

# Alaska State Policy Research Alliance: Informing issues with data and evidence

February 22, 2017

Dr. David Stevens Dr. Ashley Pierson

### Introductions



David Stevens, Ph.D.



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### Today's goals:

- Overview:
  - Alaska State Policy Research Alliance (ASPRA)
  - Regional Educational Laboratory Northwest (REL NW)
- Review analysis on three issues:
  - Alaska's smallest schools
  - Educator retention
  - Developmental education



Alaska State Policy Research Alliance (ASPRA)

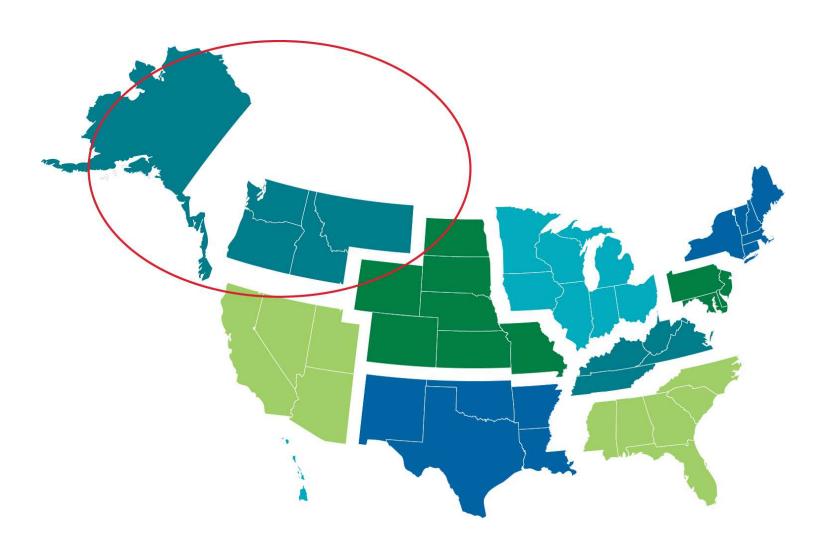
Produce and share evidence on Alaska education issues



### ASPRA leadership team

- Department of Education & Early
   Development (DEED) Dr. Susan McCauley
- Alaska Superintendents Association –
   Dr. Lisa Parady
- University of Alaska Dr. Steve Atwater
- REL Northwest Drs. Pierson & Stevens

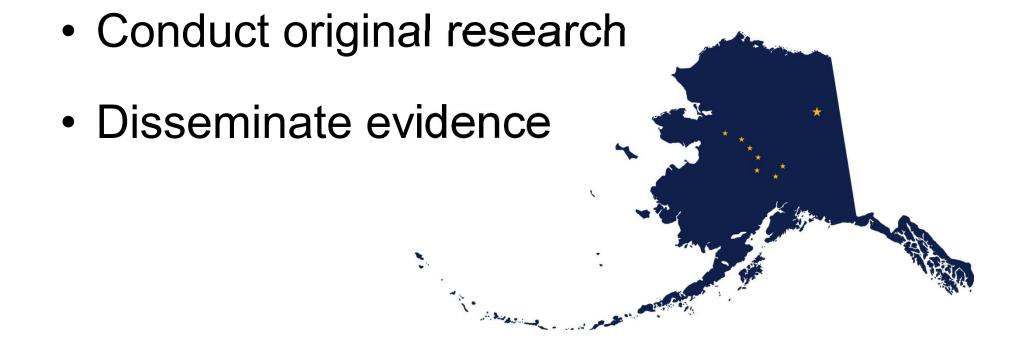
### REL Northwest region





#### **ASPRA** activities

- Convene Alaska education stakeholders
- Support stakeholders in using data and evidence



### Four ASPRA working groups

- Educator pipeline
- Early childhood
- State education policy
  - –DEED support
- School leadership
  - Superintendents
  - -Principals



### Superintendent working group

- ASA & 11 districts
- Chair: Ty Mase, Lake & Peninsula



- Questions:
  - Characteristics of Alaska's smallest schools
  - Alaska's educator turnover rates
  - Strategies to reduce developmental education rates



#### Alaska's smallest schools



### **Enrollment analysis**

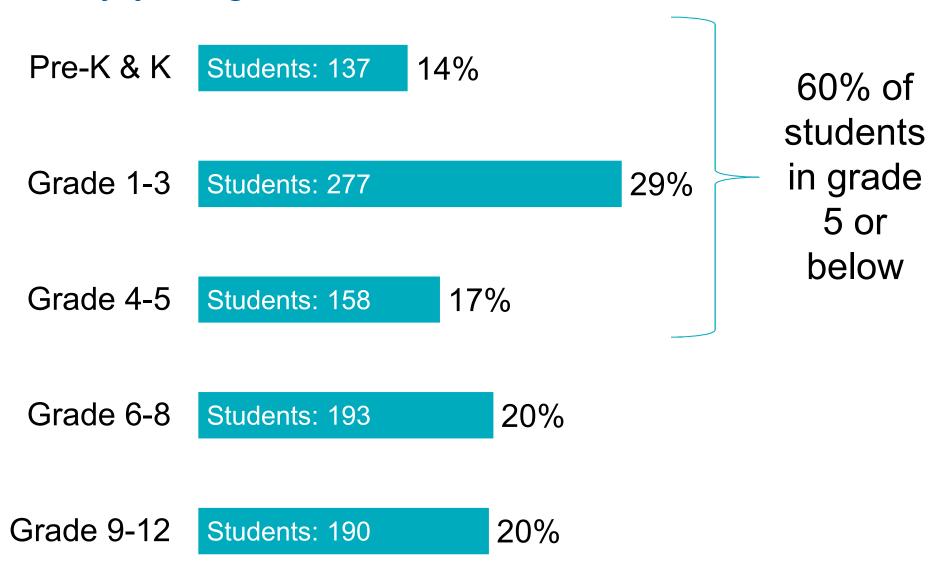
- Public data from 2015-16 school year
- Compare schools with:
  - -10 to 24 K-12 students
  - -25 or more K-12 students
- Understand Alaska's smallest schools
  - –Implications of changes in enrollment floor policy



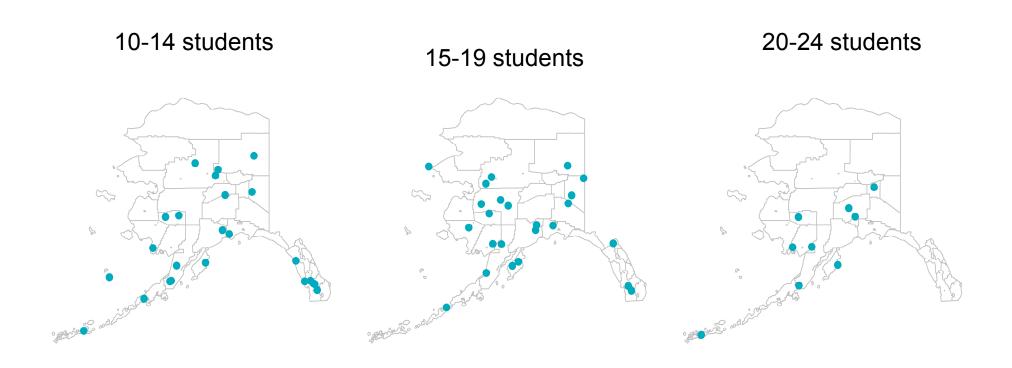
## 58 schools have fewer than 25 students

| Enrollment | School cou | ınt        | Percent of total schools |
|------------|------------|------------|--------------------------|
| 10–14      | 25         |            | 5.6                      |
| 15–19      | 24         | <b>—58</b> | 5.4                      |
| 20–24      | 9 _        |            | 2.0                      |
| 25–29      | 7          |            | 1.6                      |
| 30–49      | 27         |            | 6.1                      |
| 50 or more | 351        |            | 79.2                     |
| Total      | 443        |            | 100.0                    |

### Schools with less than 25 students have many young students



## Schools with less than 25 students are in many regions of the state



### 22 of 54 districts have schools enrolling less than 25 students

- Alaska Gateway
- Aleutian Region
- Aleutians East
- Bering Strait
- Chatham
- Chugach
- Copper River
- Delta-Greely
- Denali
- Iditarod Area
- Kenai Peninsula

- Kodiak Island
- Kuspuk
- Lake and Peninsula
- Lower Kuskokwim
- Mat-Su
- Pelican City
- Pribilof
- Southeast Island
- Southwest Region
- Yukon Flats
- Yukon-Koyukuk

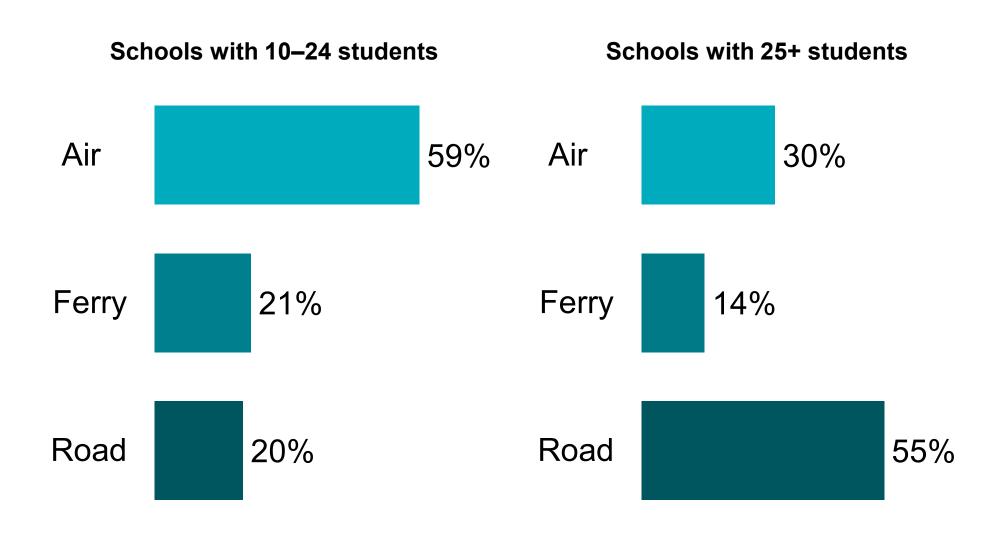
### Student numbers change each year

 Most schools experience changes in enrollment each year

 Current policy does not take enrollment fluctuations into account

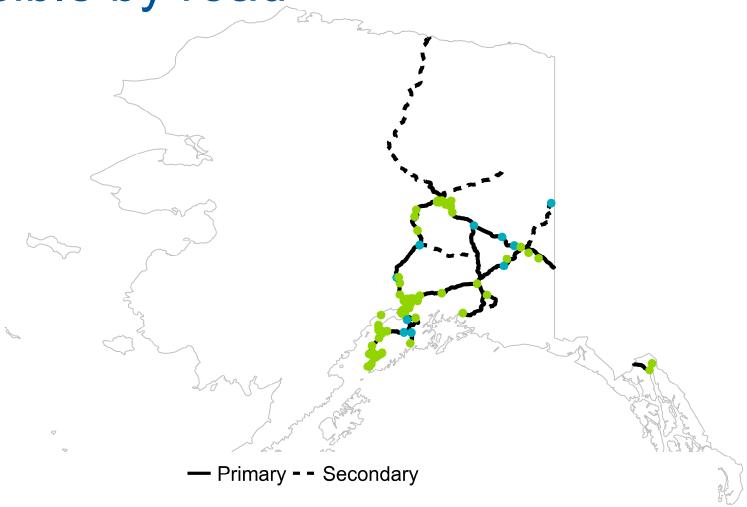


# Most schools with less than 25 students are accessible only by air



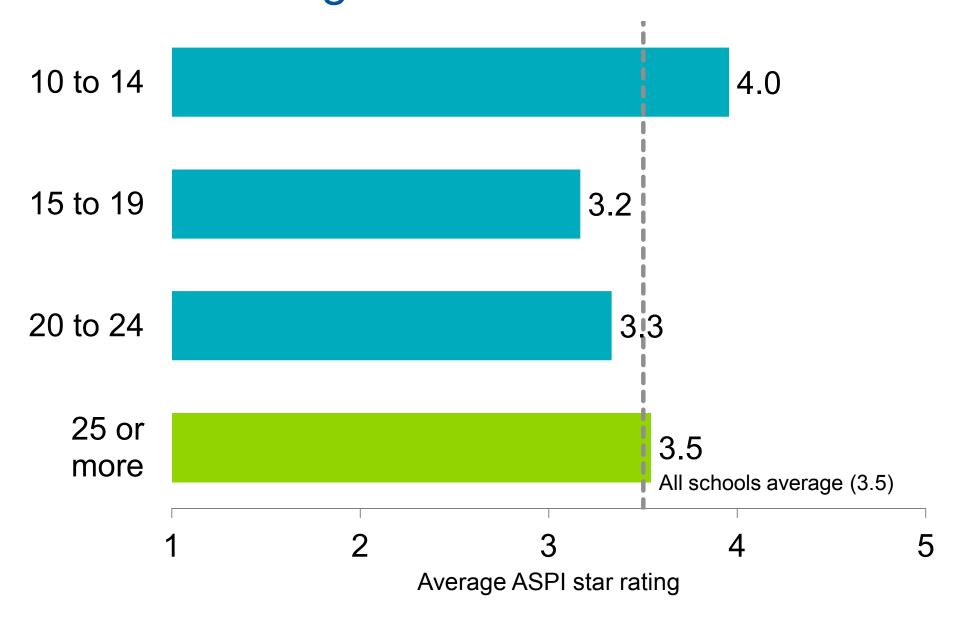
Few schools with less than 25 students

accessible by road

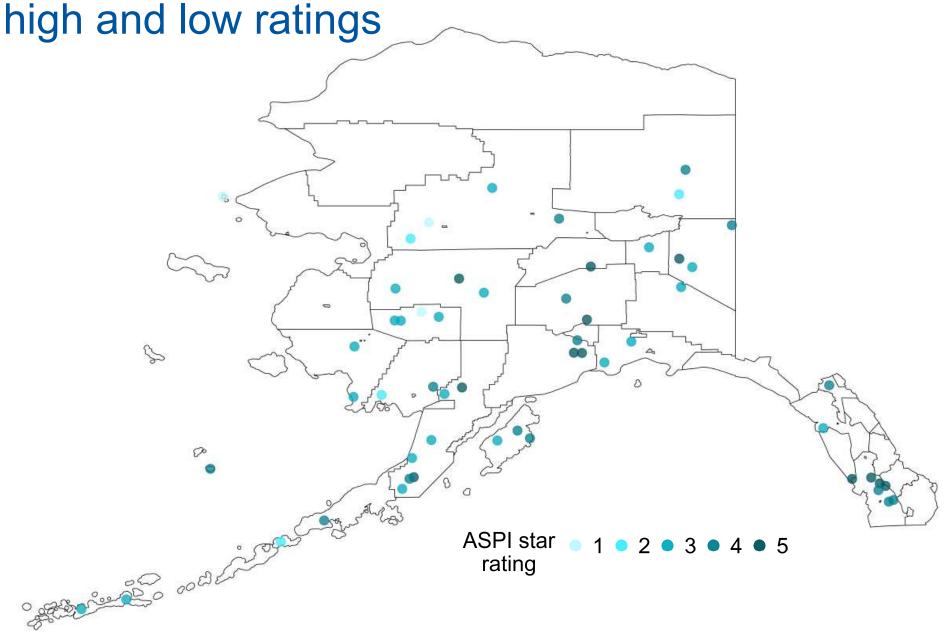


Schools with less than 25 students
 Schools with 25 or more students

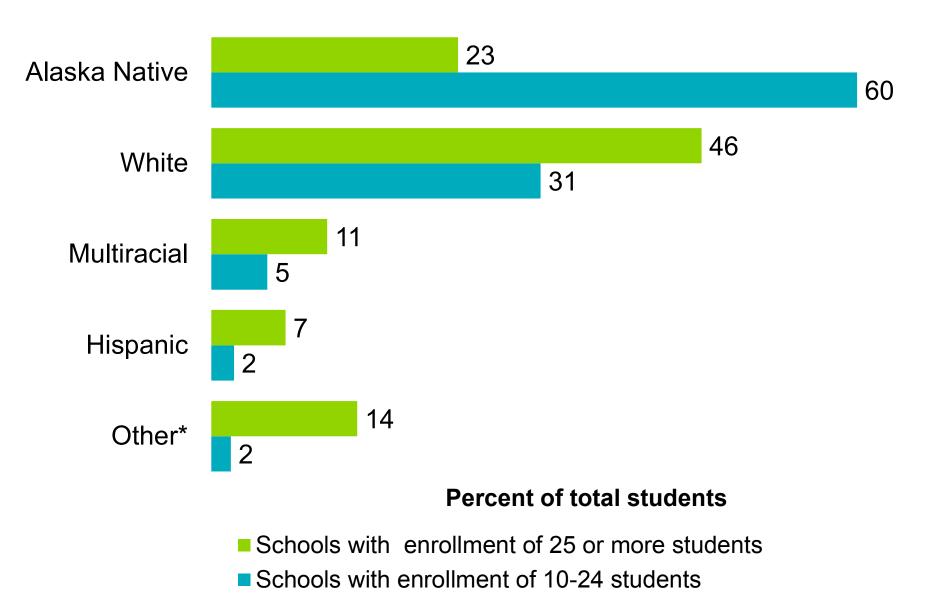
## Schools with 10–14 students had highest ASPI star rating



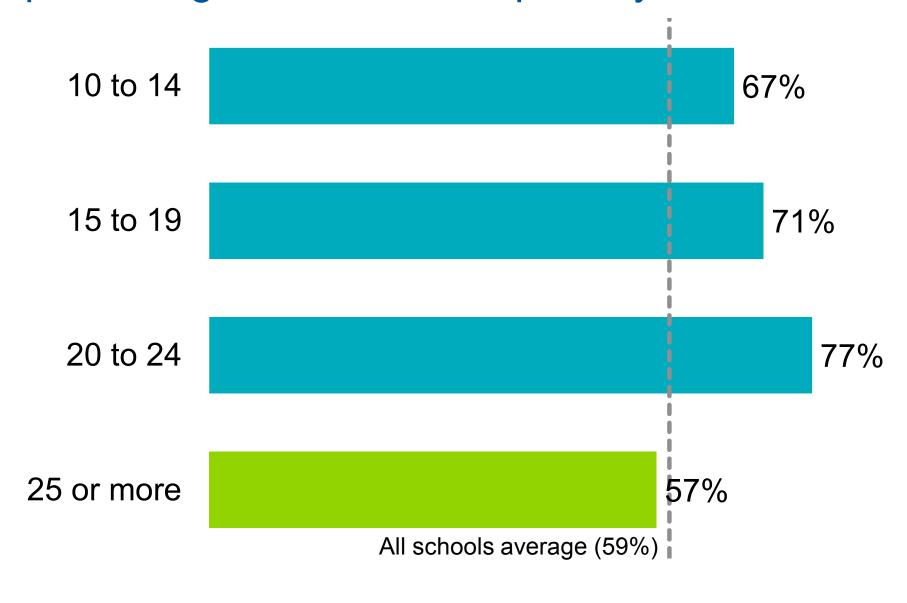
Schools with less than 25 students have both



## Schools with less than 25 students have predominantly Alaska Native population



### Schools with less than 25 students have high percentage of students in poverty



#### Alaska's smallest schools

- 13% of schools in most regions of state
- 22 of 54 districts
- 60% of students in grade 5 or younger
- Majority accessible only by air
- Both high- and low-performing schools
- Many historically disadvantaged students



#### **Educator Retention**



### Educator retention analysis

- National research
- DEED and original analysis
  - Public and DEED data
  - Numbers may differ slightly from DEED
- Teacher, principal, & superintendent turnover and retention
  - Turnover new to school/district
  - Retention stay at school/district
  - Tenure years at school/district



### DEED turnover analysis 2016-17

- Teachers
  - Inter-district: 10.5%
  - Intra-district: 12.8%
  - -**Total**: 22.0% of teachers new to their school

- Administrators: 30.3%
  - -177 of 584 new to their school

### Turnover rates vary across U.S.

- Teachers (2013):
  - Nationally 14%
  - Alaska 17%
  - Hawaii 21%

- Idaho 13%
- Montana 19%
- Oregon 12%
- Washington 10%
- Principals: 15-30% across districts
  - Alaska has 3<sup>rd</sup>-lowest average tenure
- Superintendents: ~15% annually
  - Up to 45% exit in 3 years

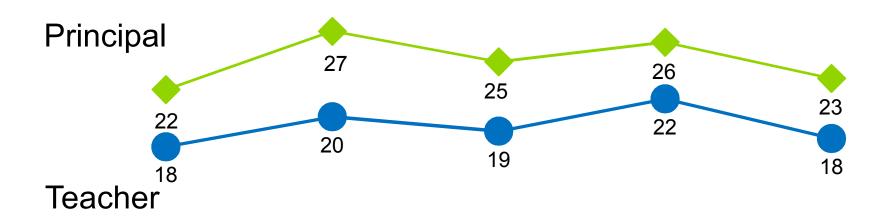


Typically move out of high-poverty/rural schools

### Newly certified & new to state

- Teachers
  - About 10% of teachers new to the state each year for last 5 years (~800 new of 8000)
- Principals
  - In 2013, 13% of principals were new to state
  - Down to 7% by 2017 (27 new of 397)
- Superintendents
  - In 2017, only 1 superintendent new to state

# School turnover: Principal and teacher rates steady over time



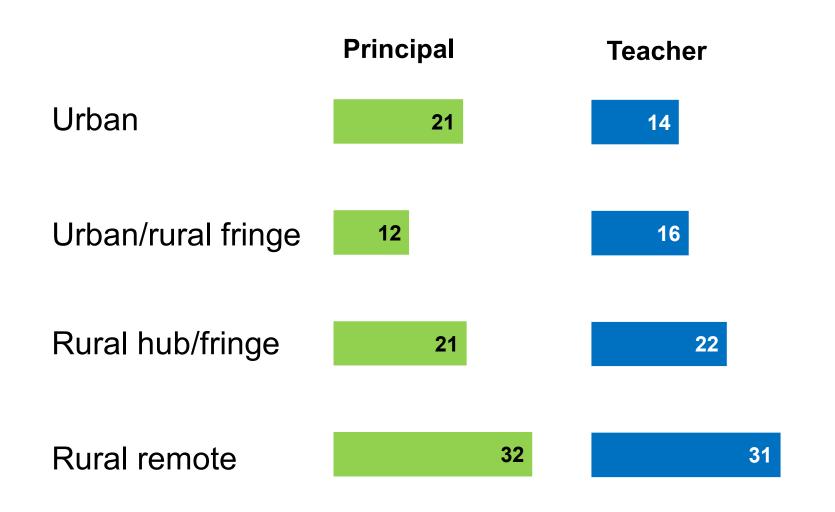
2013 2014 2015 2016 2017

### Defining rural schools

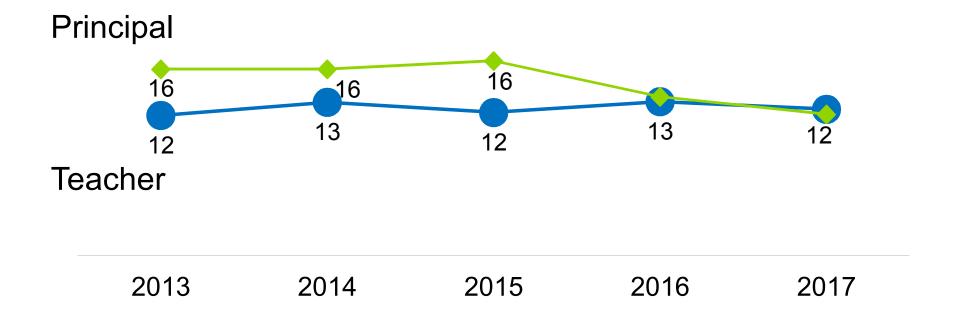
- Created four modified categories
  - Urban (on- and off-road)
    - Anchorage, Fairbanks, Juneau
  - Urban/rural fringe (on- and off-road)
    - Palmer, Seward, Sitka
  - Rural hub/fringe (on- and off-road)
    - Bethel, Healy, Unalaska
  - Rural remote (off-road)
    - Adak, Arctic Village, Yakutat



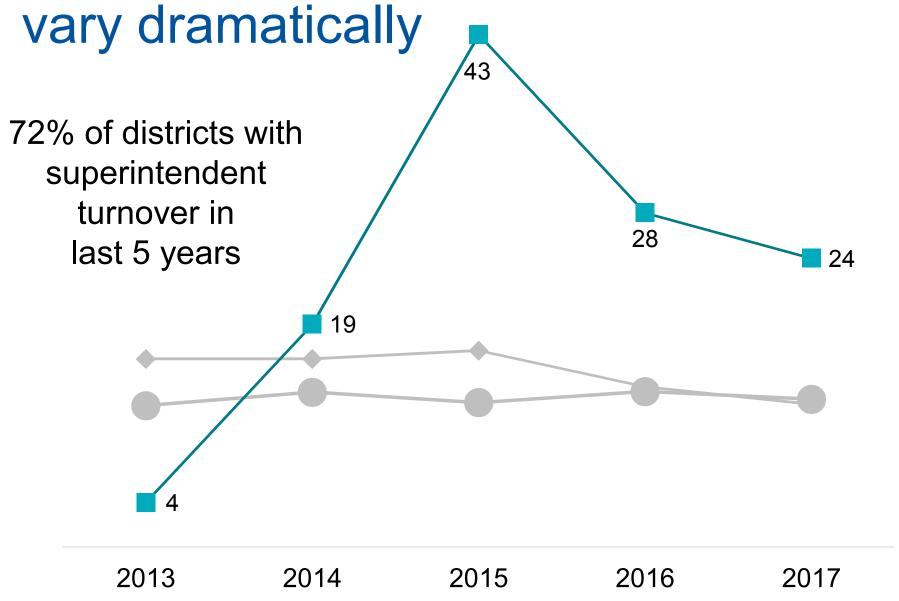
### Rural remote schools had highest turnover among principals and teachers, 2016/17



# District turnover: Rates relatively steady over time



Superintendent turnover: Rates



### Strategies to increase retention

- Caveat: Not all turnover is negative
- Grow-your-own staff and leadership
- Improve onboarding of new staff
  - Connections to community
  - Connections to other staff
- Build incentives to stay in contracts
  - Example: bonus after 2 years
- Encourage networks within and across districts
  - Key for rural districts
  - Can be virtual and/or in-person



### Cost of teacher turnover study

Dayna Jean DeFeo, PhD

Trang Tran, MPP; Diane Hirshberg, PhD; Dale Cope, PhD; Pam Cravez, JD



### Categories and cost examples

| Separation             | <ul><li>Administrative tasks</li><li>Exit interviews</li></ul>                             |
|------------------------|--|
| Recruitment            | <ul><li>Job fairs: travel, registration, per diem</li><li>Advertising</li></ul>            |
| Hiring                 | <ul><li>Applications, interviews, background checks</li><li>HR processing</li></ul>        |
| Orientation & training | <ul><li>New teacher orientation &amp; mentoring</li><li>Professional development</li></ul> |
| Preparation            | <ul><li>Coursework, field placement</li><li>Certification</li></ul>                        |
| Teacher productivity   | Student learning   |
|                        |  |



## This analysis: District-level costs

| Preparation | Teacher<br>productivity                                      | Separation   | Recruitment                                    | Hiring   | Orientation<br>& training   |
|-------------|--|--|--|--|---|
|             | <ul> <li>Student learning</li> <li>School climate</li> </ul> | <ul> <li>Exclude</li> <li>Terminations</li> <li>Teachers leaving mid-year</li> <li>Contracted ed services</li> <li>Benefits</li> </ul> | • Wages & benefits for recruit-ment activities | • Community costs, like having elders or parents on interview committee • Benefits | <ul> <li>School-level costs</li> <li>State-wide mentor program</li> <li>Benefits</li> </ul> |

### Teacher turnover report forthcoming

http://www.iser.uaa.alaska.edu/CAEPR/

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## **Developmental Education**



## Developmental education

- Non-credit courses
- Prepare students for college math and English

(Hodara & Cox, 2016)



 Students who take developmental education are less likely to complete college (Bailey et al., 2010)



# High school graduates place into developmental education for many reasons

- Graduation requirements may not align with college
- Lack of rigorous coursework
  - Historically disadvantaged students tend to take less rigorous courses
- Misaligned placement processes

(Hodara, 2015)





## Strategies to reduce developmental education rates

 Shorten required math sequence for students not seeking degree in math-focused field (Hodara & Petrokubi, 2017)

• Increase high school rigor (Thomas, 2013)

 "Co-enroll" students in developmental and college-level coursework

(Vandal, 2014)

Change placement policies

(Hodara & Cox, 2016)



# Developmental education rates are higher at community colleges

- Open-access enrollment
- National entering college class of 2003/04:
  - -68% of community college students
  - -39% of public four-year

(Radford & Horn, 2012)

 Oregon – 75% of recent high school graduates enrolled at community college



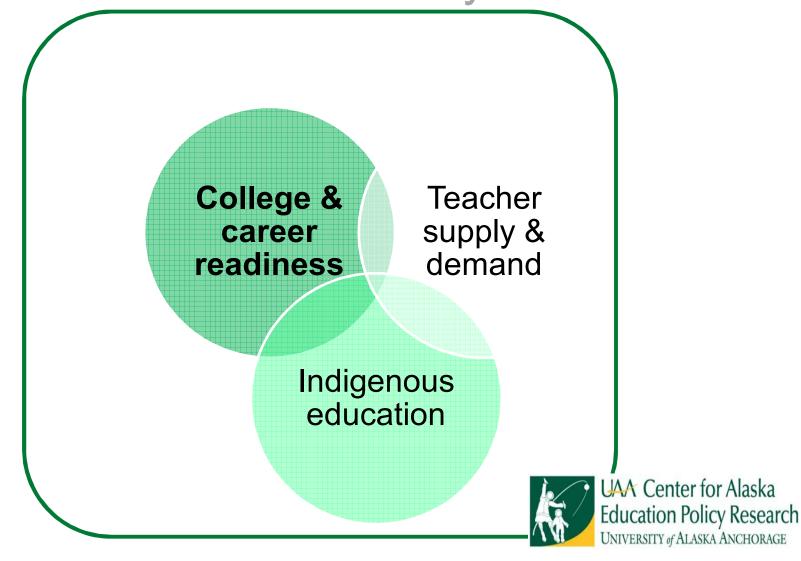
# University of Alaska rates are similar to community college rates in other states

### Developmental education rates:

- 61% of first-time students between fall 2008 and spring 2012
  - Rates higher for math than English (Hodara & Cox, 2016)
- 71% of incoming students in fall 2014 (University of Alaska Anchorage, 2016)
- Open-access institution
- Two-year, four-year, and graduate degrees

### Current CAEPR research focus

Alaska Education Policy Context



# Forthcoming work on college readiness

- Early college placement testing
- State of state in education
- Study of high school seniors' aspirations and plans
  - Collaborative proposal in development
    - ACPE
    - 65 by 2025
    - AVTEC
    - School Districts
- Juneau March 6 & 7

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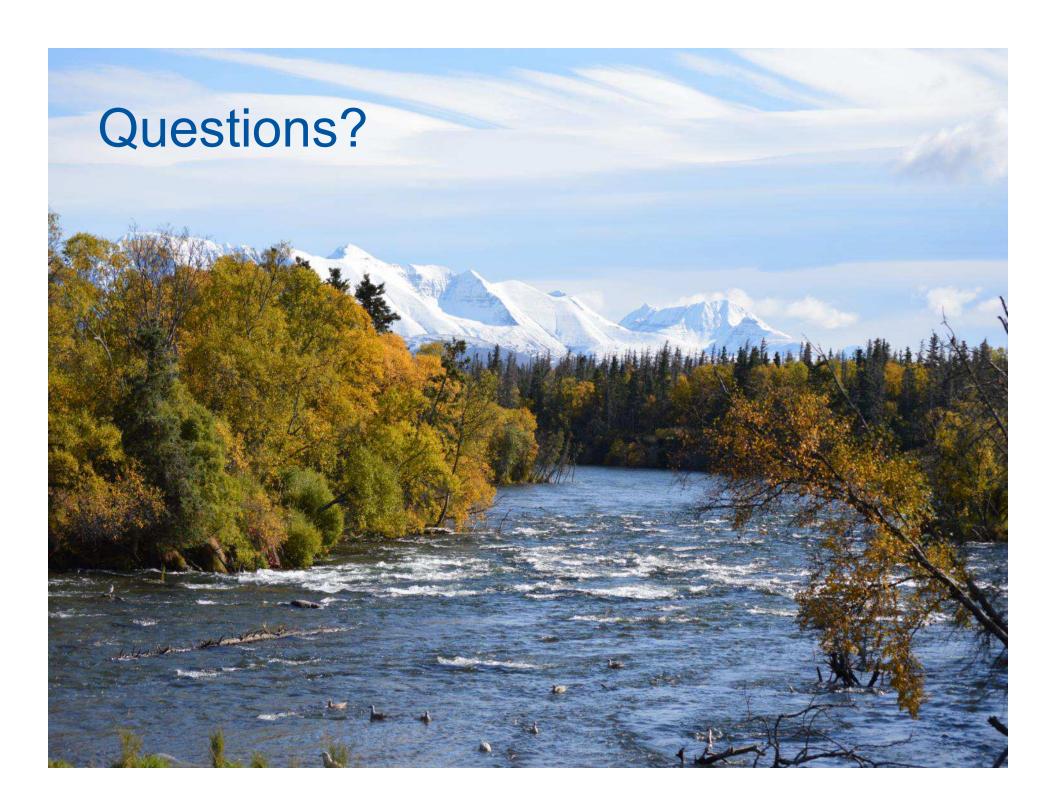
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