# The Challenge of Teacher Retention in Urban Schools: Using Evidence from 16 Districts in 7 States to Examine Variation Across Sites

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## The challenge of teacher retention

 High rates of teacher turnover impose serious costs on districts, schools, and students

#### Financial costs

- Advertising, recruiting, hiring, induction, etc.
- \$10,000 to \$20,000 to replace a teacher (Milanowski & Odden, 2007; Birkeland & Curtis, 2006)

#### Educational costs

- Possible costs as more experienced teachers leave (although depends on effectiveness)
- Organizational costs because of instability (Ronfeldt, Loeb, & Wyckoff, 2012)

## The challenge of teacher retention

- Popular press asserts that we have a teacher retention crisis:
  - "The Teacher Dropout Crisis" (NPR, 2014)
  - "Report finds crisis in teacher retentions" (Washington Post, 2012)
  - **...**
- But, what do we know of the teacher retention challenge?
  - National studies with limited data
  - Local studies with better data but results that are difficult to compare due to different methodological approaches

## Our study

#### **Data**

- Admin data from 16 urban school districts in 7 states
- ▶ Longitudinal, up to 12 years in some cases
- Sample represents about 5% of US public school children

#### **Guiding Questions**

- 1. How do one-, three-, and five-year teacher retention rates vary at the school, district and state levels?
- 2. How do these rates differ when we take re-entrants into account and when we examine cross-district moves within a state?
- 3. How do teacher retention rates vary across districts by teacher experience and effectiveness?

## Working with these "big data"

#### Challenges & Limitations

- Renewing and extending MOUs/DUAs
- Districts/states both desire and oppose "benchmarking"
- Inconsistent time period—a potentially big limitation given the economic recession that spanned the period
- pprox 2500 hours of RA/RM time cleaning data; economies of scale working with state data

#### Opportunities

- Data enable most comprehensive x-site analysis of retention
- Use consistent data practices, definitions of retention, and analytical techniques to examine retention across districts
- State data allow us to quantify the extent of mobility between districts

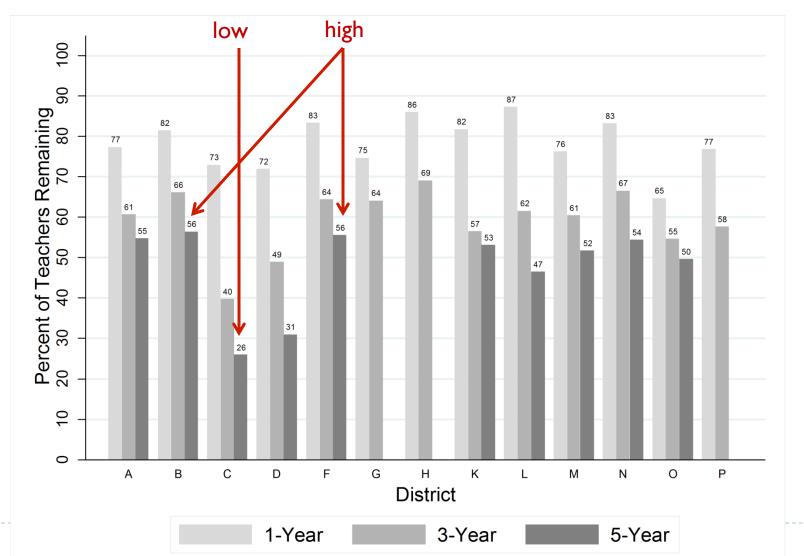
## Key findings

#### I. Turnover is quite high, particularly at the school level

- Across districts in our study, 55% of novice teachers leave their district and 70% leave their school within 5 years.
- In 9 of 13 districts, 1/3 or more of novice teachers don't remain in their same school for a second year

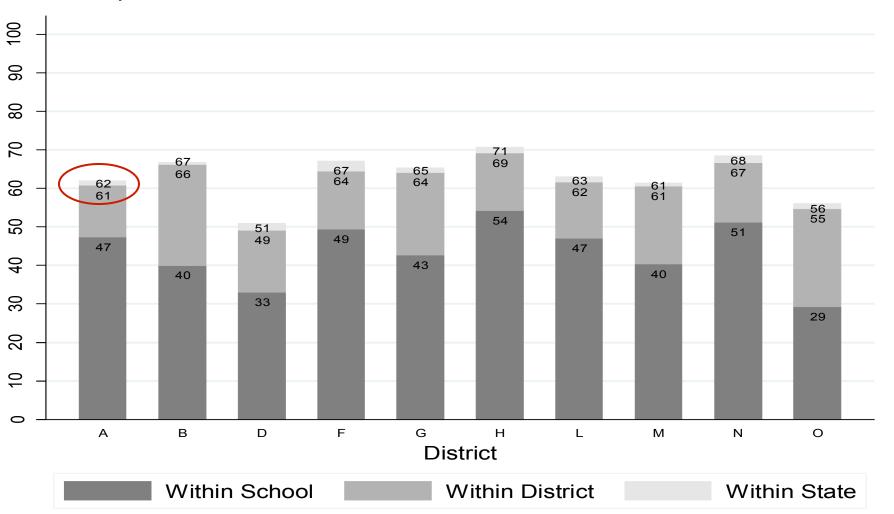
# 2. There is substantial variation in teacher retention across districts

Within-district retention rates for novice teachers



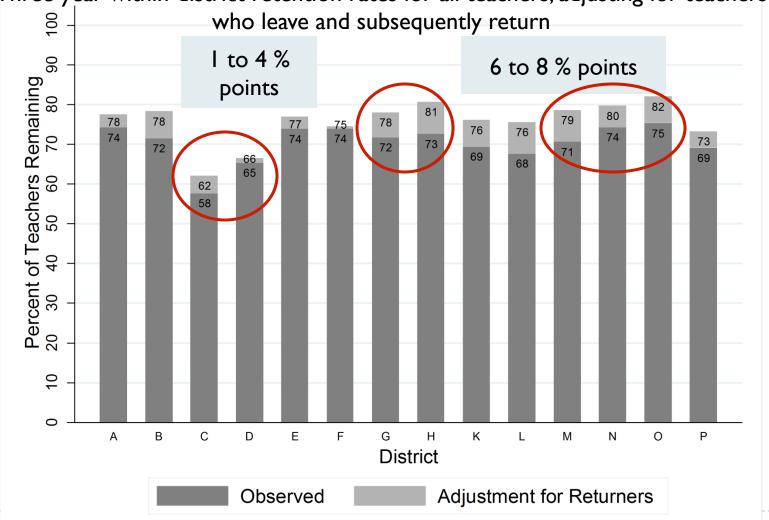
# 3. Cross-district moves within state do not contribute much to the retention challenge

Three-year within-school, -district, and -state retention rates for novice teachers



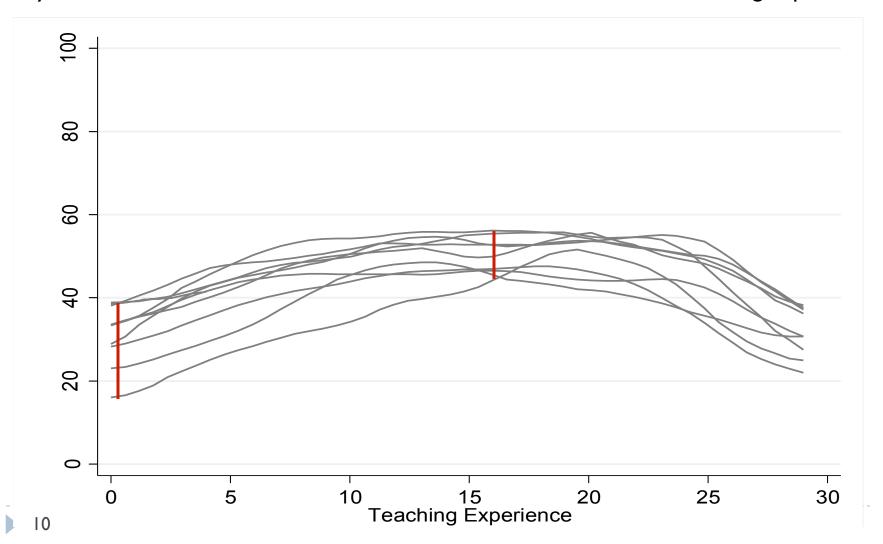
# 4. Adjusting for returners exacerbates variation in retention rates across districts

Three-year within-district retention rates for all teachers, adjusting for teachers



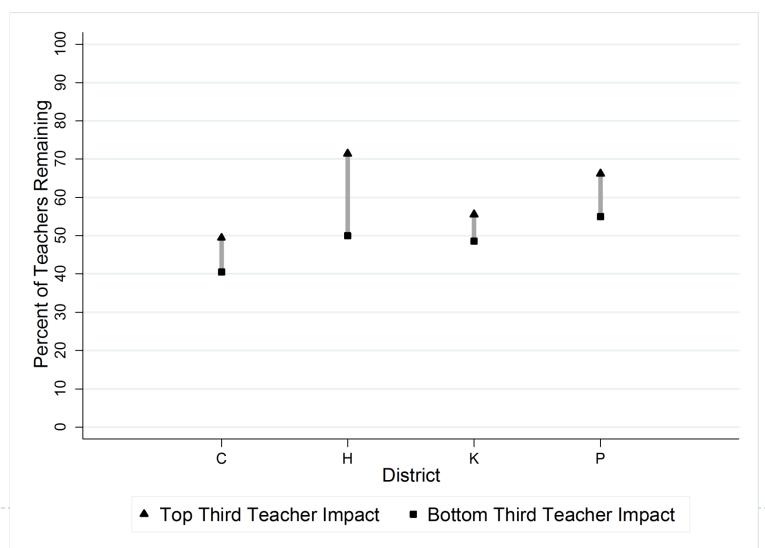
# 5. Retention rates are lowest (and variation greatest) early and late in teachers' careers

Five-year within-school retention rates for all teachers, across levels of teaching experience



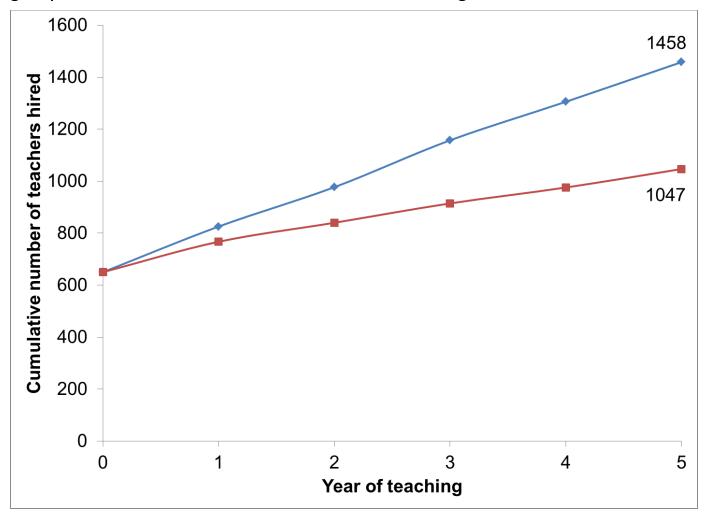
# 6. There is substantial variation in retention rates by teacher effectiveness

Three-year within-district retention rates for novice teachers, by value-added tercile.



# 7. Because teacher retention rates vary, so too would the financial costs of turnover

Hiring required to fill 650 novice slots, in districts with highest and lowest retention rates.



## Conclusion: Policy-related

- Even among similar districts, rates of teacher turnover vary widely
  - ▶ 44-74% of novice teachers left their district within 5 years.
  - Thus, costs of turnover vary widely.
  - Estimates from national data insufficient for informing local policy.
- Little evidence of cross-district mobility within states
- However, within-district transfers are substantial
- School-level turnover universally quite high, particularly for novice teachers
- Turnover is greatest early in teachers' careers and among teachers who are less effective, on average
  - Substantial differences in retention rates by effectiveness across districts

#### Conclusion: Research-related

- "Big data" can help us add important nuance to widely held beliefs.
- Our understanding of the retention challenge would have been substantially different in District B than District C.
- How much variation would we observe in other key research findings if we looked across a range of sites?

### Thank You

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