

# Workforce Dynamics: Building a Data Visualization Tool for Racial Equity

By: Ericka Cox, Ana Gaeta, Bryan Pannell,  
Joe Taylor, and Jeremy Warren



[seakingwdc.org/workforce-dynamics](https://seakingwdc.org/workforce-dynamics)



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# Workforce Development Council of Seattle-King County

## Data and Communications Staff

- Ericka Cox – Chief of Staff & Strategy
- Bryan Pannell – Director of Performance
- Joe Taylor – Communications Lead
- Jeremy Warren – Regional Workforce Management Analyst
- Ana Gaeta – Communications Specialist



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# Why Are We Here Today?

- **Culture and Knowledge Building:** Two-year journey
- **Data + Communications:** A dream collaboration
- **Realities:** Turnover, building a culture of iteration
- **Core Takeaways:** Leadership support is critical for cross-team collaboration; the process is as crucial as the product

# Workforce Dynamics

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“A data visualization tool to locate racial inequities in communities and to assist King County residents and partners advance their own racial equity work.”



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# Top Narrative – On the Surface

## **Perceived dominant view:**

- Seattle and King County: robust regional economy
- Shaped by tech advancement, global connectivity, and demographic change

## **But our demographic report challenged this:**

- Racial gaps in employment and wages are masked
- Intergenerational inequities disadvantage communities of color
- Persistent barriers include:
  - Discriminatory hiring practices
  - Gaps in educational attainment
  - Low job-quality standards
  - Housing and transportation inequities
- Results in an uneven geography of opportunity

(Reference: [Advancing Workforce Equity in Seattle Report](#), Pg 13)

# The Dynamics Underneath

## Emerging Reality:

- Increasing diversity in King County's workforce
- Seattle economy losing tens of billions per year in lost GDP due to racial gaps in wages and employment
- Labor market not a zero-sum game – everyone benefits from racial equity

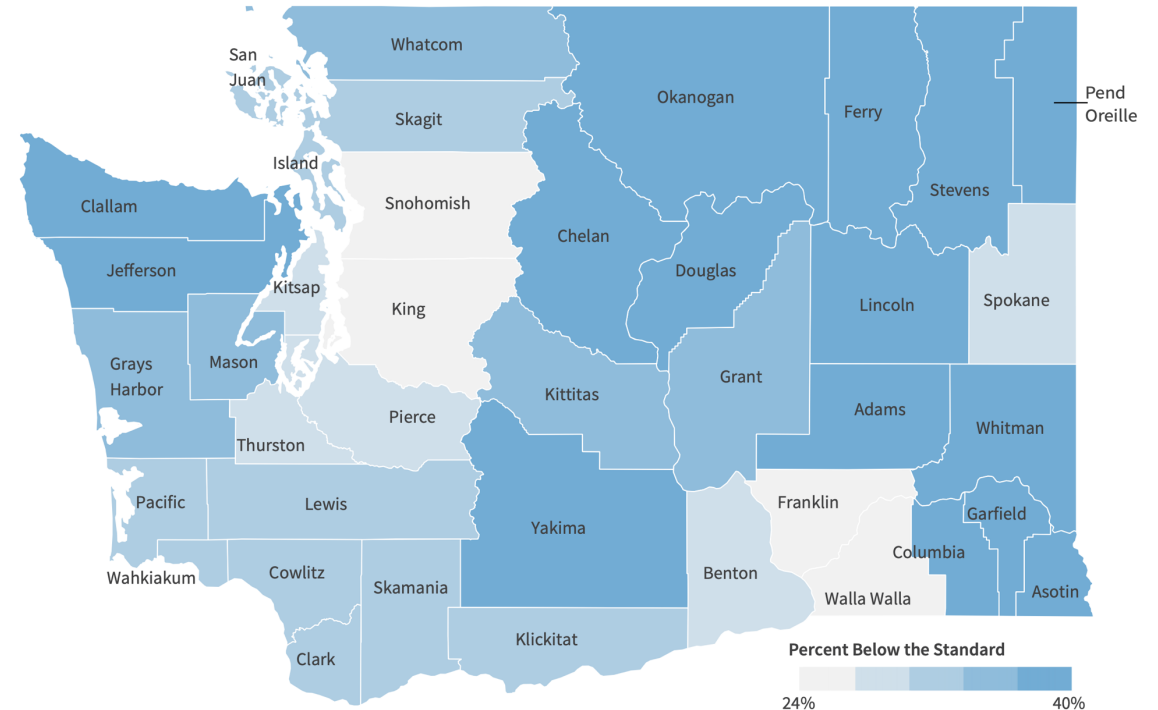
(Reference: [Advancing Workforce Equity in Seattle Report](#), Pg 21)



# Disparities Across Washington State

Both cost of living and income inadequacy vary across WA state

Figure AC. Income Inadequacy Rate by County



Source: U.S. Census Bureau, 2021 ACS 1-Year Public Use Microdata Sample.

Self-Sufficiency Standard for  
One Adult, One Preschooler

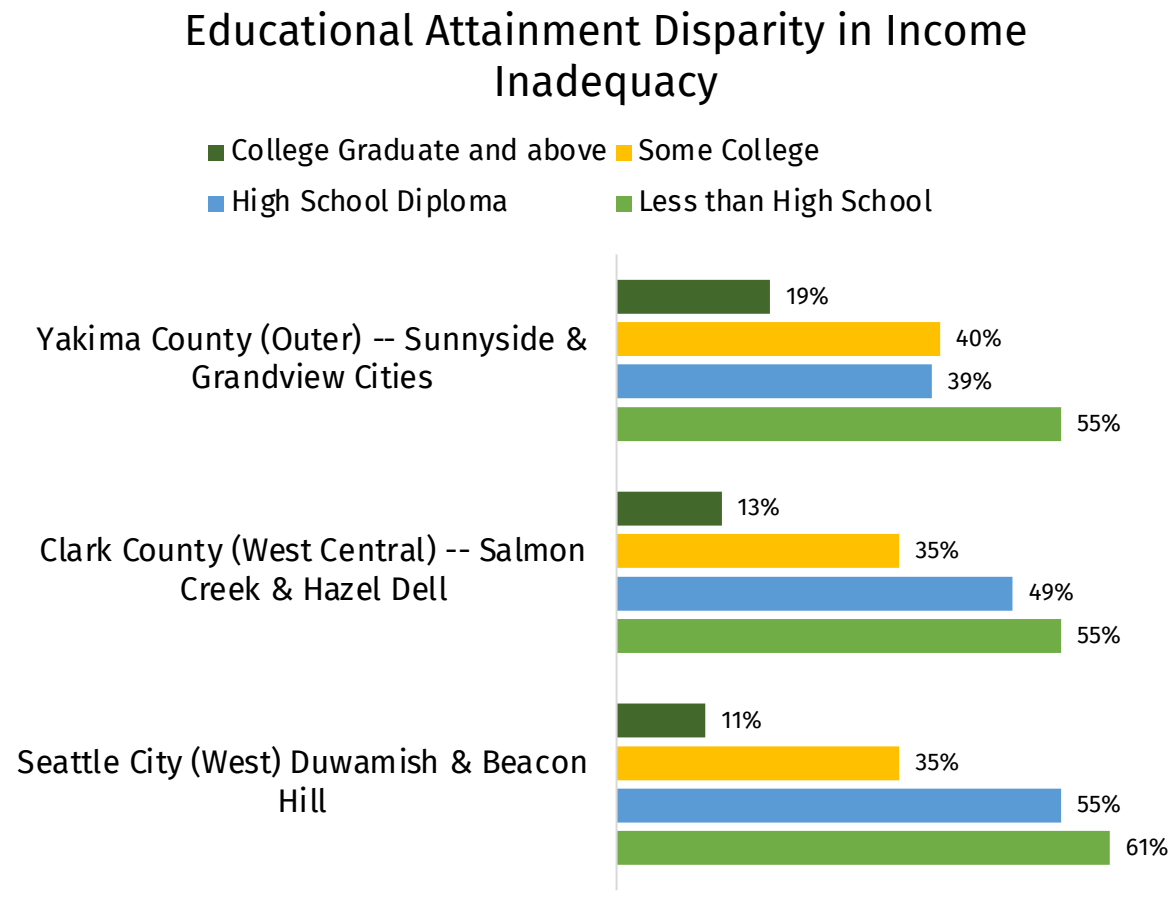
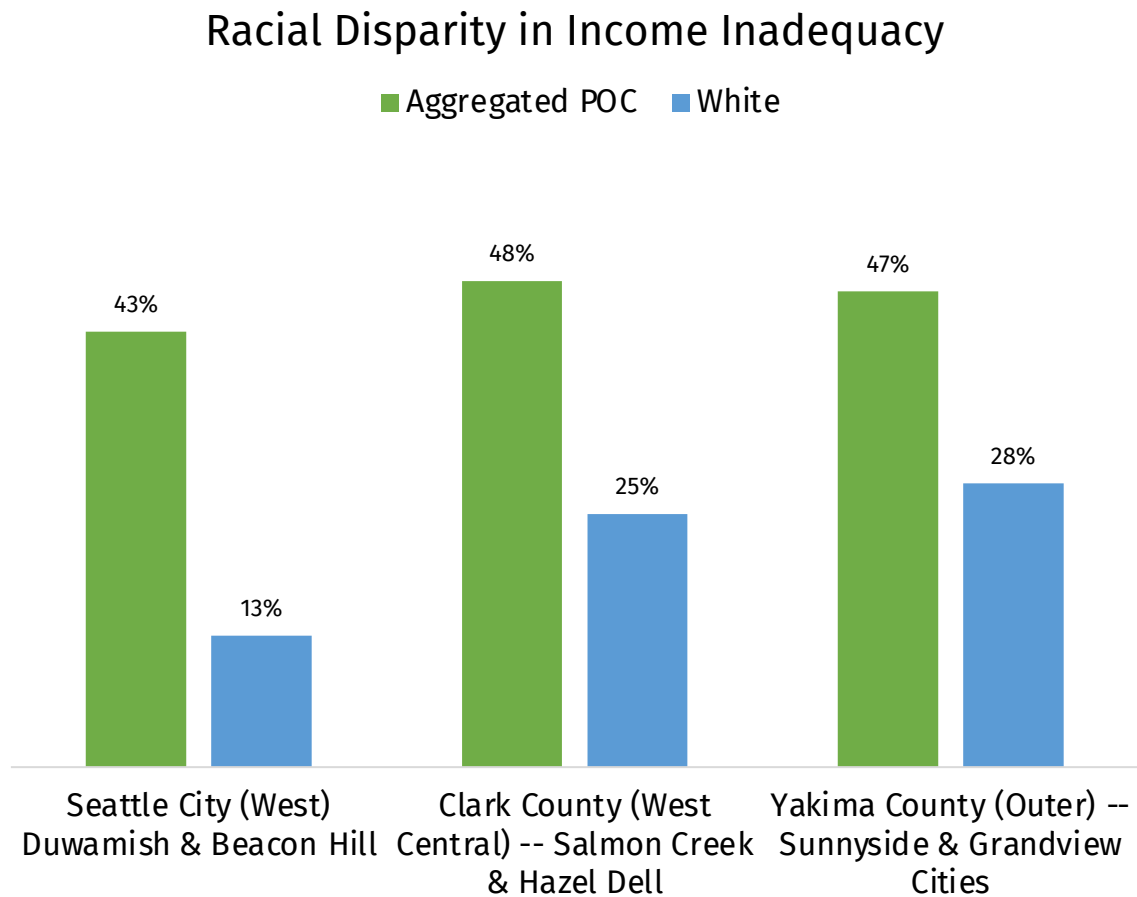
\$45,973 \$84,720

Source: [Overlooked and Undercounted Report](#) (pages 6 and 31)



# Income Inadequacy in Three WA Regions

(% Below Self-Sufficiency Standard)



Source: [Overlooked and Undercounted Report](#) (page 33)





# The “Why” Behind Workforce Dynamics

- **Challenge:** Data-driven world, but racial disparities in labor market data are often masked (not disaggregated)
- **Vision:** Tool to illuminate and tackle racial inequities, applying a racial equity lens to understand labor market data
- **Historical Context:** Anchored in historical context of race and racism in the United States
- **New Approach:** Reject the status quo, focus on rebuilding stronger

# Storytelling in Data Visualization

- **Early Collaboration:** Integrating Data and Communications
- **Data Needs Context:** We needed words/analysis, not just in a blog post published later, but alongside the data
- **Breaking Silos:** Data team embracing design concepts; Comms team diving into data insights
- **Address Misinterpretation:** Some will use data to promote racism; our focus is on systems, not people





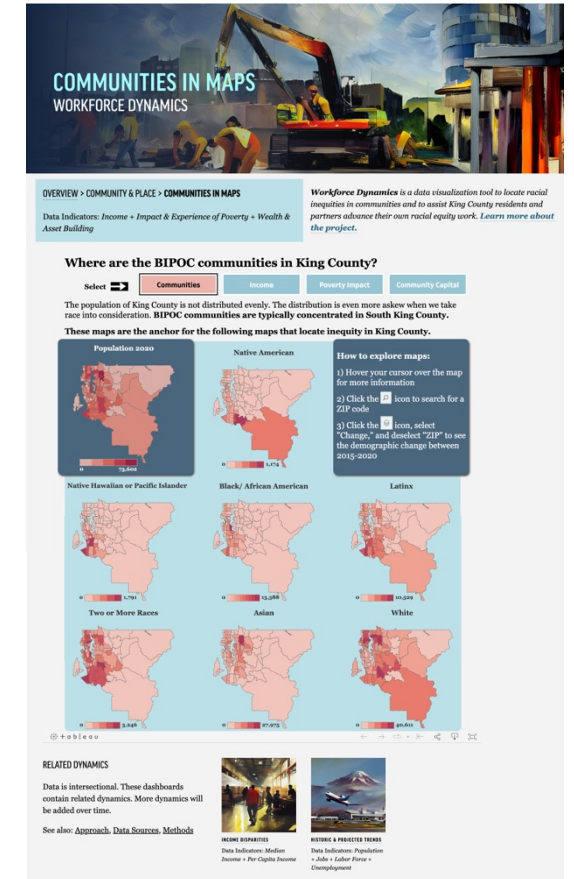
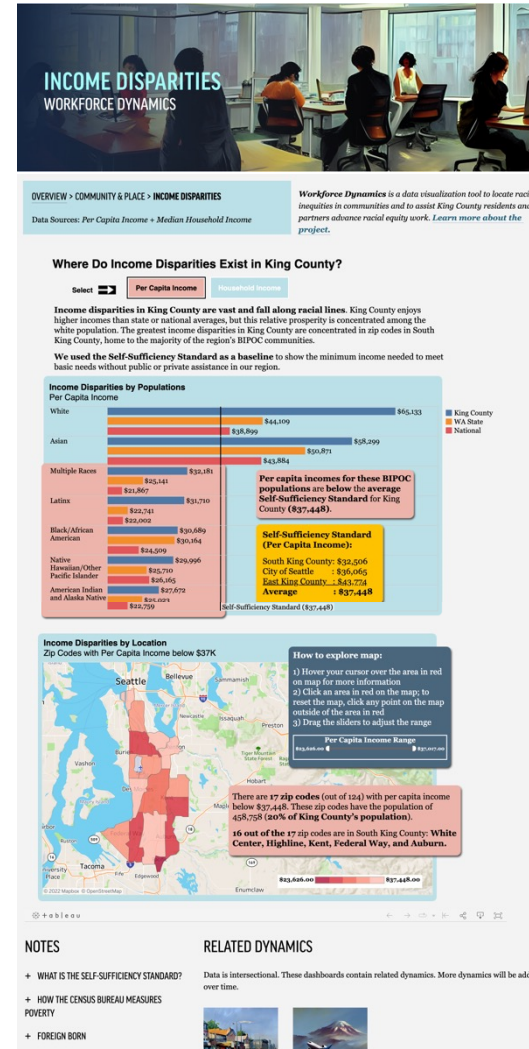
# Content Layout

**Design goal:** Frame and support the data, interconnect content, and provide additional context

**Text:** Presented alongside and given equal weight to the data visualization

**Color:** Used to draw attention to important information

**Art:** Focus on scenes of workers in different industry sectors



# Creating Useful Data Insights

**Start Simple, with Intention:** No need for fancy tools or big teams. Focus on revealing insights that are useful for your audience.

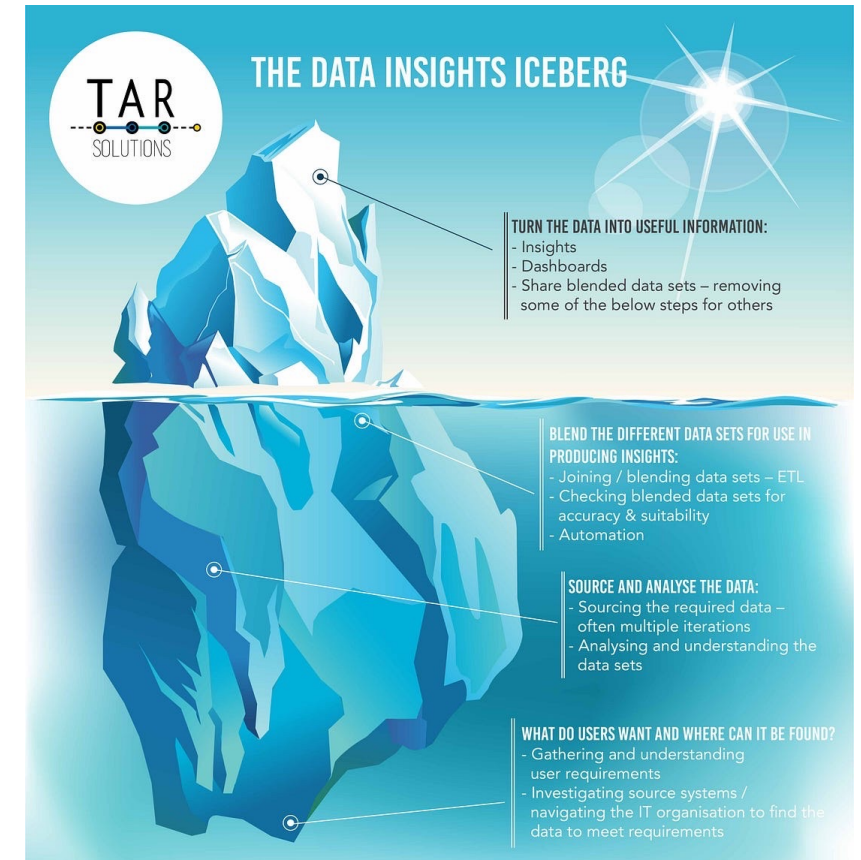
**Utilize Accessible Resources:** Census data is a good start. Build from there.

**Know Your Data:** Understand the difference between the data sources you want, and the data sources you have.

**Blend & Enhance:** Blend datasets like customer info to find insights.

**Visualize & Share:** Basic tools like Excel can help visualize your findings.

**Our Journey in King County:** We're continually refining our practices. We're not perfect and we're not there yet.





# Importance of Disaggregated Data

- **Aggregation:** Groups diverse communities and experiences together, masking disparities
- **Disaggregation:** Separates data into distinct groups for clearer insights; essential to understand specific community conditions



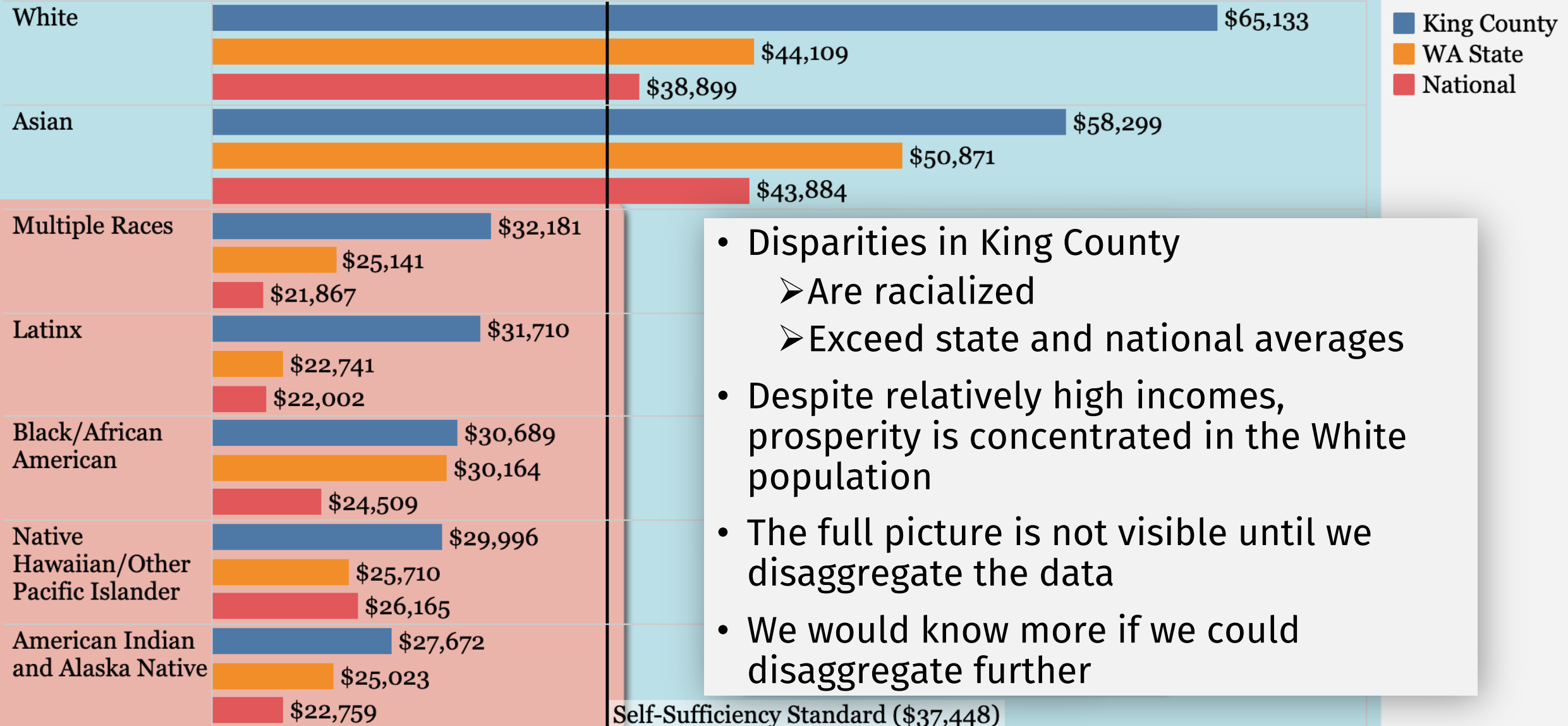
# Challenging Dominant Narratives

- **Case Study:** Median per capita income in King County is \$59,843 across all populations (2017-2021, in 2021 dollars)
- **Disaggregated data reveals:**
  - Racial disparities between BIPOC and White communities
  - Differences even within racial categories (e.g., Vietnamese vs. Chinese)

Source: [United States Census](#)

## Income Disparities by Populations Per Capita Income

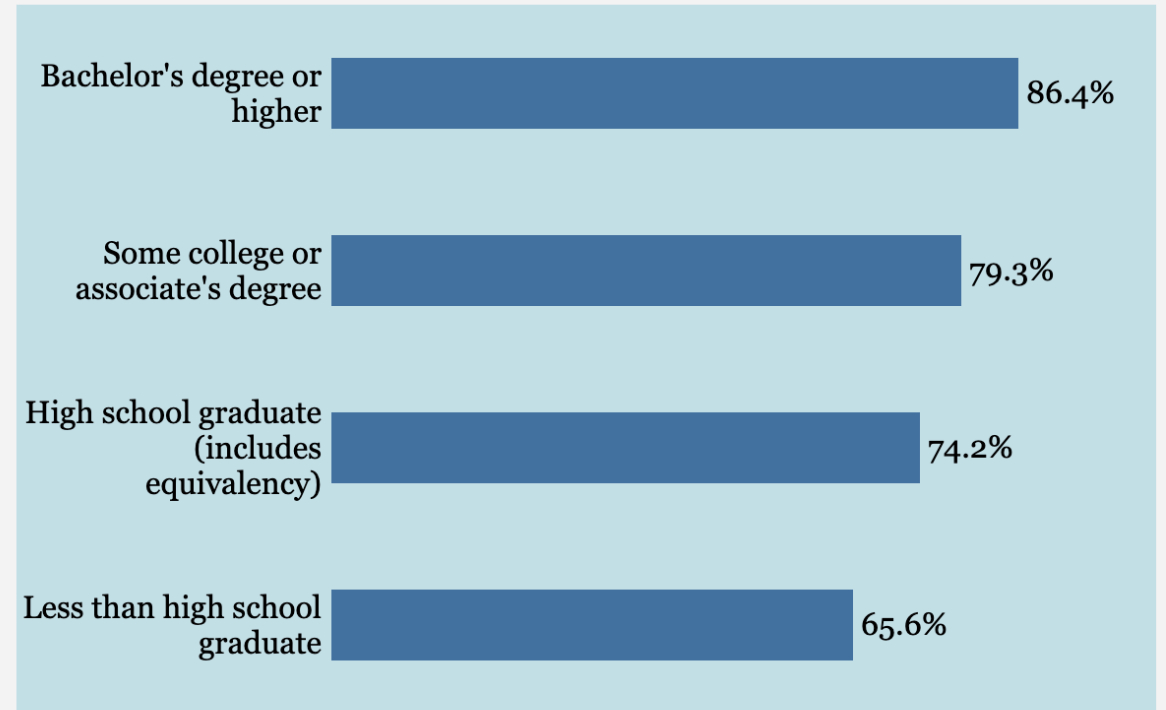
## Disaggregated Data Reveals:



**Higher education  
correlates  
with increased  
labor force  
participation.**

## Labor Force Participation

### By Educational Attainment



Source: *United States Census*



**We also know that educational attainment starkly affects income inadequacy.**

Source: [Overlooked and Undercounted Report](#) (page 19)

**Figure N. Income Inadequacy Rate by Highest Educational Attainment in Household**

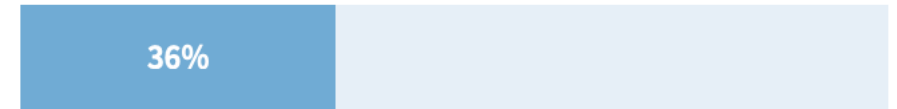
No High School Diploma



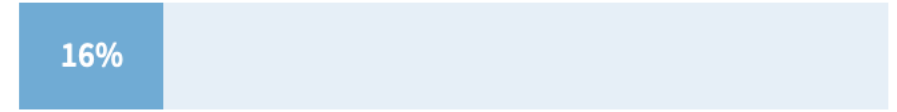
High School Diploma or Equivalent



Some College\*



Bachelor's Degree +



\*Some college includes an Associate's degree, and some college credit but no degree.

+Includes Bachelor's degree and higher

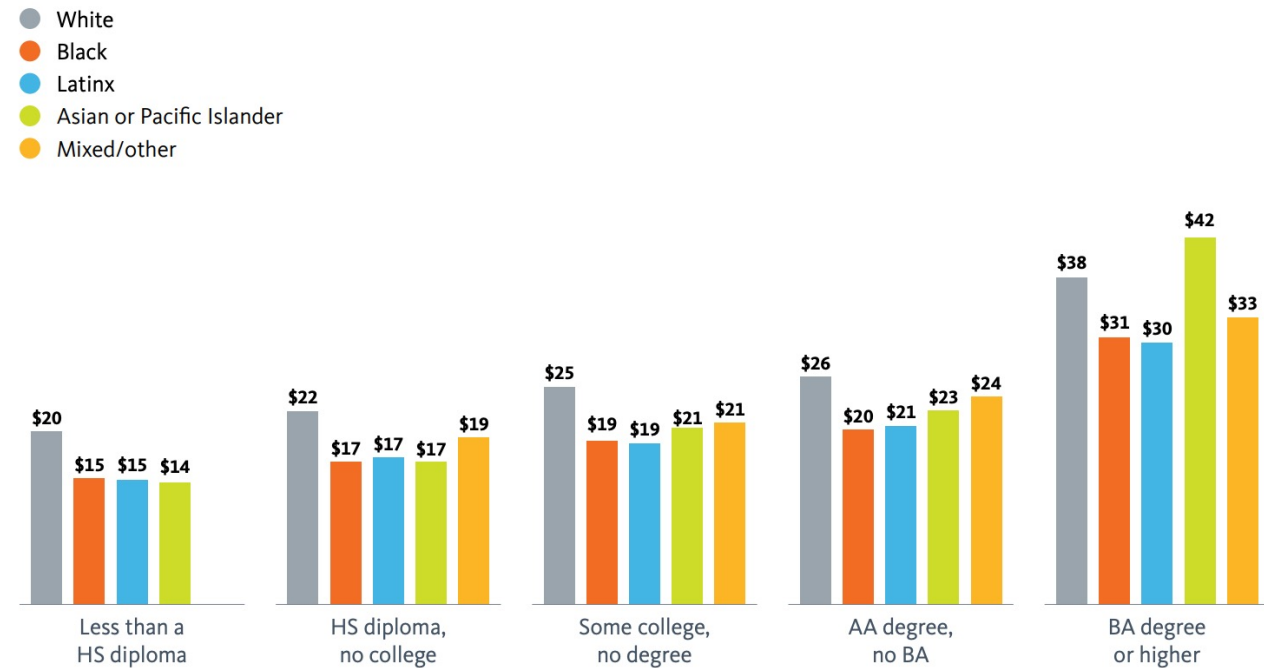
Source: U.S. Census Bureau, 2021 ACS 1-Year Public Use Microdata Sample.

# But benefits of educational attainment are limited for Black and Latinx workers.

- At every level of educational attainment, White workers earn more than Black and Latinx workers.
- White workers in Seattle with no high school diploma earn the same median hourly wage as Black workers with an associate's degree (\$20/hour) and only one dollar less than Latinx workers with an associate's degree (\$21/hour).

**Black and Latinx workers earn substantially less than their White counterparts at every level of educational attainment.**

**Median Hourly Wages by Educational Attainment and Race/Ethnicity, Seattle Metropolitan Region, 2018**



**Source:** Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes civilian noninstitutional full-time wage and salary workers ages 25–64 years. Data reflect a 2014–2018 average; Native American workers, and mixed/other race workers at certain educational levels, are not included because of small sample size. Values are in 2018 dollars.

Source: [Advancing Workforce Equity in Seattle](#) (page 33)



# How is WDC Using Data Insights to do Business?

**WDC's Data-Driven Lens:** Re-evaluating our entire portfolio with a focus on data insights around racial inequities.

**Demographic Alignment:** Comparing office and customer data with Census insights to locate gaps in service delivery.

**Targeted Recruitment:** Prioritizing programs by zip codes informed by specific demographics.

**Community Collaboration:** Partnering for enhanced data collection to boost operational efficiency.





# Now it's Your Turn

- **Local Insights:** What overlooked questions/issues resonate in your community?
- **Your Voice, Your Vision:** What story can you tell with data that no one else can?
- **Stay Curious, Stay Bold:** Start simple, and embrace iteration.





# Q&A Session



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# Thank you for joining us today!

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