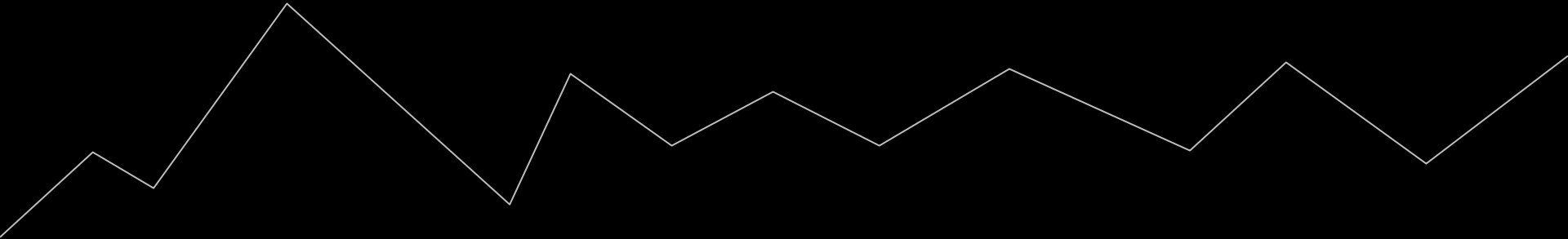




Alabama/Arkansas

Unemployment Claims Resource Planning Dashboard
DOL ETA Applied Data Analytics Project
Final Presentation



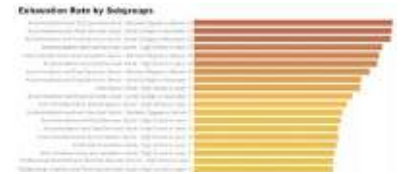
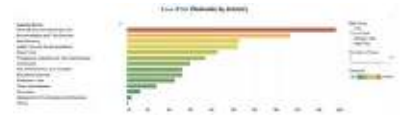
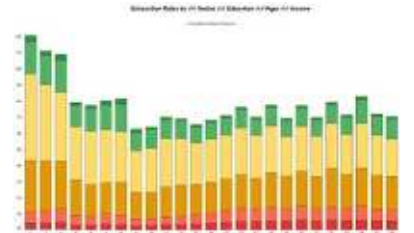
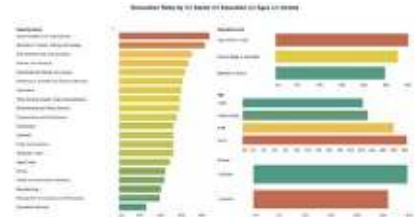
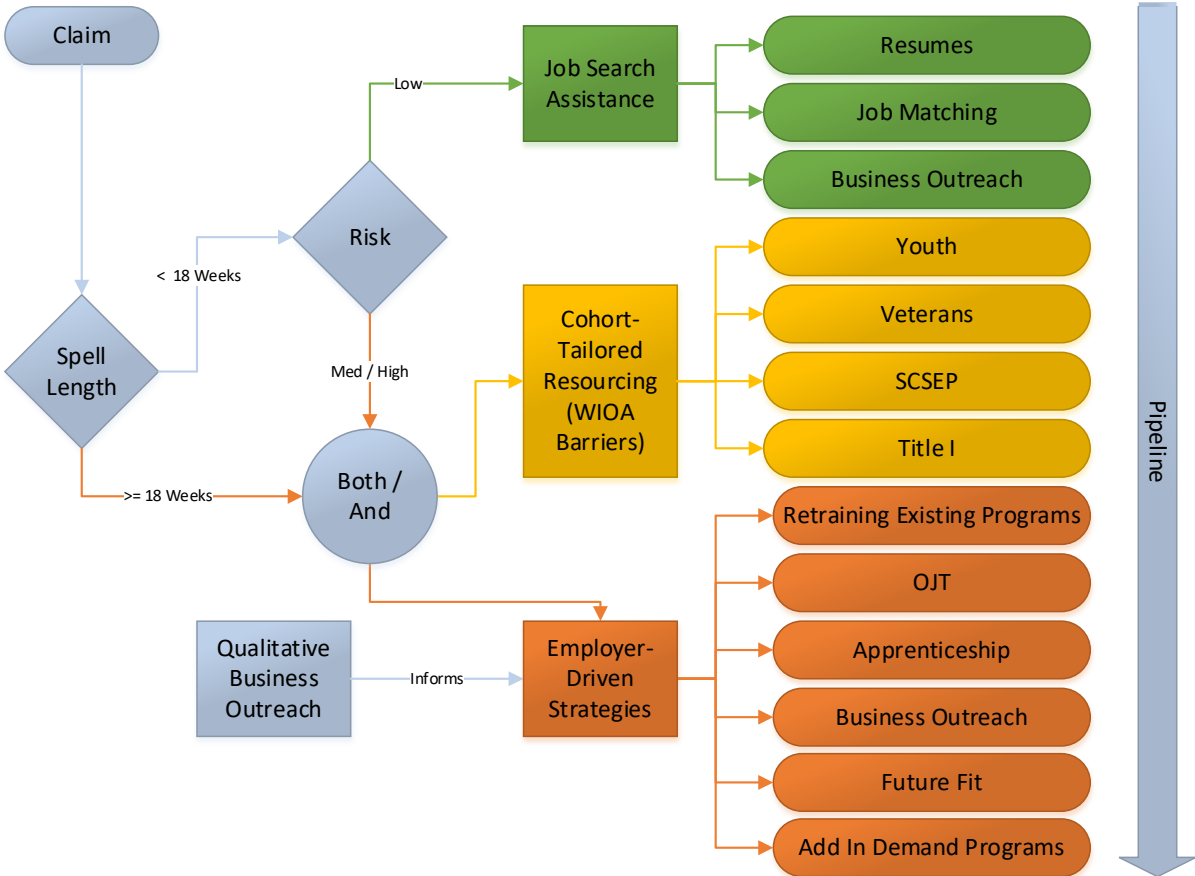
The Goal

Inform workforce boards for timely and effective allocation of limited resources in a dynamic environment.

The Proposed Solution

- UI Strategy Context
 - Informed by WIOA barriers and workforce board strategies and resources
- Longitudinal Metrics Relative to Claimant Benefit Year
 - For additional context on claimant population
 - For informing risk of exhaustion

Resource Planning Strategy

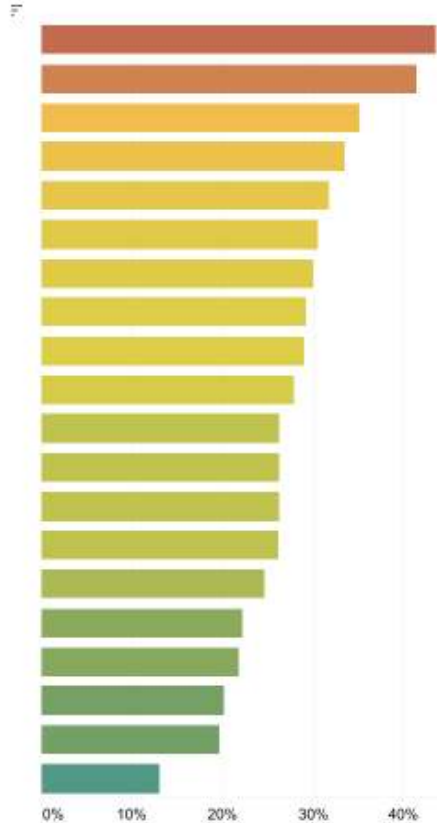


Exhaustion Rates As Indicator of Risks

Exhaustion Rates by **All Sector** **All Education** **All Ages** **All Income**

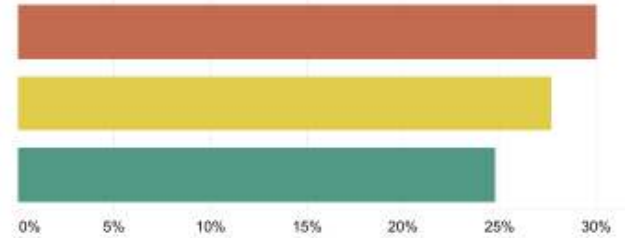
Industry Sector

Accommodation and Food Services
 Agriculture, Forestry, Fishing, and Hunting
 Arts, Entertainment, and recreation
 Finance and Insurance
 Real Estate and Rental and Leasing
 Professional, Scientific and Technical Services
 Information
 Other Services (Except Public Administration)
 Administrative and Waste Services
 Transportation and Warehousing
 Construction
 Unknown
 Public Administration
 Wholesale Trade
 Retail Trade
 Mining
 Health Care and Social Assistance
 Manufacturing
 Management of Companies and Enterprises
 Educational Services



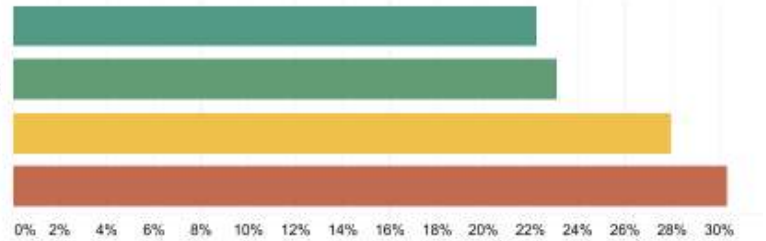
Education Level

High School or Less
 Some College or Associate
 Bachelor or Above



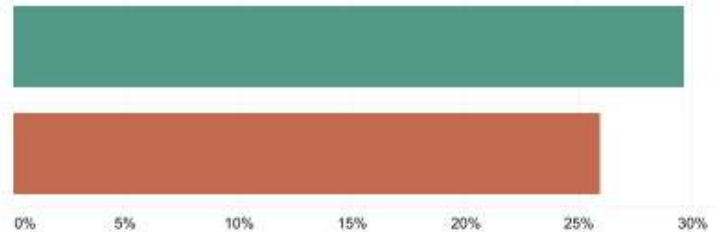
Age

Youth
 Youth or Adult
 Adult
 Senior



Income

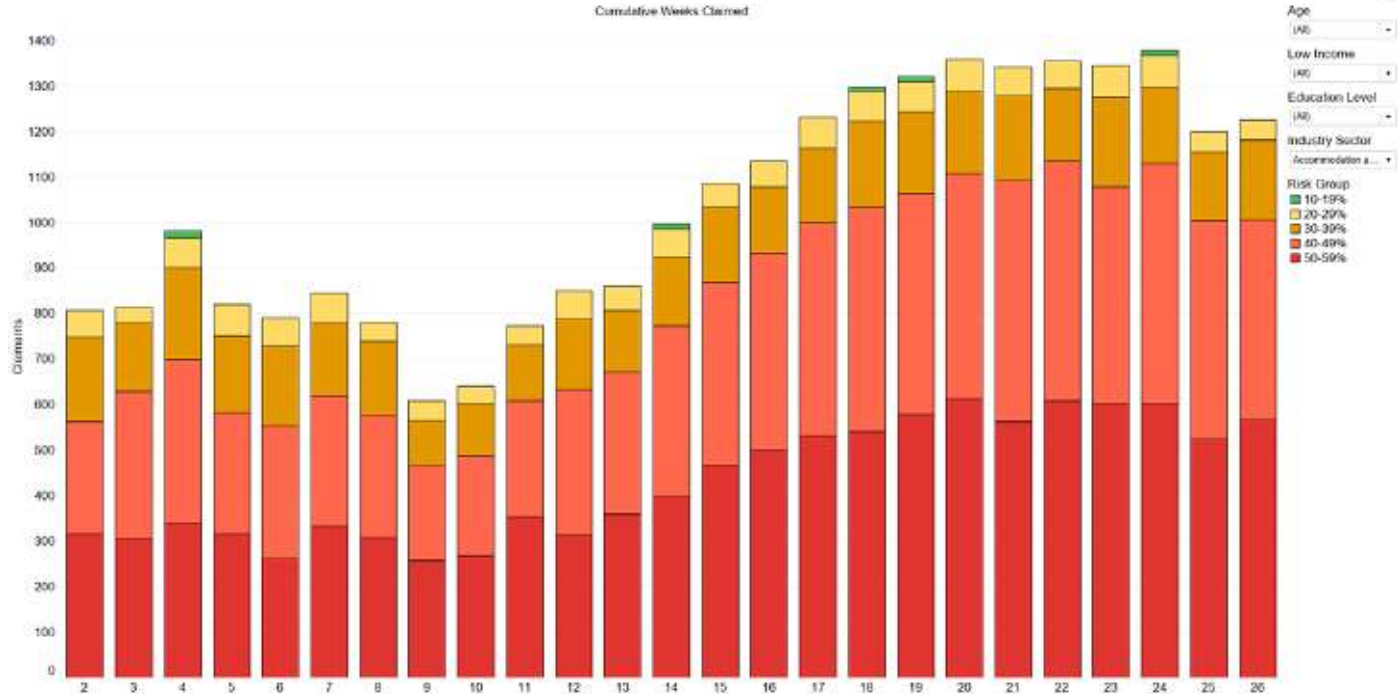
> \$22,000
 < \$22,000



Active Claimant Dashboard

- Looking at active claims per cumulative claims within the Accommodations Industry, we see the bulk of claimants are long-term with growing bands of high-risk

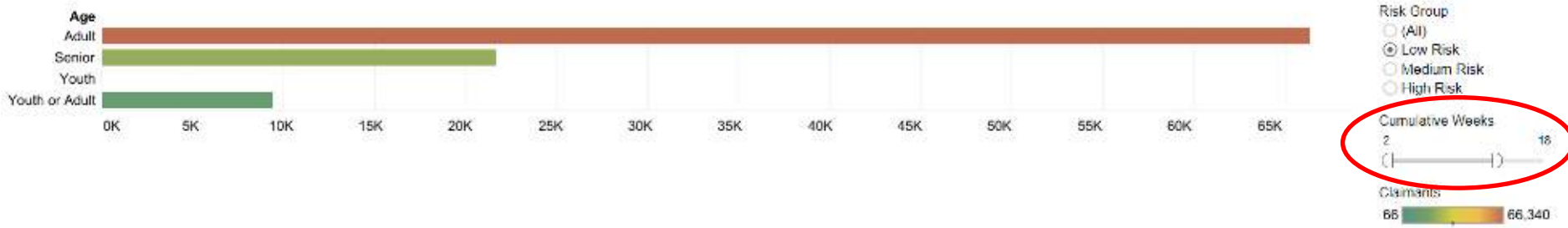
Exhaustion Rates by Accommodation and Food Services Sector All Education All Ages All Income



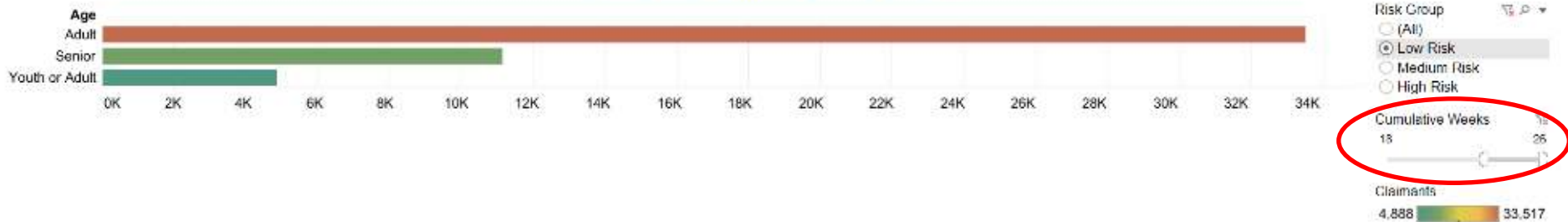
Typical All Sector All Sub-Group Trend



Risk by Age Groups and Weeks

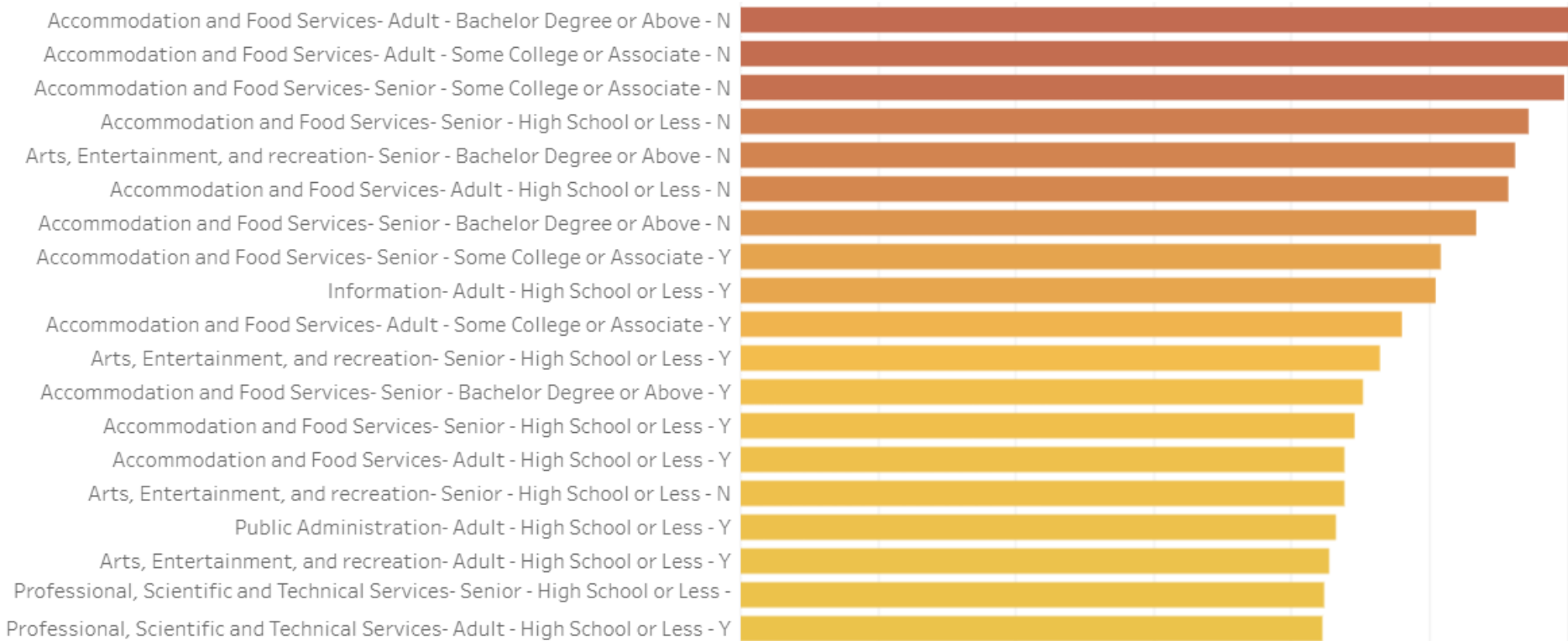


Low Risk Claimants by Age Group



Risk by Subgroup

Exhaustion Rate by Subgroups



Informed Strategic Planning

- Strategy
 - Engage industries with low exhaustion rates- Manufacturing and Healthcare to determine their immediate needs
 - Adult and Dislocated Worker programs work with the business service teams to develop solutions
 - The most at risk are Highschool level or lower-possible Adult Education, Adult, and Dislocated Worker partnership focused on outreach and training programs
 - Some potential to add SCSEP as a partner
 - Youth appear to be lower risk of exhaustion and should be analyzed with a shorter intervention window
 - Risk subgroups identify next rounds of risk analysis

Next Steps

- Additional research or validations that we identified but did not include in the project scope
- Longitudinal and multi-dimensional risk scoring combined with machine learning to improve accuracy
 - Ability to watch risk bands move into strategic intervention window
- Demand analysis to improve business outreach strategies-
 - Changes in job posting data to inform current changes in LMI Projections
- Include asset mapping for non-profits and Federal programs that focus on specific subgroups
- Additional view to support co-enrollment strategies
 - Matrix of potential partners for each risk subgroup
- Add underserved population indicators
- Add geographic risk

Appendices

Literature Review

Duration of nonemployment spell is strongly associated with earning losses

Fallick, Bruce, John Haltiwanger, Erika McEntarfer, and Matthew Staiger. 2019. "Job-to-Job Flows and the Consequences of Job Separations." Federal Reserve Bank of Cleveland, Working Paper no. 19-27. <https://doi.org/10.26509/frbc-wp-201927>.

Exhausters appear to be more likely to leave the labor force

Luoqia Hu, and Shani Schechter. 2011. "How Much of the Decline in Unemployment is Due to the Exhaustion of Unemployment Benefits." Federal Reserve Bank of Chicago, Chicago Fed Letter no.. 288. <https://www.chicagofed.org/publications/chicago-fed-letter/2011/july-288>.

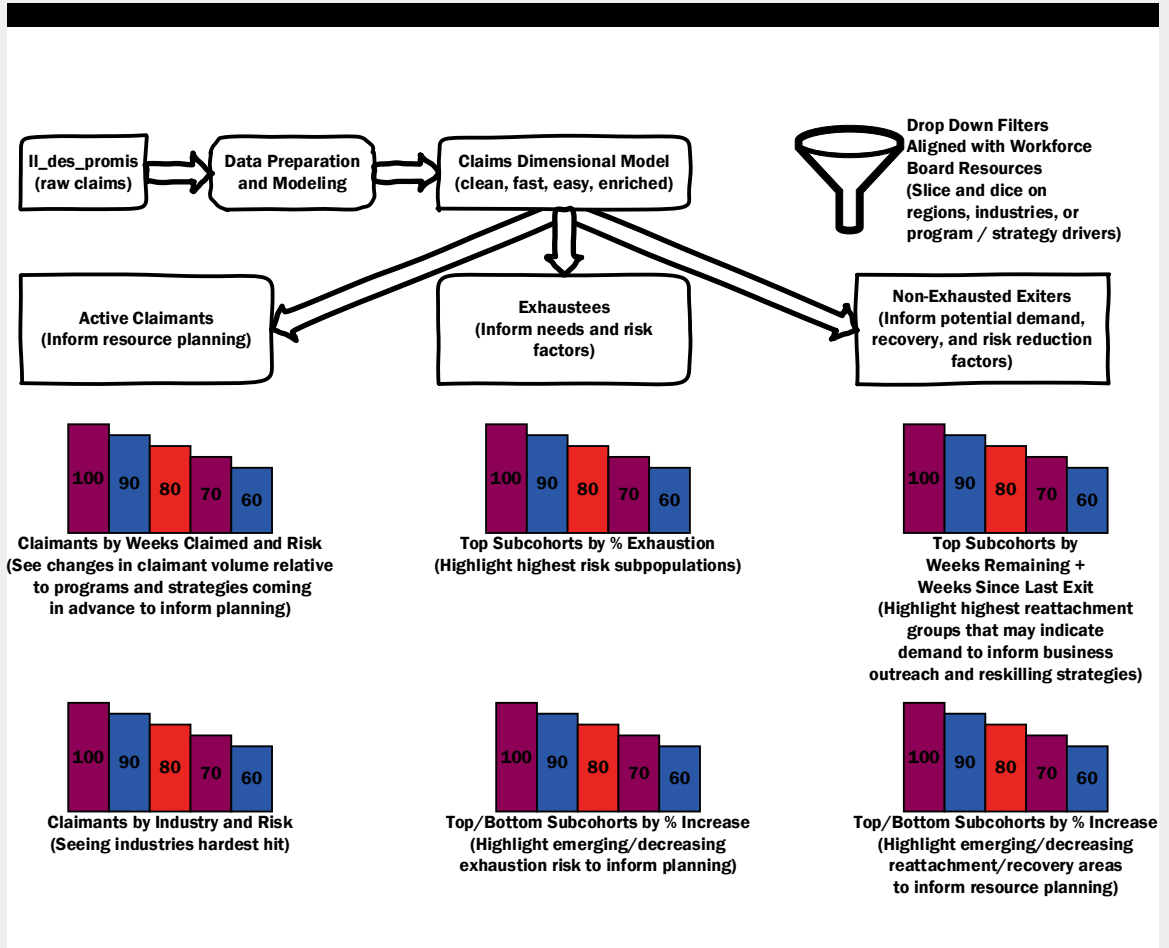
Many individuals leave the unemployment system when their benefits expire without returning to work

David Card, Raj Chetty, and Andrea Weber. 2007. "The Spike at Benefit Exhaustion: Leaving the Unemployment System or Starting a New Job?". The American Economic Review. 97(2):113-118.

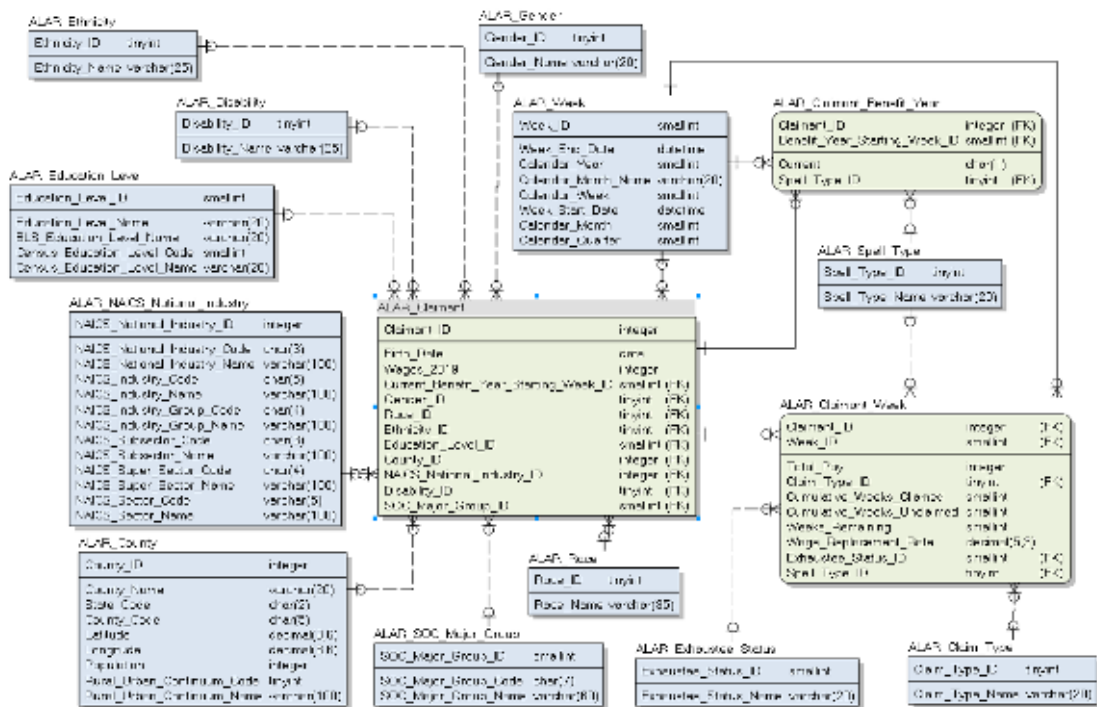
Workforce Board Survey

- Surveyed Arkansas Workforce Boards for Needs
- Agreed that:
 - Comparing existing workforce experience to more current demand projections would be beneficial
 - Analyzing the work history and demographics of the most vulnerable cohort would be helpful in resource planning
 - Analyzing both together would help establish local pipelines, business outreach strategies, and resource planning
- Added
 - The importance of realtime skills gaps analysis
 - Metro/city level data
 - Mapping of local programs and services to push the analysis towards additional resources

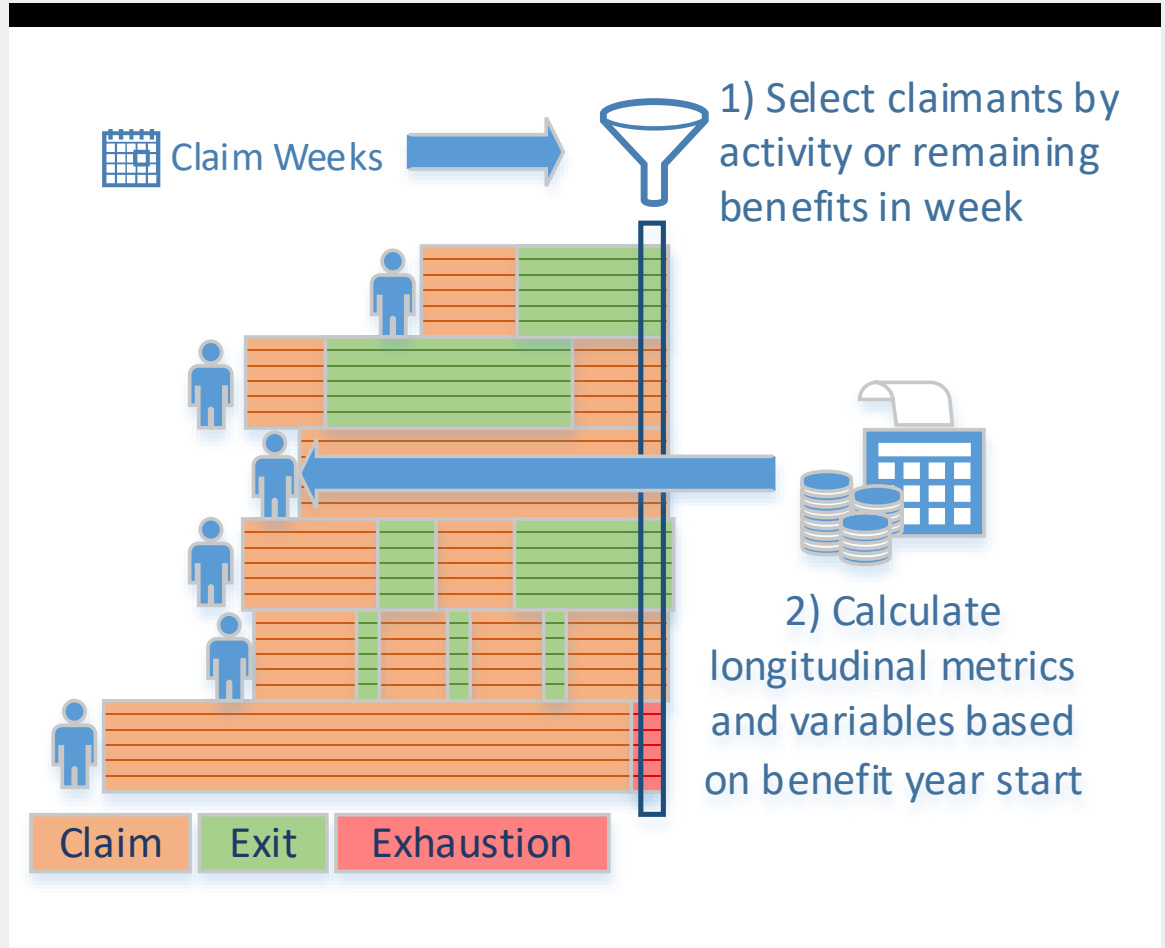
Project Design



Dimensional Model



Longitudinal Analysis



Inferring Re-Employment

- We are inferring reemployment based on pre-exhaustion exit, which requires additional literature review and validation.
- A DOL ETA UI Reemployment Pilot found
 - Exhaustion rates are *not* a good proxy for Q+1 reemployment rates
 - Exhaustion rates are a good proxy for Q+2 reemployment rates
 - It appears that in general exhaustion rates for the second quarter probably understate reemployment rates by at least 10 percent

<https://oui.doleta.gov/unemploy/reemploy/pilot.asp> -