



**Workforce  
Analytics**

# How-to Guide

## Developing a Child Welfare Workforce Dashboard

**Date:** April 2026

# What Is This Guide **About?**

## Anticipating the Staffing Crisis

Can you see workforce challenges coming, or are you only reacting after they arrive?

## Turning Data into a Living Narrative

Utilizing dashboards to transform “lifeless data” into visual insights on turnover, vacancies, staff engagement, workload, and opportunities for improvements.

## From Manual Reporting to Actionable Workforce Insights

Move from manual reporting to an automated dashboard that supports proactive decision-making.



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## The Evidence

Research suggests that evidence-informed workforce strategies, when supported by clear data visualization, allow agencies to identify trends in retention and vacancy that are otherwise invisible in standard spreadsheets.

# Who Is This For?



## Intended Audience:

- Human Services Analysts
  - HR Professionals
  - Child Welfare Directors, Administrators, Managers and Supervisors
- 



## Outcome

Readers will learn how to transition from manual reporting to an automated, visual dashboard that tracks critical workforce metrics.



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## Project Timeline

Approximately 3 to 6 months  
from data audit to full  
implementation.

# Preparing for Implementation



Form Your Team



Conduct a Data  
Readiness Assessment



Identify the "Why"



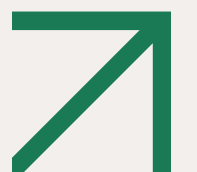
Identify the "Who"

# Form Your Team



## Assemble a cross-functional implementation team

- IT/Data Lead
- HR Representative
- Frontline Supervisor (end-user)
- Leadership (if they can't join all meetings, keep them informed to support buy-in)



Learn more

# Conduct a Data Readiness Assessment



## Review existing workforce data sources

- HR systems
- SACWIS / CCWIS
- Payroll systems
- Caseload assignment and workflow data
- Training and program enrollment/attendance logs
- Assessment results
- Participant engagement and satisfaction surveys
- Referral logs
- Supportive services disbursements
- Job placement and employer engagement logs

## Ensure data is clean, accessible, and updated frequently



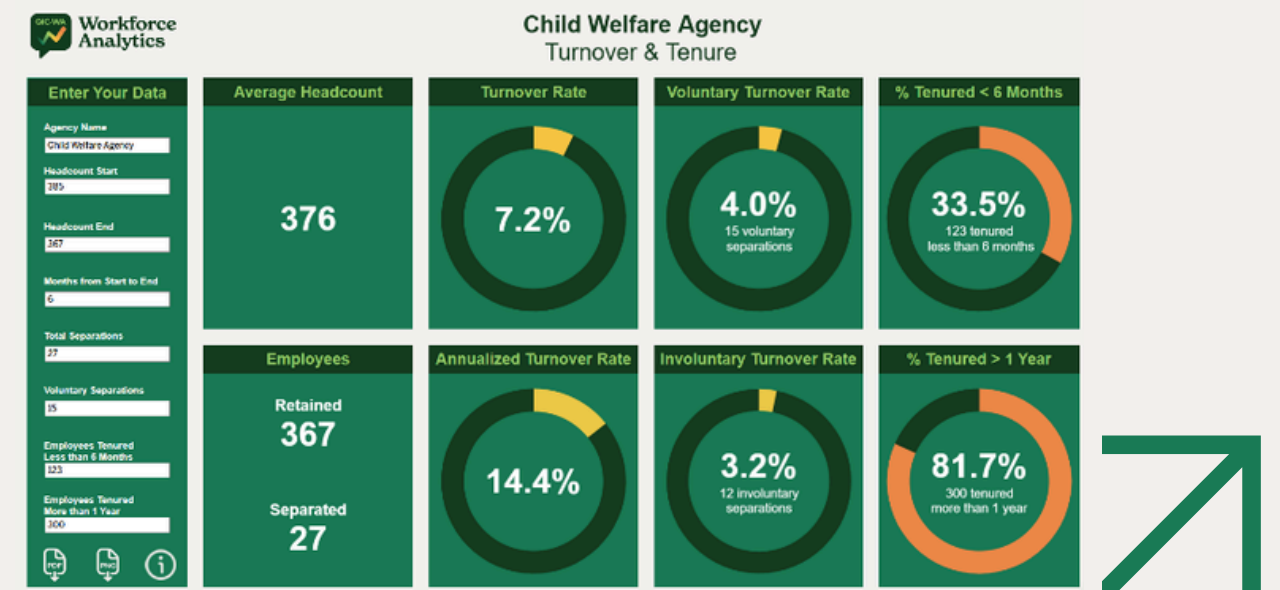
Learn more

# Identify the “Why”



## Determine what business need the dashboard will analyze

- Hiring speed
- Supervisor-to-staff ratios
- Predicting turnover
- Other workforce information needs



See an example and try it out 

# Identify the “Who”



## Map your Stakeholders and Beneficiaries

- What specific questions do they need answered?
- How will they access the dashboard?
- How will they engage with the data?



# Resources to Review

## General Resource Links

- [Why policy advocates should pay more attention to data visualization?](#)
- [Unlocking the Potential in Your Workforce Data](#)
- [Workforce Analytics Dashboards: Bridging the Gap between HR and Child Welfare](#)
- [Urban Institute 'Do No Harm' guide](#)
- [GoodData Blog: Top 10 Best Practices](#)
- [Tableau Blog: Dashboard Design](#)
- [Nightingale: How to Use Storytelling Conventions to Create Better Visualizations](#)

## Podcasts

- [The Big Book of Dashboards](#)
- [Dashboarding tips for beginners](#)
- [Why Dashboards Die—and How to Save Them With Allison Horst](#)

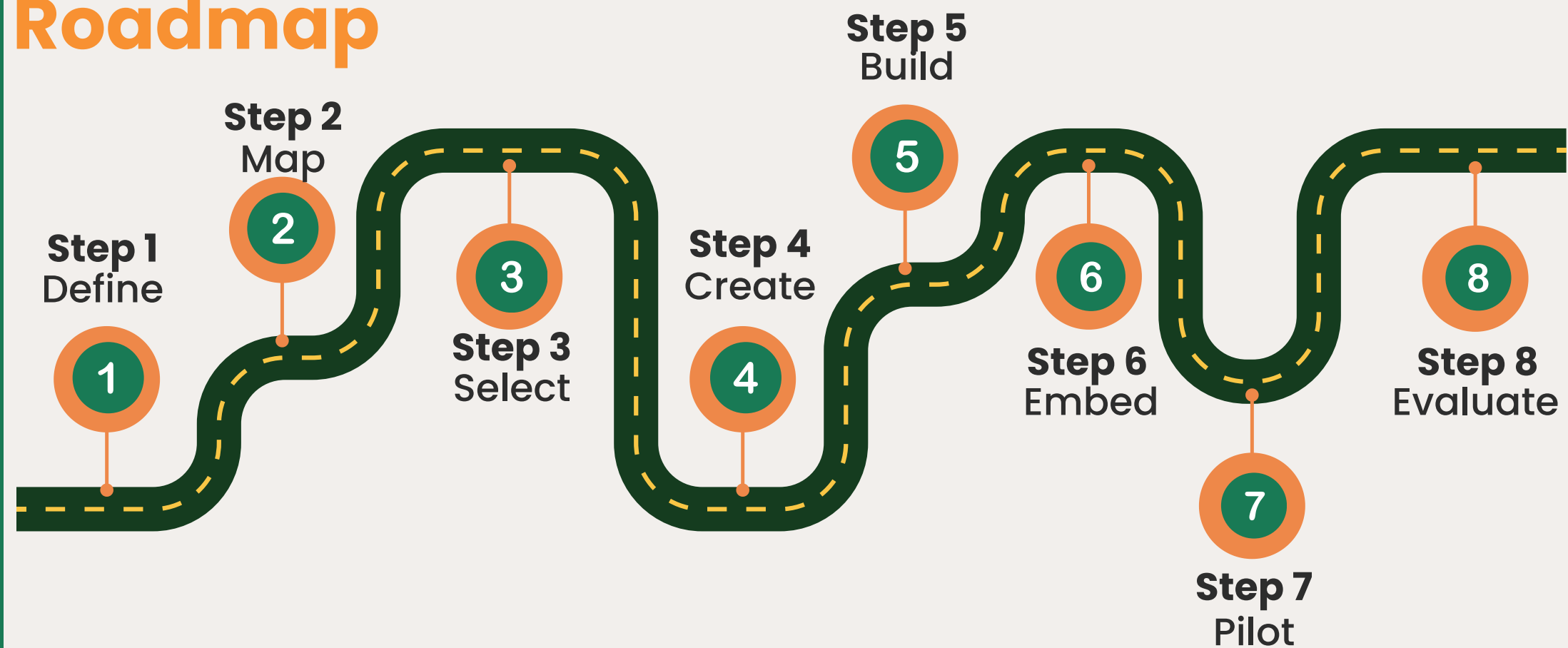


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# Concrete Steps for Implementation



## Implementation

### Roadmap



# 1. Define

## Example: Metric vs. Calculated KPI

Metric	Calculated KPI
 <p><b>Office Vacancy Rate</b></p> <p>30 vacant positions in an office of 120 total positions</p>	 <p><b>Office Vacancy Rate = 25%</b></p> <p>Office Vacancy Rate = <b>25%</b></p> $\frac{30 \text{ vacant positions}}{120 \text{ funded positions}} = 0.25 \text{ ( 25\% )}$

# Define your Key Performance Indicators (KPIs)

## Focus on a narrow set of workforce metrics

- Vacancy Rate by Office
- Average Caseload per Worker
- 90-Day Turnover

**Workforce Metrics**

Calculating and tracking workforce metrics is a valuable way to assess workforce needs and examine workforce-related processes, interventions, and outcomes. This resource includes over 90 metrics related to recruitment and selection, education, work hours, work arrangements, caseload capacity, supervision, career development, performance, turnover and tenure, and costs. Note that these metrics are not universal, and many other variations exist elsewhere. These have been selected or developed based on their applicability to the child welfare workforce.

**Recruitment and Selection**

**Quantity Metrics**

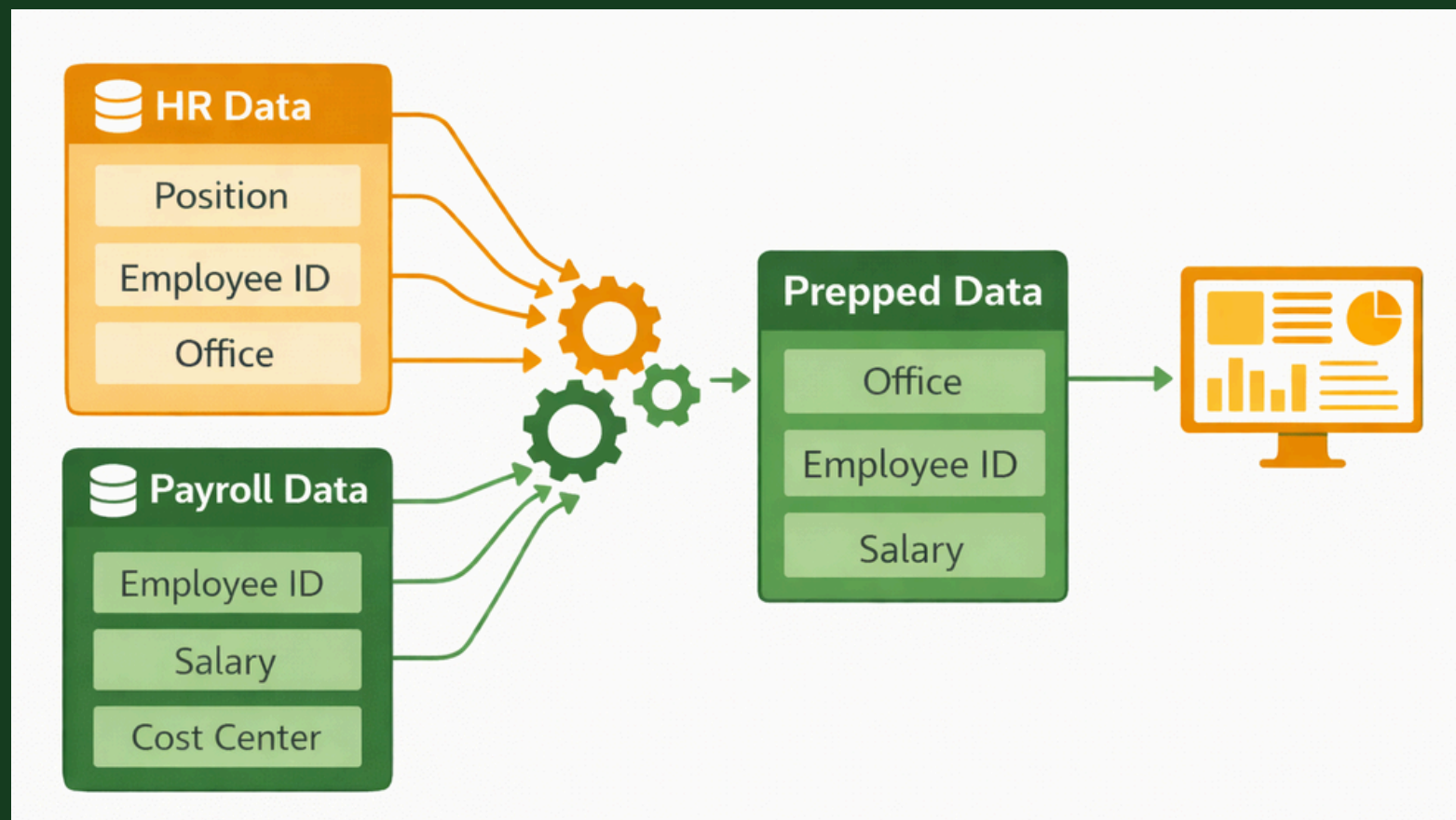
Average number of applicants per opening	Total number of applicants across openings divided by the number of openings
Candidate dropout rate (per stage of hiring process)	For each stage of the hiring process, total number of candidate that choose to drop out of the hiring process divided by the number of candidates in the hiring process, multiplied by 100
Yield ratio (per stage of hiring process)	For each stage of the hiring process, total number of candidates that pass the stage divided by the total number of candidates who entered the stage, multiplied by 100
Selection ratio	Total number of candidates hired divided by the total number of candidates
Source of application	Total number of applicants recruited through a certain source <sup>1</sup> divided by the total number of applicants, multiplied by 100
Source of hire	Total number of hires recruited through a certain source divided by the total number of hires, multiplied by 100
Internal hire rate	Total number of internal hires in a period divided by the average headcount for the period, multiplied by 100
External hire rate	Total number of external hires in a period divided by the average headcount for the period, multiplied by 100
Retire rate	Total number of retirees in a period divided by the average headcount for the period, multiplied by 100

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Learn more

## 2. Map



Identify exactly which database fields are needed to drive each dashboard visual, and how these fields are related

# 3. Select a Visualization Tool



## Explore which tool will best meet your agency's needs

- Tableau
- Power BI
- Excel
- or many others!

### Key Considerations

- Existing software licenses
- IT support
- Staff expertise
- Software platform user community support
- Ability to share with target audiences

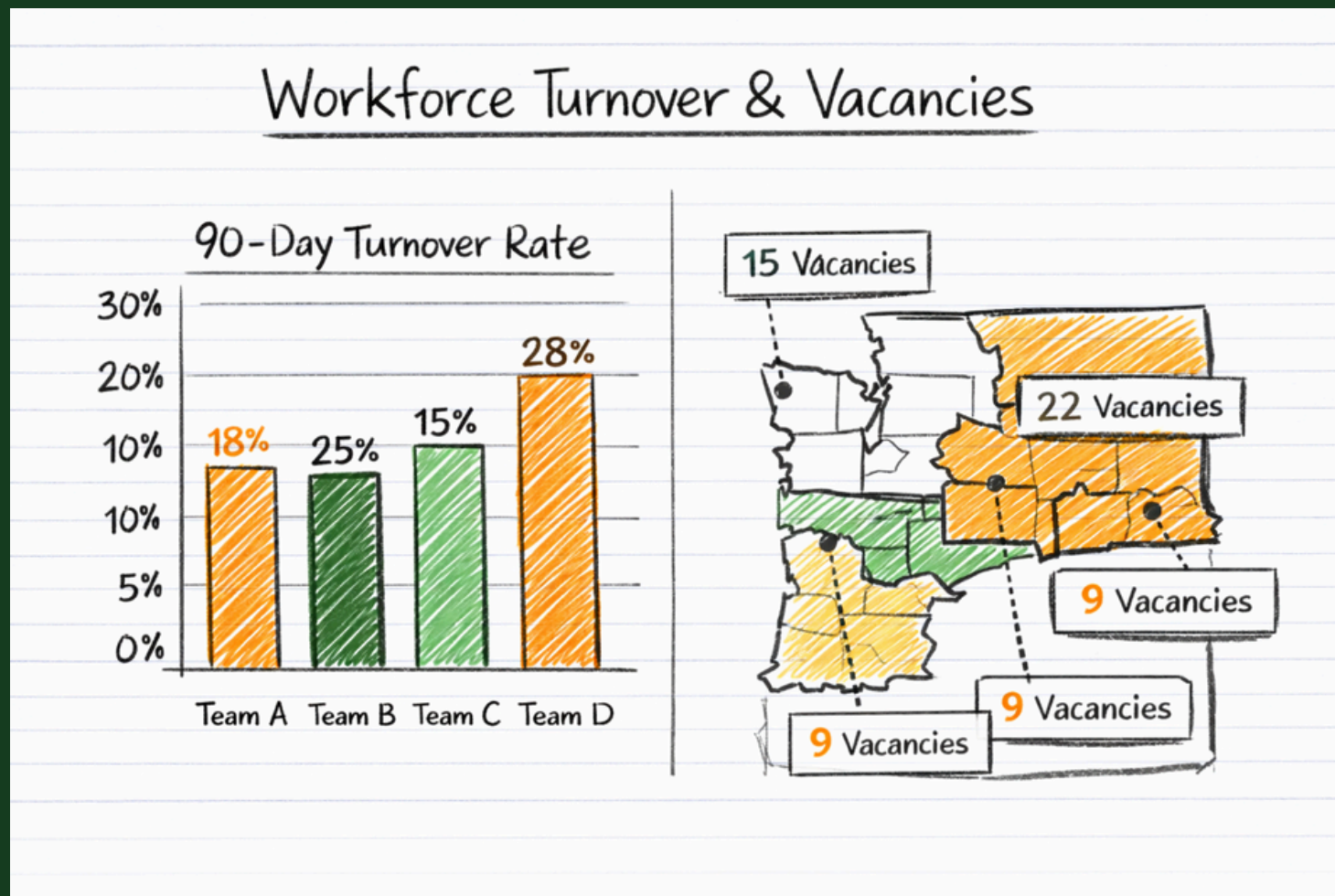
# 4. Create

## Create a Low-Fidelity Wireframe

Sketch dashboard layout before development

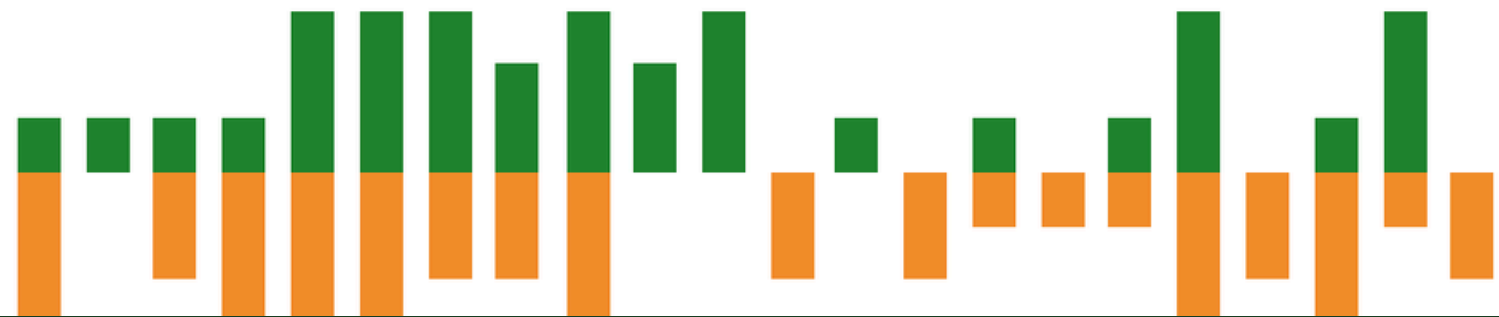
Designs can be captured on:

- Paper or whiteboard
- Design software (e.g., Figma, Miro, Canva, etc.)



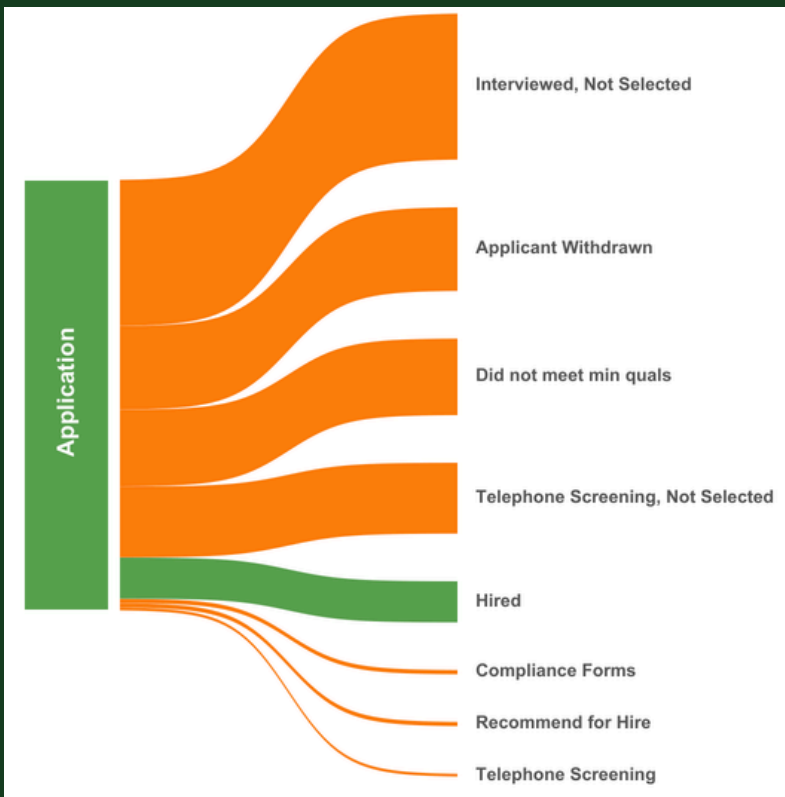
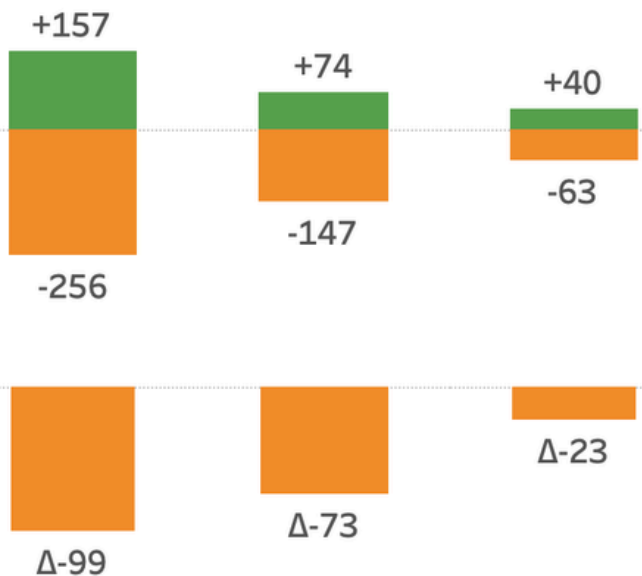
# 5. Build

## New Workers & Separations



## Employee Turnover by Period

Past 24 months Past 12 months Past 6 months



# Build the Minimum Viable Product (MVP).

## Develop a draft dashboard.

- Build a “minimum viable product”, or build out sufficiently to start testing without trying to reach perfection in the first draft.
- Make sure key questions or information needs are addressed.

## Use data that is:

- Accurate
- Reliable
- Timely



# 6. Embed

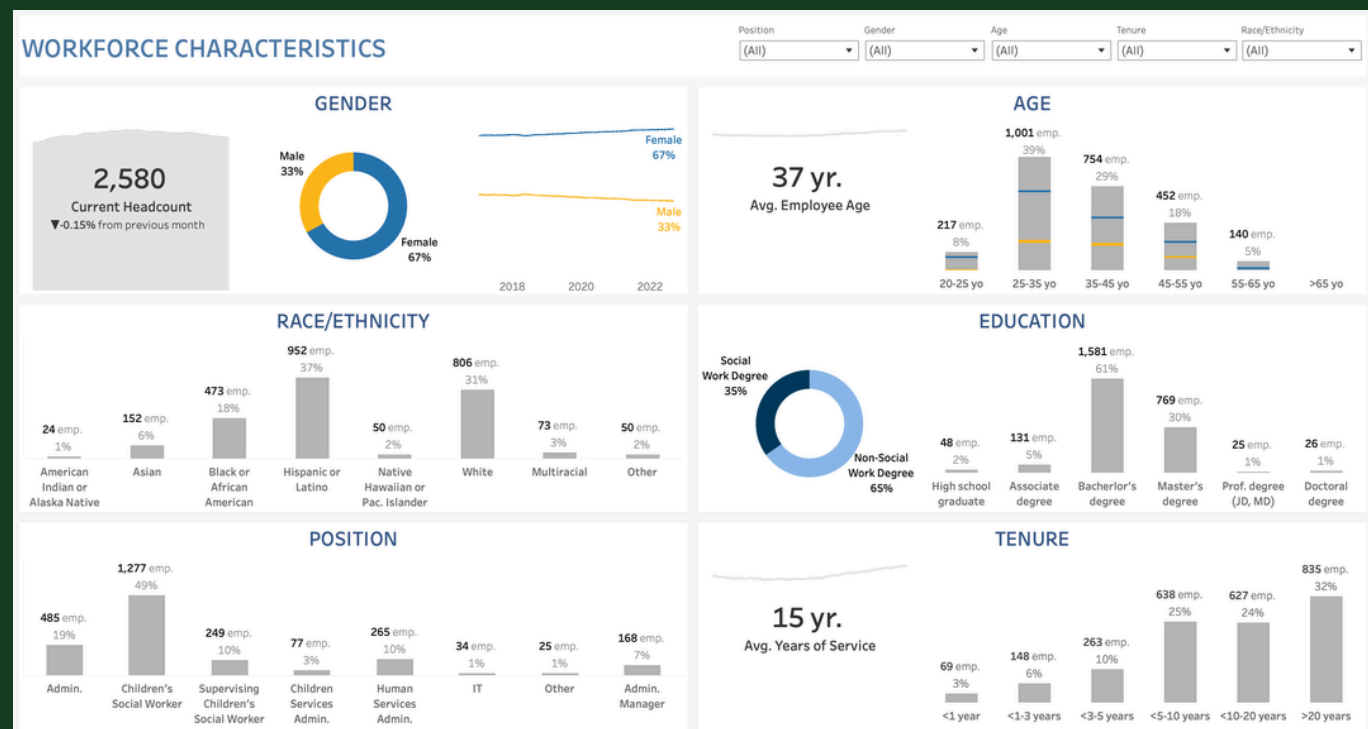


## Embed “User-Friendly” features

- For example:
  - Interactive filtering or slicing
  - Hover over tooltips with explanations of visual elements.
  - Drill down navigation.
  - Key context elements to help users understand the data
  - Reset view controls so users can get back to the original view.
  - Conditional formatting to quickly highlight relevant or outstanding data points to users.

**Include filters that allow users (e.g., managers or supervisors) to drill down by unit or region.**

# 7. Pilot



Test with a group of five stakeholders (e.g. HR, child welfare director, administrator, supervisor, QA/CQI manager)

**Focus on:**

- Accessibility
- Intuitive understanding of the visual layout and functionality (e.g., leveraging of pre-attentive cues)
- Ease and accuracy of interpretation of data
- Actions users decide to take based on the data
- Questions or information needs that users feel are not addressed and how best to address them

# 8. Evaluate



## Evaluate the impact post-launch

- Survey users about the use and impact of the dashboard 3-6 months post launch
- Provide opportunities for continuous quality feedback
- Assess changes in resource allocation
- Assess changes in how staff are supported

# Additional Resources

- [Quality Improvement Center for Workforce Development \(QIC-WD\)](#)
- [National Child Welfare Workforce Institute \(NCWWI\)](#)



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# About the Authors



**Robert Blagg, PhD**

Dr. Blagg is the Research Director for the Agile Visual Analytics Lab (AVAL) at UCLA, and has received funding for evaluation and applied research from federal, state, and local agencies to investigate social welfare, education, and health organizations, programs, and policies. Dr. Blagg is dedicated to empowering stakeholders to use data to make timely and sound program and policy decisions.



**Susana Agama**

Susana Agama is a Research Associate with the Agile Visual Analytics Lab (AVAL) at UCLA, where she supports applied research and evaluation projects focused on workforce development, education, and social service systems. Her work centers on using data analytics and thoughtful approaches to help organizations translate data into actionable insights that support effective programs and decision-making.



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# What's Next? Give it a try!

Start developing your own Child Welfare Workforce Dashboard. If you need support, explore the resources @ [www.qic-wa.org](http://www.qic-wa.org), or reach out to the Quality Improvement Center for Workforce Analytics at [contact.qic.wa@gmail.com](mailto:contact.qic.wa@gmail.com).