

Nebraska Statewide Workforce & Educational Reporting System (NSWERS)
Executive Council Meeting
Monday, October 12, 2020
2:30 p.m.
Varner Hall Boardroom, 3835 Holdrege Street, Lincoln, NE 68583

Publicized notice of the Executive Council meeting was given by posting the date, time, and location on the NSWERS.org website.

1. CALL TO ORDER – President Dr. Susan Fritz called the meeting to order at 2:30 p.m.

1.1 Roll Call

Roll Call showed the following NSWERS members in attendance:

Dr. Susan Fritz, President
Dr. Paul Turman, Vice President
Dr. Paul Illich, Member
Dr. Matthew Blomstedt, Secretary/Treasurer

1.2 Announcement of the placement of the Open Meetings Act information

President Fritz announced that information regarding the Open Meetings Act is posted on the north wall in the Varner Hall Boardroom.

2. PUBLIC COMMENT PERIOD

No one appeared for public comment via ZOOM or in person.

3. PRESIDENT'S REPORT

3.1 Additions or corrections to agenda

No agenda items were removed, added or corrected.

3.2 Approve minutes of the previous meeting

Approval of the August 26, 2020 minutes passed with a motion by Dr. Matthew Blomstedt, second by Dr. Paul Illich.

Dr. Susan Fritz	Yea
Dr. Paul Turman	Yea
Dr. Matthew Blomstedt	Yea
Dr. Paul Illich	Yea

4. EXECUTIVE DIRECTOR'S REPORT

Dr. Matthew Hastings, Executive Director, NSWERS made two presentations on behalf of himself and the Management Team.

In the first presentation Dr. Hastings gave an overview of the envisioned framework that includes Strategy, Structure, System and Skills that included an 18-month StartUp Matrix that describes the goals and timeline of each. Dr. Hastings and the Management Team believe this will position NSWERS for success and a more comprehensive conversation will take place at the scheduled Workshop, October 21, 2020. Dr. Hastings and the Management Team look forward and encourage the Executive Council regarding to provide feedback to either presentation today. (See attached detailed PowerPoint presentation.)

The second presentation Dr. Hastings communicated to the Executive Council the importance of attaining an early data product and organizational proof of concept for NSWERS. This will provide a data visualization to promote inquiries and questions and identify educational gaps. Dr. Hastings and the Management Team recommend a Cohort Mapping of the Class of 2011. Cohort Mapping will simply and intuitively depict Nebraska's realized educational pathways from high school to college to 2 and 4-year institutions to the workforce. The results will invite questions and conversations about Nebraska's education-to-workforce continuum. (See attached detailed PowerPoint presentation.)

5. COMMITTEE REPORTS

5.1 Report from the Management Team

Please see presentations made by Dr. Matthew Hastings in Agenda Item 4.

6. EXECUTIVE SESSION (if needed)

No Executive Session held.

7. ACTION ITEMS

7.1 Approve Minutes of the Previous Meeting

Motion to approve the minutes of the previous meeting passed with a motion by Dr. Matt Blomstedt, second by Dr. Paul Illich.

Dr. Susan Fritz	Yea
Dr. Paul Turman	Yea
Dr. Matthew Blomstedt	Yea
Dr. Paul Illich	Yea

7.2 Approve Data Product Proof of Concept (POC) and related Data Collection from NSWERS partners

Motion to approve Data Product Proof of Concepts (POC) and related Data Collection from NSWERS partners passed with a motion by Dr. Paul Turman, second by Dr. Paul Illich.

Dr. Paul Turman	Yea
Dr. Susan Fritz	Yea
Dr. Paul Illich	Yea
Dr. Matthew Blomstedt	Yea

7.3 Approve Contract for POC Technical Support

Motion to approve Contract for POC Technical Support passed with a motion by Dr. Matthew Blomstedt, second by Dr. Paul Turman.

Dr. Matthew Blomstedt	Yea
Dr. Paul Illich	Yea
Dr. Susan Fritz	Yea
Dr. Paul Turman	Yea

7.4 Approve Engagement Letter to retain NSWERS Legal Counsel passed with a motion by Dr. Paul Illich, second by Dr. Matthew Blomstedt.

Dr. Blomstedt conveyed his appreciation of the efforts put forth by the Management Team to get to this point and this is a step forward for NSWERS.

Dr. Paul Illich	Yea
Dr. Matthew Blomstedt	Yea
Dr. Paul Turman	Yea
Dr. Susan Fritz	Yea

7.5 Table any action on the approval of NSWERS-NDOL Data Sharing Agreement until a future NSWERS Executive Council meeting passed with a motion by Dr. Paul Turman, second by Dr. Paul Illich.

Dr. Susan Fritz	Yea
Dr. Paul Turman	Yea
Dr. Matthew Blomstedt	Yea
Dr. Paul Illich	Yea

7.6 Approve Delegation of Signature Authority passed with a motion by Dr. Matthew Blomstedt, second by Dr. Paul Turman.

Council members discussed the importance of this as NSWERS moves forward to administer the organization and authorizes officers of NSWERS to execute all contracts and other documents related to the operations of NSWERS below \$200,000 upon approval of such action by the Executive Council.

Dr. Paul Turman	Yea
Dr. Susan Fritz	Yea
Dr. Matthew Blomstedt	Yea
Dr. Paul Illich	Yea

8. ADDITIONAL BUSINESS

No additional business.

9. SPECIAL PRESENTATIONS AND DISCUSSIONS

No special presentations and discussion.

10. INFORMATION ITEMS AND REPORT

No information items and reports.

8. ADJOURNMENT

Motion to adjourn the NSWERS Executive Council Business Meeting passed with a motion from Dr. Blomstedt, second by Dr. Paul Illich.

Dr. Matthew Blomstedt	Yea
Dr. Paul Turman	Yea
Dr. Paul Illich	Yea
Dr. Susan Fritz	Yea

President Fritz adjourned the meeting at 3:42 p.m.

A NSWERS Executive Council Workshop will be held on Wednesday, October 21, 2020 from 11 a.m. - 1 p.m. at the Center for Great Plains Studies, 1155 Q Street, Schorr Suite, 6th floor, Lincoln, NE.



Nebraska Statewide Workforce & Educational Reporting System (NSWERS)

Executive Director's Report

Matt Hastings, Ph.D.

October 12, 2020



Overview



STRATEGY



STRUCTURE



SYSTEM



SKILLS

Strategy

Core approach to accomplishing our goals.

Strategy

- Strategic Visioning Workshop
 - Who: NSWERS Executive + Management Council members
 - When: 11:00 a.m. – 1:00 p.m., October 21, 2020
 - Where: Center for Great Plains Studies
 - Schoor Suite, 6th Floor, 1155 Q Street, Lincoln, NE 68588
 - Masks required in this space, will be identified as a public meeting
 - Lunch provided
 - Goals:
 - Revise and/or reaffirm stakeholder input and use cases
 - Review additional feedback from Executive + Management Council members
 - Facilitate discussion towards establishment of Strategic Approach

Strategy

- NSWERS 18-Month Start-Up Matrix
 - Goals:
 - Provide a timeline of key NSWERS activities over the next six quarters
 - Position NSWERS for success
 - Upon the successful completion of these activities, at quarter six, prepared for “Implementation Phase” per NSWERS Interlocal Agreement
 - Framework utilized:
 - Strategy
 - Structure
 - System
 - Skills

Strategy

NSWERS 18-Month Start-Up Matrix

	October-December 2020 Quarter 1	January-March 2021 Quarter 2	April-June 2021 Quarter 3	July-September 2021 Quarter 4	October-December 2021 Quarter 5	January-March 2022 Quarter 6
Strategy						
Strategic Approach	Develop Strategic Approach (Vision, Mission, Principles, and Goals)	Publish Strategic Approach Develop NSWERS Strategic Plan (+ Objectives and Tactics)	Publish Strategic Plan Develop LB 1160 Report Approve FY 2021 Budget Develop Communications Strategy Provide Deliverables	Develop LB 1160 Report Approve Communications Strategy Provide Deliverables	Review Update Strategic Plan Update Publish LB 1160 Report Provide Deliverables	Publish Strategic Plan Update
Legislative Report (LB 1160)						
NSWERS Budget						
Communications Strategy						
Philanthropy						
Structure						
Executive Council	Meet Every Six Weeks	Meet Every Six Weeks	Meet Quarterly	Meet Quarterly	Meet Quarterly	Meet Quarterly
Advisory Committee	Identify Committee Members	Empanel Committee				
Membership	Define Roles/Responsibilities	Operationalize Roles/Responsibilities				
Roles/Responsibilities	Meet Weekly	Meet Bi-Monthly	Meet Monthly			
Management Council						
Working Groups						
Technology Group	Identify Work Group Membership	Empanel Work Group				
Research Group	Identify Work Group Membership	Empanel Work Group				
Legal Counsel	Identify and Secure Legal Counsel					
Interlocal Phase	Begin Interlocal Preparation Phase					Begin Interlocal Implementation Phase

Strategy

NSWERS 18-Month Start-Up Matrix

	October-December 2020 Quarter 1	January-March 2021 Quarter 2	April-June 2021 Quarter 3	July-September 2021 Quarter 4	October-December 2021 Quarter 5	January-March 2022 Quarter 6
System						
Define Responsibilities	Create Responsibility Matrix	Implement Core Package	Data Collection for Strategic Plan/Research Agenda			
Board Policies	Create Core Package	Implement Core SOPs	Create NSWERS Data Warehouse v1.0			
Standard Operating Procedures	Data Collection for POC		Publish Research Agenda			
Standard Data Collection	Create NSWERS Data Warehouse v0.1	Develop Research Agenda				
Data Warehouse						
Research Agenda						
Data Sharing Agreements	Develop/Execute Partners Data Sharing Agreement					
NSWERS	Develop/Execute NDOL Data Sharing Agreement					
NDOL						
Skills						
Staffing						
Tier One	Identify Tier One Staff	Onboard Tier One Staff	Onboard Tier Two Staff	Onboard Tier Three Staff		
Tier Two		Identify Tier Two Staff	Identify Tier Three Staff	Establish partnerships		
Tier Three			Identify partnerships for strategic efforts			
Partnerships						

* As of 10/12/20

Strategy

- NSWERS Early Data Product – Proof of Concept (POC)
 - Goals:
 - Develop a POC to identify needed and test existing NSWERS policies, processes and procedures
 - Promote efforts to garner continuous funding
 - Target Date:
 - January 1, 2021
 - Identified POC
 - Animated Visualization of Single HS cohort
 - Dependencies
 - Data sharing agreement between NSWERS partners / NSWERS and NDOL
 - Contract for professional services related to technical support

Structure

How our work is situated and coordinated.

Structure

- Securing NSWERS Legal Counsel
 - Needs:
 - Data sharing agreements:
 - Finalize data sharing agreement between NSWERS & NDOL
 - Create thoughtful agreement for data sharing between/among NSWERS partners
 - Contract template and review
 - Guidance related to the operations of interlocal administrative entity
 - We contacted and reviewed qualifications of recommended attorneys (4)
 - Recommend engagement with Karen Haase and KSB Law of Lincoln, NE

Structure

- NSWERS Executive Council
 - Business meetings established through June 2021
 - 2020 Dates
 - *Wednesday, October 21 @ 11:00 – 1:00
 - Monday, November 23 @ 1:00 – 3:00
 - Monday, December 21 @ 1:30 – 3:00
 - 2021 Dates
 - Monday, January 25 @ 2:30 – 4:00
 - Monday, March 8 @ 2:30 – 4:00
 - Monday, April 26 @ 2:30 – 4:00
 - Wednesday, June 9 @ 2:30 – 4:00



Structure

- NSWERS Management Council
 - Currently meeting weekly for 90-minute blocs
 - Additional meetings as needed
 - Beginning 2021 we will look to back off to bimonthly, as needed
 - Thank you!

Structure

- Other Committees
 - Advisory Committee
 - Executives from other stakeholders to make recommendations to the Executive Council
 - Meet to review progress and provide input to emerging reports, research agenda, and processes associated with the management of NSWERS
 - The intent is to extend participation and visibility to a larger stakeholder community who are potential users of the NSWERS research or have interest in the initiative
 - Panel of candidates being developed by Management Council to align with strategic approach/plan
 - Working Groups of the Management Council
 - Technology Group
 - Research Review Board

System

Processes used to add value.

System

- Working to establishing standard administrative operations
 - Organizational responsibility matrix
 - Identify at a high-level the roles and responsibilities for:
 - Executive Council
 - Management Council
 - Executive Director
 - NSWERS Staff
 - Executive Council/Board Policies
 - Standard Operating Procedures

System

- Core system components for NSWERS:
 - Standard Data Collection
 - Data Warehouse Design
 - Research Agenda
 - Related necessary legal structures
- By design, create system informed by strategic approach and plan
 - Parallelism
 - Pilot system components by leveraging POC processes
 - Scale up to meet strategic goals, once codified



Skills

The capabilities of our organization.



Skills

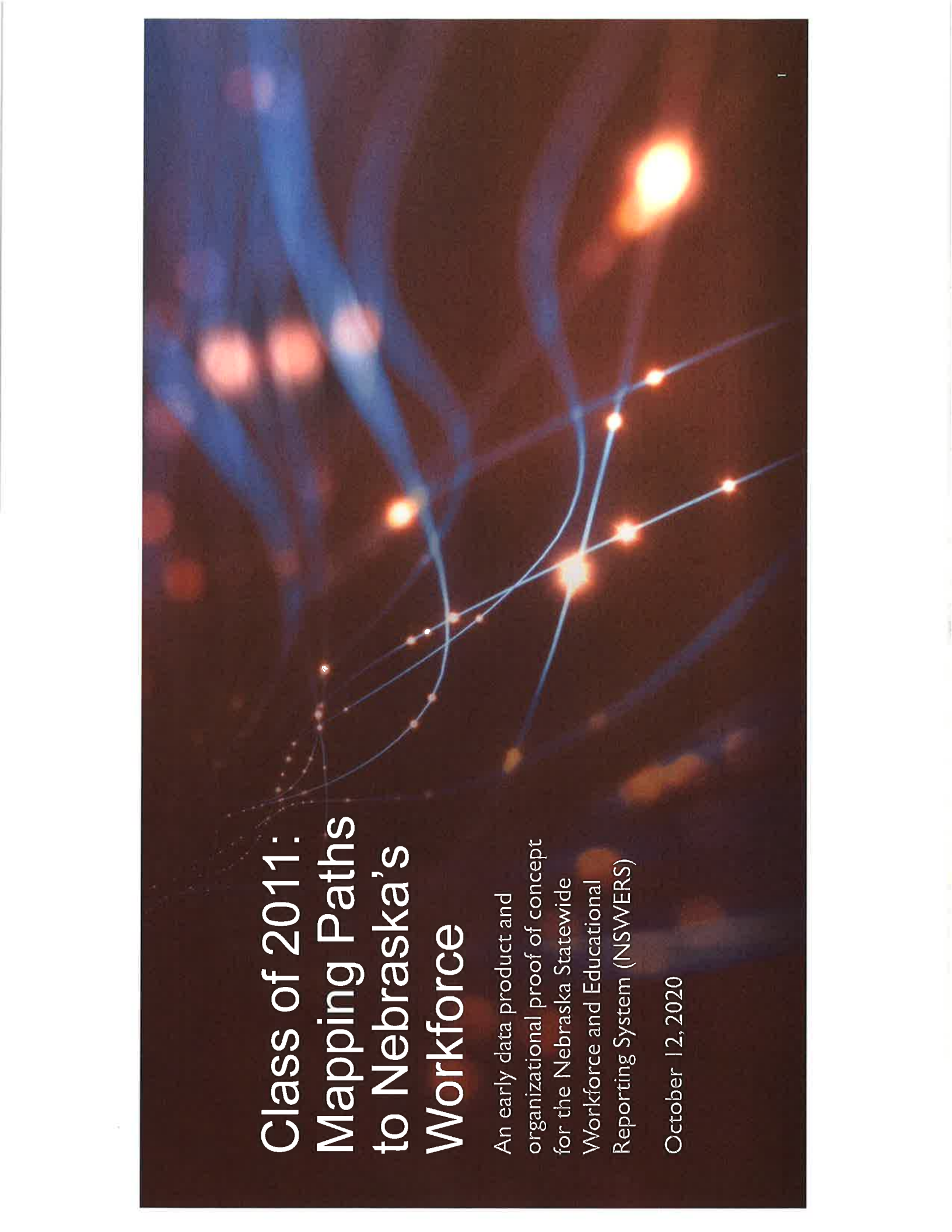
- By design, acquire staff with the unique skills necessary to successfully execute on our strategic approach and plan
- Three-Tiered Priority Hires
 - Tier 1:
 - Database/ETL Development
 - IT/Web Applications Development
 - Tier 2:
 - Communications
 - Research
 - Tier 3:
 - Line staff



Skills

- In the meantime, leverage contract support to fill gaps
 - Provide professional technical services related to POC development
- See SOW for contract with Student1
 - Scope of Service:
 - Data mart structures and animated visualizations depicting ten years of transition of the high school cohort of 2011 to postsecondary and workforce

Thank you



Class of 2011: Mapping Paths to Nebraska's Workforce

An early data product and
organizational proof of concept
for the Nebraska Statewide
Workforce and Educational
Reporting System (NSWERS)

October 12, 2020

Why Cohort Mapping?



CAPITALIZE ON
INVESTMENTS MADE
IN EDUCATION DATA
STANDARDIZATION



EXPLOIT THE
MARKETING
POTENTIAL OF A TEN-
YEAR, EDUCATION-
WORKFORCE
REVIEW PERIOD



SIMPLIFY INITIAL DATA
SUBMISSIONS FROM
NSWERS PARTNER
ORGANIZATIONS



GENERATE AN
ORIGINAL,
SIGNATURE
PRODUCT TO
GALVANIZE SUPPORT
FOR CONTINUOUS
FUNDING



POSITION NSWERS AS
A NATIONAL
LEADERS IN
EDUCATION-
WORKFORCE
ANALYTICS

Cohort Mapping - Benefits Defined

- Simply and intuitively depicts:
 - Nebraska's *realized* educational pathways
 - From HS to College
 - To and from two-year and four-year institutions to the workforce
 - Showcases the contribution of one cohort of Nebraska's youth to Nebraska business and industry
 - And its *relative* contribution to workforce demands
 - Highlights when, and from where, we are losing people – visualizing potential “brain drain”

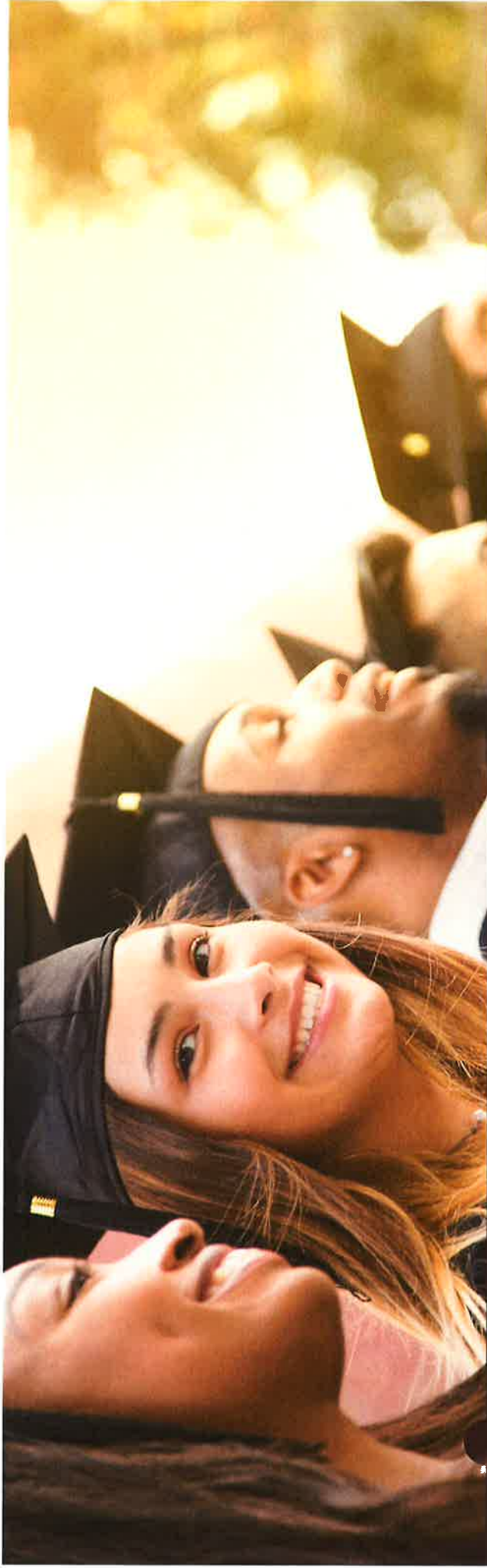
Cohort Mapping - Benefits Defined

- Highlights how Nebraska's youth become our workforce – or not
 - How some industries do a better or worse job of attracting and retaining talent
 - Where cross-industry talent capture is occurring
- Invites questions and conversations about Nebraska's education-to-workforce continuum –
 - Thereby underscoring the salience of NSWERS and the coming phases of our work!

Proof of Concept

An animated graphic created to map and showcase Nebraska's education-workforce pipeline. The scope for this visualization is Nebraska public high school students assigned to *cohort year 2011*. This selection provides approximately a ten-year window into the movement of Nebraska's youth, depicted each quarter over a ten-year period, in and out of postsecondary education and Nebraska's economy.



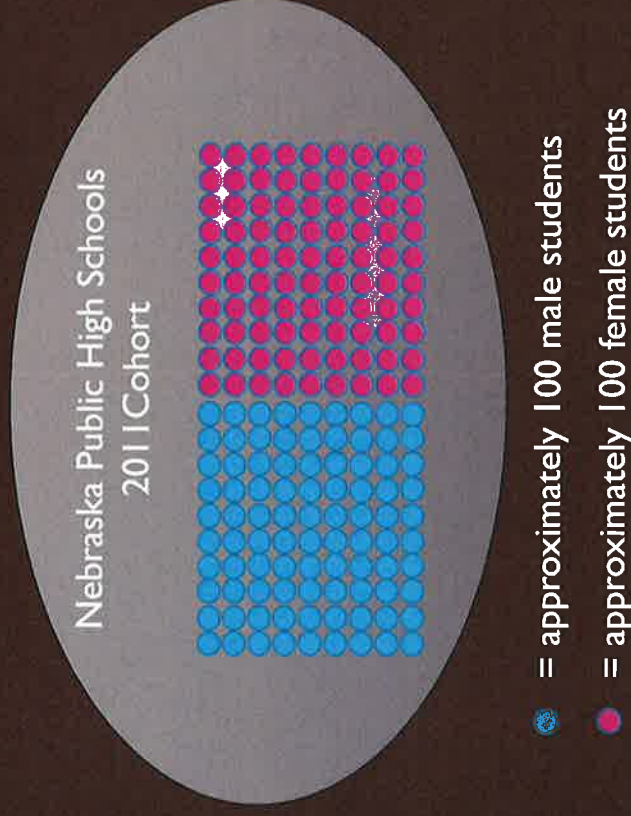


A Ten-Year Reunion for Nebraska

- **The Class of 2011 (Cohort Year 2011)**

- What have you been up to?
- Where are you now?
- How did you get there?

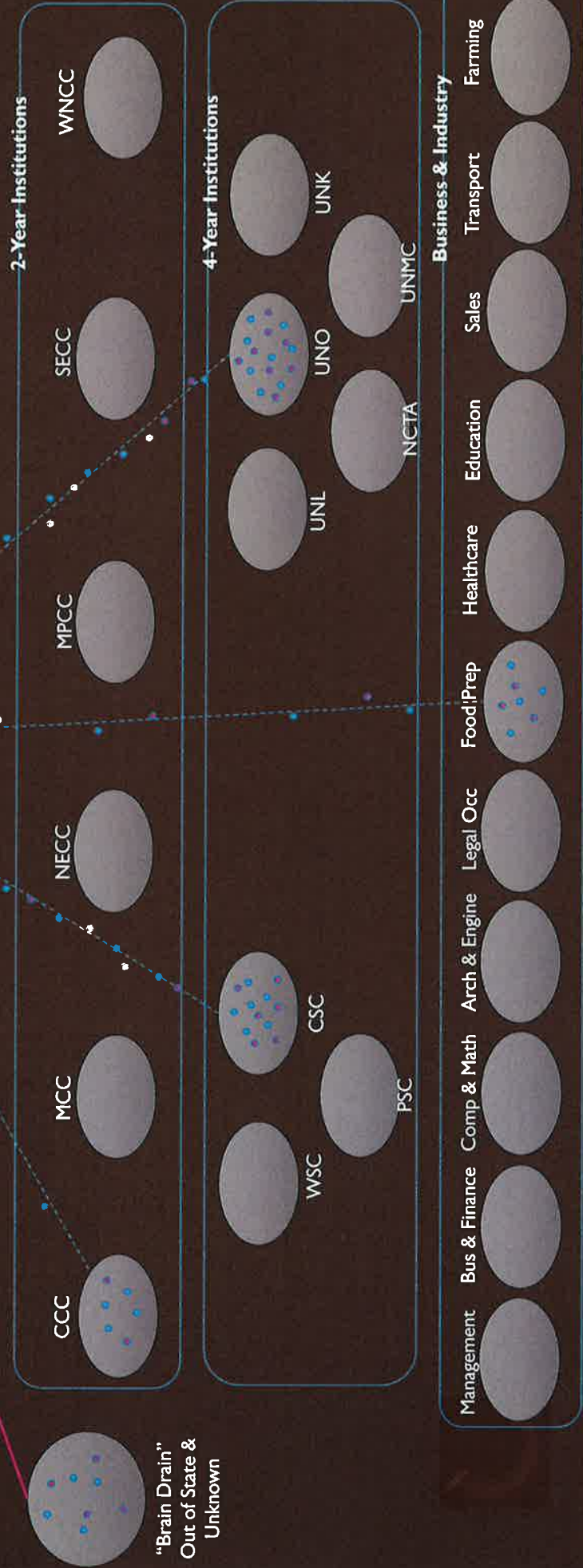
2011 - Q2



We aggregate the data in this presentation to ease the creation burden. In practice, the visualization would consist of approximately 20,000 individual dots – one dot to represent everybody included in cohort year 2011. Ideally, dots would be made to change colors based on filters available in the web application. In this example, we are filtering by gender. As such, male students appear as blue and females as mauve. In practice, filter functionality might provide for disaggregation by FRL status, high school membership size (e.g. small, medium, large), ACT score bands (0-15, 16-20, 21-25, 26-30, 31-37), etc.

2011 - Q3

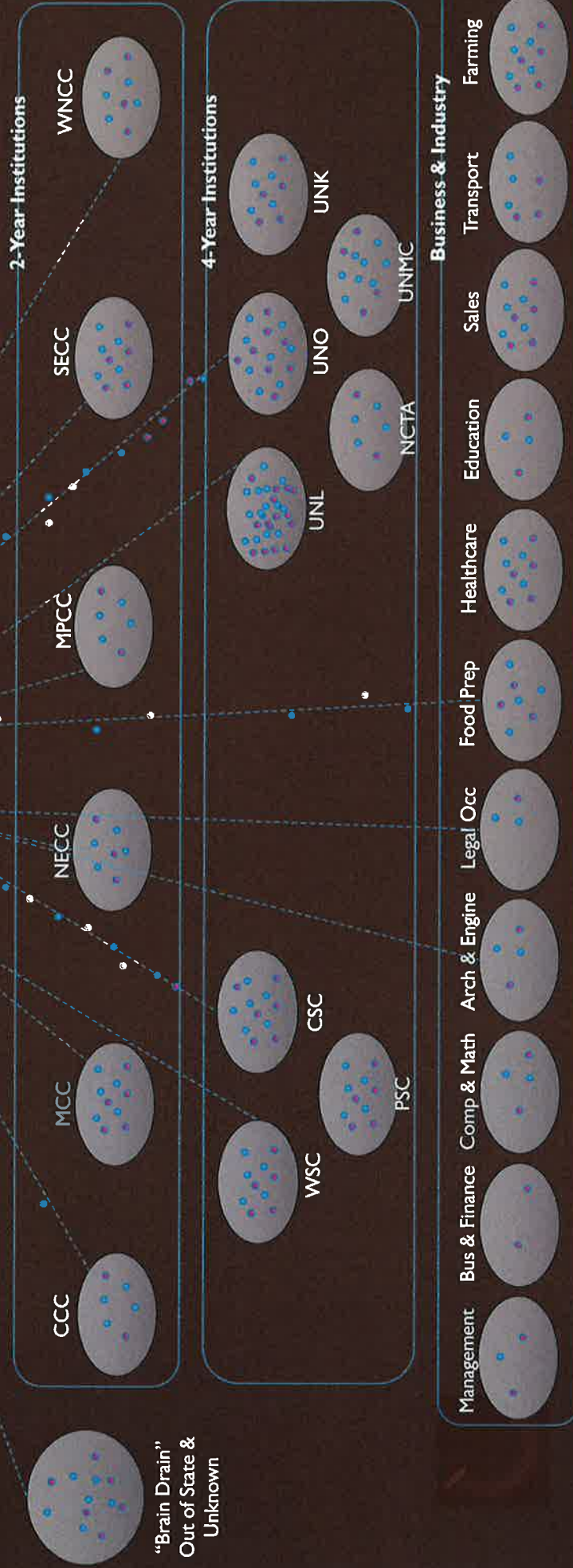
Nebraska Public High Schools



"Brain Drain"
Out of State &
Unknown

2011 - Q4

Nebraska Public High Schools



2013 - Q4

Nebraska Public High Schools



2-Year Institutions



4-Year Institutions



Business & Industry



"Brain Drain"
Out of State and
Unknown

2016 - Q4

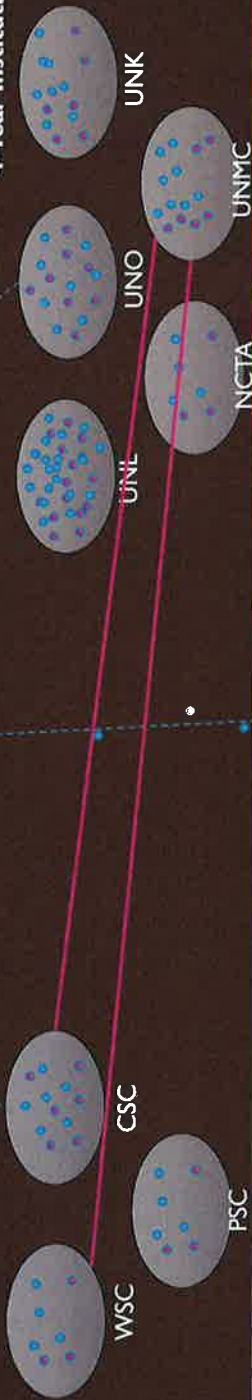
Nebraska Public High Schools



2-Year Institutions



4-Year Institutions



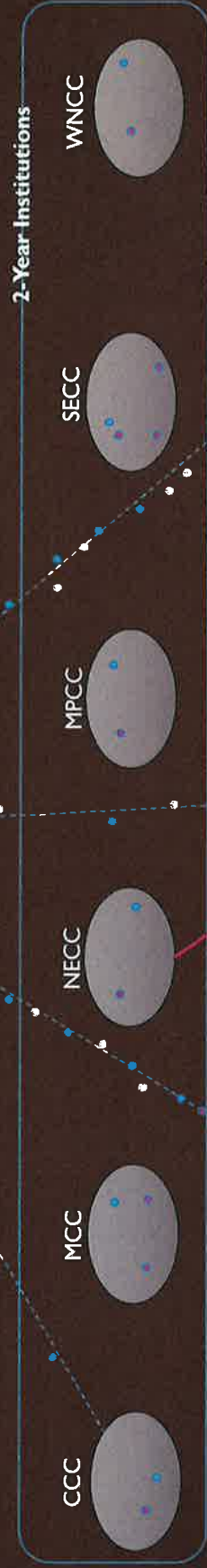
Business & Industry



"Brain Drain"
Unknown

2020 - Q3

Nebraska Public High Schools



Concept in Practice

- As an example of network analysis, see the animated ATUS visualization published by Nathan Yue:
 - <https://flowingdata.com/2015/12/15/a-day-in-the-life-of-americans/?platform=hootsuite>

Data Collections - NDE

- Nebraska Department of Education provides initial data file
 - A file limited to students assigned to cohort year 2011, including:

Data Collections – NDE

Student

County District Number	School Number	School Year	NDE Student ID	Middle Initial
Birthdate	Gender	Race I Code	Expected Graduation Year	Home or Native Language
Generation Code	First Name Alias	Food Program Eligibility	Last Name	First Name Alias
Full-Time Equivalency (FTE)	Generation Code Alias	Last Name Alias	Middle Name Alias	Hispanic Indicator

School Enrollment

County District Number	School Number	School Year	NDE Student ID	Enrollment Date
Enrollment Code				

Program Facts & Assessment

County District Number	School Number	School Year	NDE Student ID	Programs Code
Technical Skill Attainment	Participation Info Code	NeSA Scale Score	Alternate Assess. Scale Score	Proficiency Level

Data Collections - Postsecondary

- Nebraska Public Postsecondary Institutions Match and Append
 - SCOPE: only students included in matching file originating from NDE
 - Access list of students assigned to cohort year 2011 and perform match, appending:

Data Collections - Postsecondary

Postsecondary Enrollment

Institution ID	NDE Student ID	SSN	Academic Year Ending	Term as Year and Quarter	Census Flag
Full-time Student Flag	First Time Student Flag	Degree Seeking Flag			

Postsecondary Academic Awards

Institution ID	NDE Student ID	Academic Year Ending	Term as Year and Quarter	Award Date
Award Code	Award CIP Code			

Data Collections - NDOL

- Nebraska Department of Labor Match and Append
 - SCOPE: **only** students included in matching file originating from NDE
 - NDOL access list of students assigned to cohort year 2011 and perform match, appending:

Data Collections - NDOL

Unemployment Insurance				
SSN	Employer	Hours Paid	Job Title Description	ONET Job Title Code
Wage Source	Wages	Year and Quarter		

Timelines

- Data Collections
 - October 2020
 - NDE provides initial data to NSWERS
 - November 2020
 - Postsecondary institutions provide matched results to NSWERS
 - December 2020
 - NDOL provides matched results to NSWERS

Timelines (continued)

- Technical Development

- October 2020
 - NSWERS secures contract support and selects visualization technology
- November 2020
 - Develop dimensional data mart for selected data
 - Load data into data mart – round 1
 - Mock application available for review
- December 2020
 - Load data into data mart – round 2
 - Refine visualization
- January 2020
 - POC complete and available for production

Timelines (continued)

- Administrative Processes
 - October 2020
 - NSWERS secures legal counsel
 - NSWERS provides revised/edited Data Sharing Agreement to NDOL
 - NSWERS completes Data Sharing Agreement among partner institutions
 - November 2020
 - NSWERS-NDOL Data Sharing Agreement complete

Timelines (continued)

- Communications

- October 2020
 - Initiate discussions with communications/legislative affairs regarding POC
 - Develop communications strategy
 - Review POC plan with Executive Council
- November 23, 2020
 - Review POC progress with Executive Council
- December 23, 2020
 - Review POC progress with Executive Council
- January 2020
 - POC available for production

Questions

Matt Hastings, Ph.D.

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