiences?

Job seekers and employers are the intended audience of MNW. Job seekers can post up to five resumes to be searched by employers. They can also search for job openings and be contacted by e-mail when new job postings meeting their search criteria are found by the system. Employers can post job openings and search for job candidates, recruit job seekers online, and elect to receive emails when new resumes are found that match their requirements. Program administrators and performance management staff at DEED also use the data system to track customer usage trends and their outcomes.

7. Is there a place online or a handout where people can find out more about your data system?

WorkForce Center and MinnesotaWorks usage statistics are updated monthly at:

<http://mn.gov/deed/data/research/mnworks-usage.jsp>

MinnesotaWorks annual report: <http://mn.gov/deed/images/mnw-annual.pdf>

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SLEDS – as per Meredith Fergus

1. What data does it collect and where is it located?
 - K12, higher ed and employment data
 - Located at OHE
 2. What is purpose of this data system?

SLEDS brings together data from education and workforce to:

 - Identifying the most viable pathways for individuals in achieving successful outcomes in education and work;
 - Inform decisions to support and improve education and workforce policy and practice, and
 - Assist in creating a more seamless education and workforce system for all Minnesotans.
 3. Does this data system link to any other data systems?

Not sure what you are asking

 - a. Do you have a recent real-life example of how this linkage occurs and the benefit?
 - b. Are more linkages planned?
 4. Who manages this data system (agency/org and contact person(s))?

OHE, MDE and DEED
 5. What is underlying software of this data system?

Oracle DB, SQL server, in-house designed reporting platform
 6. Who uses this data system regularly? Any other intended audiences?

MDE, DEED, OHE

K12 schools & districts

Colleges & universities

Education and workforce researchers

Public
 7. Is there a place online or a handout where people can find out more about your data system?

Sleds.mn.gov
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For Benchmarking Network/ TA (it should be noted that this work is delivered by Corp. for a Skilled Workforce and cofunded by GTCUW, Phillips Family Foundation and Twin Cities LISC)

1. What data does it collect and where is it located? Agencies collect their own data, so varies by agency
2. What is purpose of this data system? To facilitate continuous improvement by collecting relevant “milestone” data (occurs during program participation)
3. Does this data system link to any other data systems? N/A
 - a. Do you have a recent real-life example of how this linkage occurs and the benefit?
 - b. Are more linkages planned?
4. Who manages this data system (agency/org and contact person(s))? Agency specific
5. What is underlying software of this data system? Agency specific
6. Who uses this data system regularly? Any other intended audiences? Individual agencies
7. Is there a place online or a handout where people can find out more about your data system? More information on the national Network is available here: http://benchmarking.skilledwork.org/?page_id=14

For GTCUW Outcomes Project:

1. What data does it collect and where is it located? Collects (consenting) participant-level data in WorkforceOne, where DEED can automatically match participant records with Unemployment Insurance payments from employers. Matched data is downloaded from WFI, cleaned and configured and then uploaded into Tableau files. Agencies receive their own program’s information, and can compare to the rest of the GTCUW portfolio in aggregate.
2. What is purpose of this data system? To provide access, in a user-friendly way, to wage detail information (UI payments) that verify employment and earnings for consenting participants. Provides agencies with participant-level outcome data over several years (4-5, depending on individual program length) in a format that is aligned with a continuous improvement mindset/framework.
3. Does this data system link to any other data systems? It pulls information from WFI and UI data systems housed at DEED.
 - a. Do you have a recent real-life example of how this linkage occurs and the benefit?
 - b. Are more linkages planned?
4. Who manages this data system (agency/org and contact person(s))? GTCUW, Rachel Speck and Devon Meade
5. What is underlying software of this data system? Tableau
6. Who uses this data system regularly? Any other intended audiences? Agencies, and GTCUW
7. Is there a place online or a handout where people can find out more about your data system? Not at the moment, but potentially at a later date.

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Wanted Analytics

1. What data does it collect and where is it located?

Wanted Analytics collects online job postings worldwide, pulling from over 25,000 different sources for just North America alone. It spiders to over 15,000 job boards and over 12,000 different corporate sites

and aggregates data on what employers are looking for in a new hire. Using custom designed algorithms and a user-friendly interface Wanted analytics organizes information into data that is valuable for planning and service delivery. Wanted Analytics has been collecting postings since 2005, currently storing over a billion individual job postings in a centralized database. Four year data is available by subscription to users and is searchable by:

- Date Range (up to current date and time)
- Geography (city, county, MSA, district, state, region, nation)
- Employer (direct, staffing, anonymous postings, contract, temporary, seasonal)
- Occupation (SOC), Industry (NAICS), Job Title, Function
- Requirements (certifications, education, skills, licensing)
- Experience Level (entry, mid, senior)

2. What is purpose of this data system?

Wanted Analytics is a real-time data tool focused on bringing up-to-the-minute labor market information to employers, regional planners, education, and those serving job seekers. It provides valuable information on the current hiring demand for certain positions and skill sets, giving a glimpse of which employers are currently recruiting, how they recruit for key positions, what their specific skill needs are, and where they advertise vacancies. Companies can compare their postings, median salaries, and qualifications to competitors and gain valuable recruiting insights. Wanted Analytics can also be used to understand what new skills, jobs, or fields are increasing in demand and where qualified candidates can be found. It can also scan a resume, job posting, competency pyramids, career pathways, or curriculum content and match job postings that have similar requirements.

3. Does this data system link to any other data systems?

Wanted Analytics includes third party data in the tool:

- All jobs are matched up to BLS SOCS as well as NAICS codes (updated annually)
- BLS Occupational Employment Survey data (including wage data and unemployment rates, updated monthly)
- Census Bureau data (American Family Survey, updated with each new release)
- US College and University Graduate data (a survey produced conjointly by the U.S Department of Education, the Institute of Education Sciences and the National Center for Education Statistics. They gather information through a direct survey sent to more than 7,500 institutions. This includes research universities, states colleges and universities, private religious and liberal arts colleges, community and technical colleges and non-degree-granting institutions.)

a. Do you have a recent real-life example of how this linkage occurs and the benefit?

Wanted Analytics uses the Standard Occupational Classification codes as defined by the most recent data available via the bureau of labor statistics, allowing for sorting positions by how they

would be classified by BLS or DEED. The site also allows for sorting by job function, skill, and other qualities, making it a very flexible tool that can adjust to an ever-changing market.

The Hiring Scale, a measure of difficulty to fill a particular position, is calculated using information from the online job postings in conjunction with monthly local unemployment rates and graduate data.

BLS wage data by occupation is published on Wanted Analytics to estimate annual salary for positions where there are too few postings for a position to establish a reliable median posted salary.

- b. **Are more linkages planned?** Uncertain, this is an internal process of CEB's development team.

4. Who manages this data system (agency/org and contact person(s))?

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Local Contact for user licenses and access:

Jess Niebuhr, Real-Time Talent jess.niebuhr@realtimentalentmn.org

5. What is underlying software of this data system?

Wanted Analytics pulls directly from over 25,000 different sources throughout North America and many more internationally.

6. Who uses this data system regularly? Any other intended audiences?

- WIBs use the data to help clients find jobs
- Government and employer associations use the data to help employers understand what is going on in their markets and to give advice on how to fill their jobs
- Some government and private businesses use the data to find leads for new business opportunities (e.g. government clients who are looking to partner with employers for certain programs and or initiatives)
- Employers use the data to compare recruiting practices of competitors
- Researchers use the data to report on current market conditions
- Education (K-12, higher ed, training organizations, certifications) for the elaboration of career pathways, curriculum development, and employer engagement

Currently, there are 85 Minnesota organizations with user agreements in Wanted Analytics.

7. Is there a place online or a handout where people can find out more about your data system?

www.wantedanalytics.com

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