

# Teacher Mobility and External Contextual Factors: The Case of Michigan High Schools

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MICHIGAN CONSORTIUM FOR  
**EDUCATIONAL**  
**RESEARCH**

# Problem

- Teacher Mobility
  - To What Extent?
    - Nationally 15% (Keigher & Cross 2010)
    - Michigan 13%
  - Why?
    - School Demographics (Allensworth, Ponisciak, & Mazzeo 2009; Keigher & Cross 2010)
    - Poor Working Conditions (Ingersoll 2001; Kukla-Acedvedo 2009; Stuit and Smith 2010)

# Research Questions

- (1) To what extent is the implementation of a curricular policy related to teacher mobility?
- (2) To what extent is an economic crisis related to teacher mobility?
- (3) To what extent is there variation in teacher mobility within the school year and by locale?

# External Context

- Policy Factors
  - Few studies examine policy and mobility (Kessler 2010)
  - Michigan Merit Curriculum (MMC)
- Economic Factors
  - National recession
  - Declining Michigan economy

# Michigan Merit Curriculum High School Graduation Requirements



## MATHEMATICS - 4 Credits

Algebra I  
Algebra II

Geometry  
One math course in final year of high school

## ENGLISH LANGUAGE ARTS - 4 Credits

English Language Arts 9  
English Language Arts 10

English Language Arts 11  
English Language Arts 12



## SCIENCE - 3 Credits

Biology  
Physics or Chemistry

One additional science credit

## SOCIAL STUDIES - 3 Credits

.5 credit in Civics  
U.S. History and Geography

.5 credit in Economics  
World History and Geography

## PHYSICAL EDUCATION & HEALTH - 1 Credit

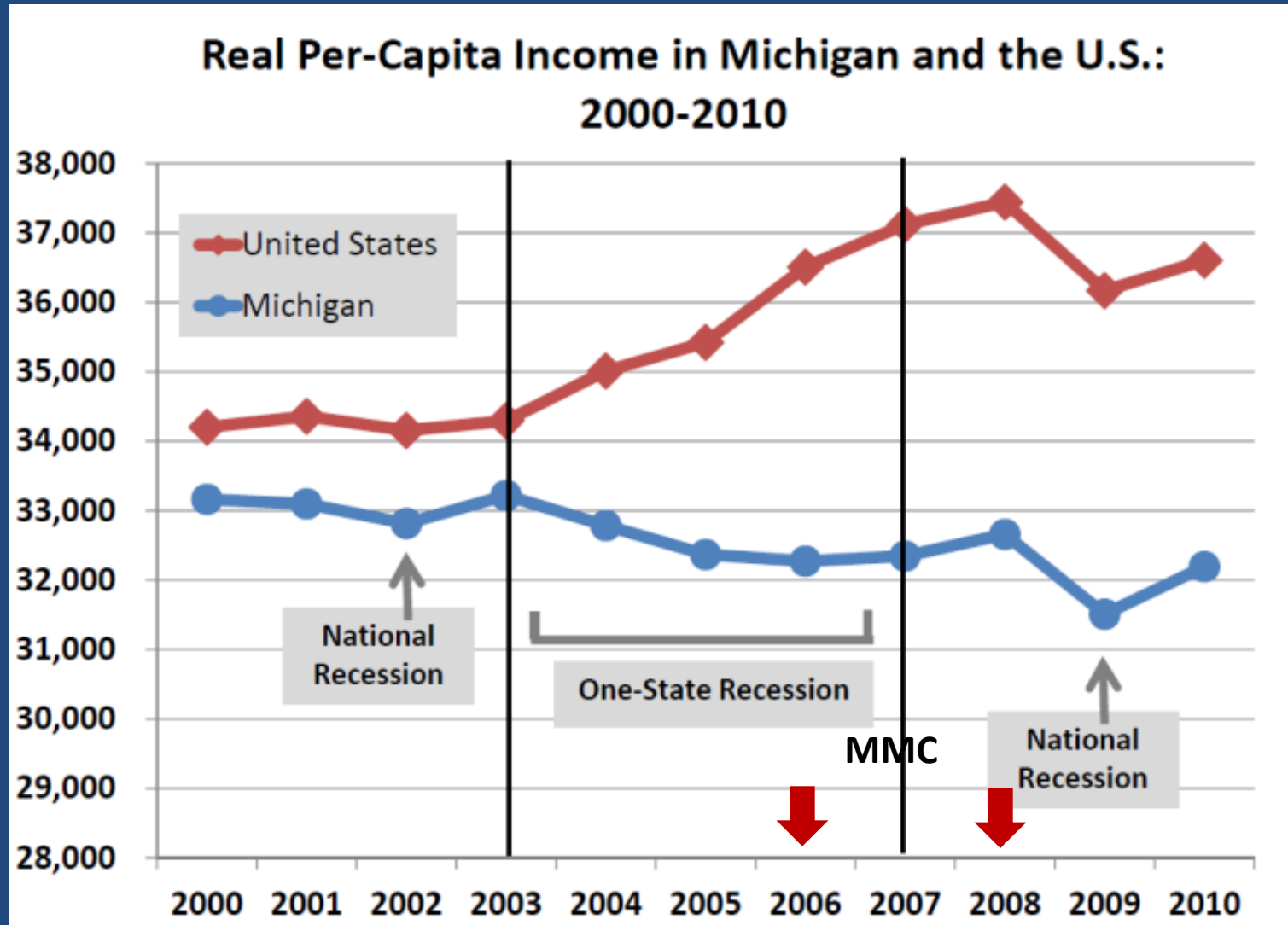
## VISUAL, PERFORMING AND APPLIED ARTS - 1 Credit

ONLINE LEARNING EXPERIENCE  
Course, Learning or Integrated Learning Experience

## LANGUAGE OTHER THAN ENGLISH - 2 Credits

In grades 9-12; OR an equivalent learning experience in grades K-12 effective for students entering third grade in 2006 (Class 2016)

# One State Recession



Source: "Real Per-Capita Personal Income in Michigan and the U.S.:2000-2010" by the Michigan Department of Technology, Management, & Budget

# Methodology

- Semesters nested within schools
- State of Michigan
  - School Location
    - City
    - Suburban
    - Town
    - Rural

# Data

- Registry of Personnel Data (REP)
  - 2003-04 through 2010-11
    - 17,931 to 22, 399 Full Time High School Teachers
    - 607 School



# Data

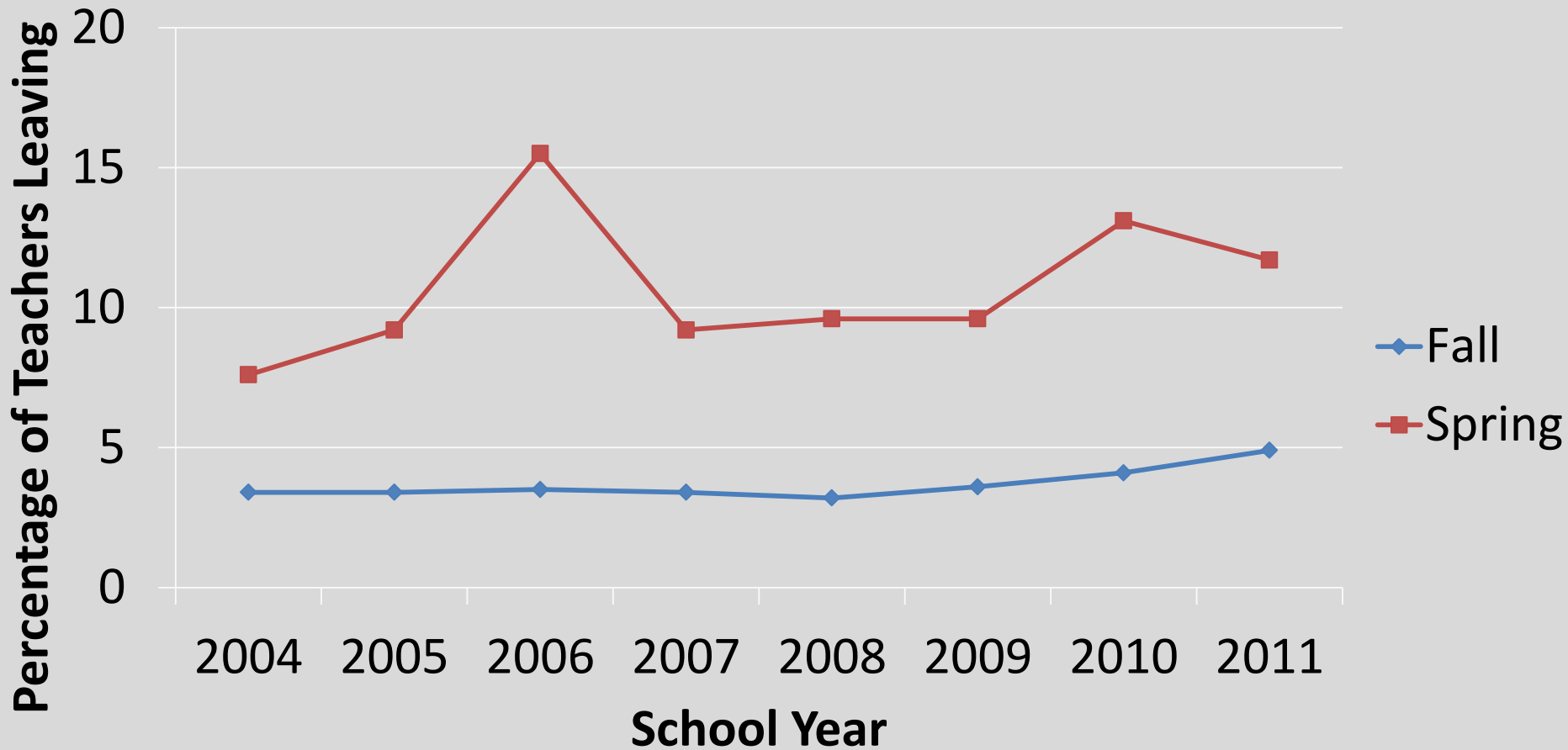
- Teacher Mobility
  - Is the teacher's primary teaching assignment in the same school in the current semester as it was in the prior semester?
- Context
  - MMC
    - 2006 (announcement)
    - 2008 (implementation)
  - Recession
    - 2010-2011

# Methods

- HLM
  - Time nested with schools
  - Separate models
    - Location
    - Detroit
- Fixed Effects
  - Results are consistent

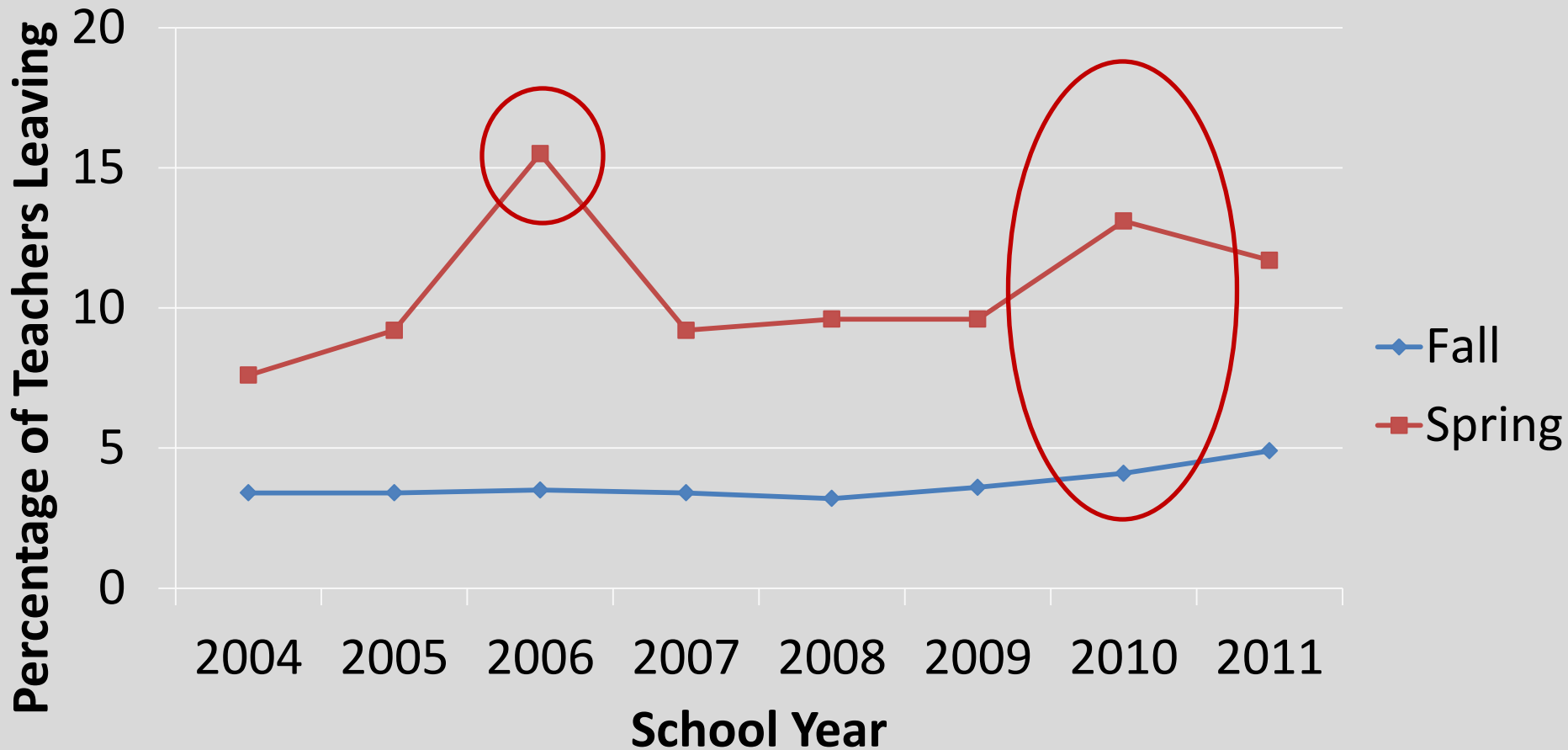
# Timing

## Teacher Mobility Between and Within School Years



# Timing

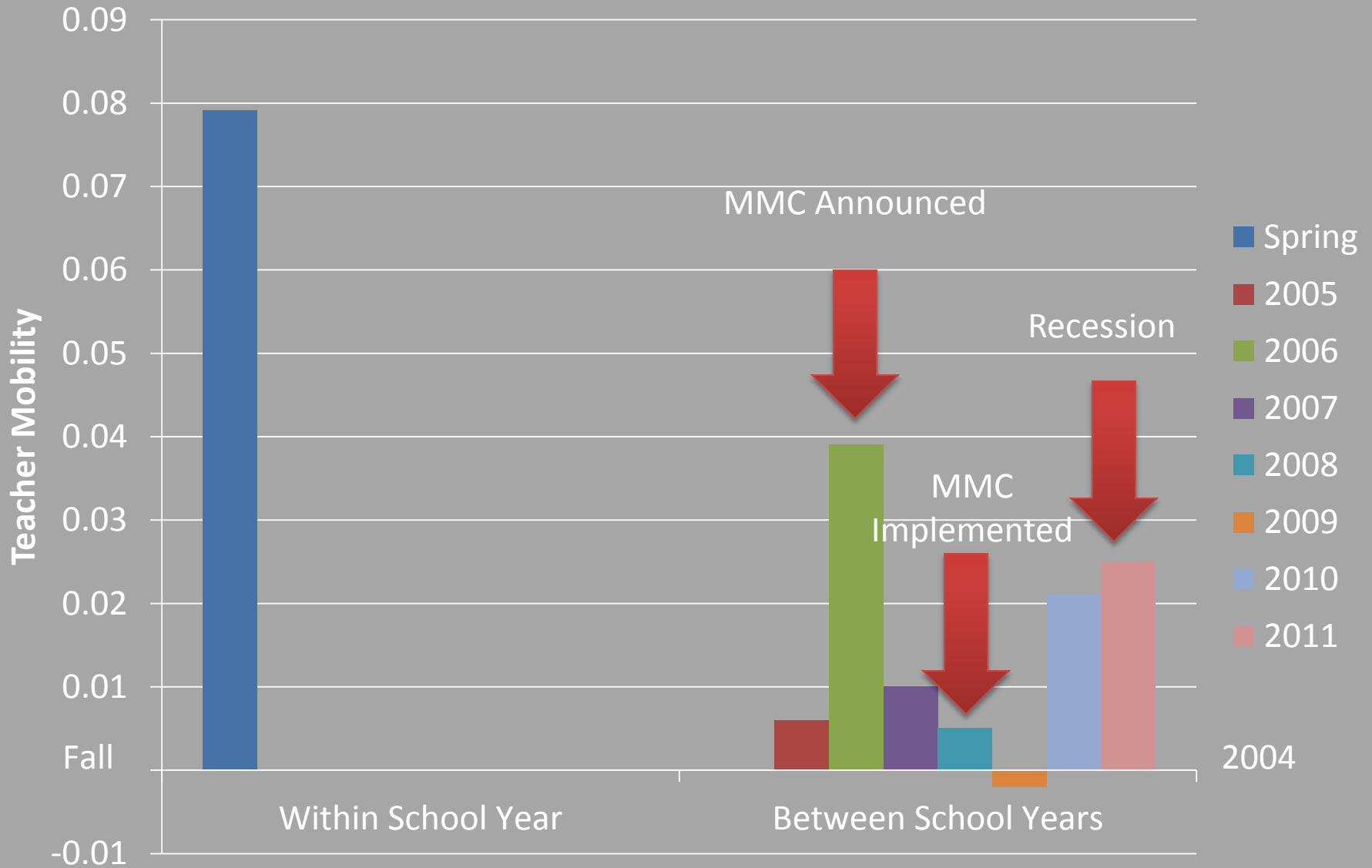
## Teacher Mobility Between and Within School Years



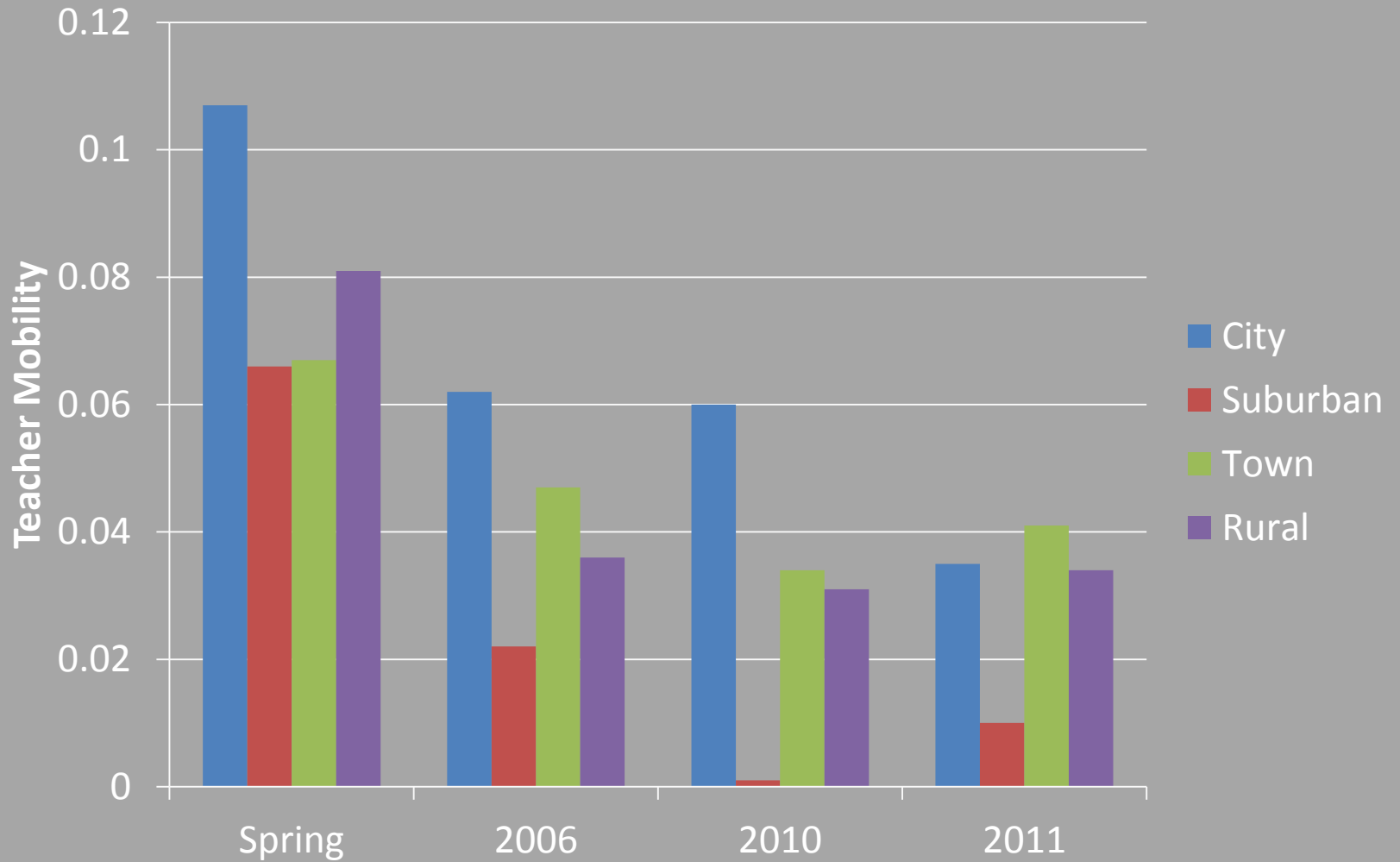
# School Characteristics

- Teachers tend to leave schools....
  - Higher poverty schools
  - Higher minority schools
  - Higher mobility (student and principal) schools
  - Smaller schools
  - City schools
  - Schools with higher percentages of novice teachers

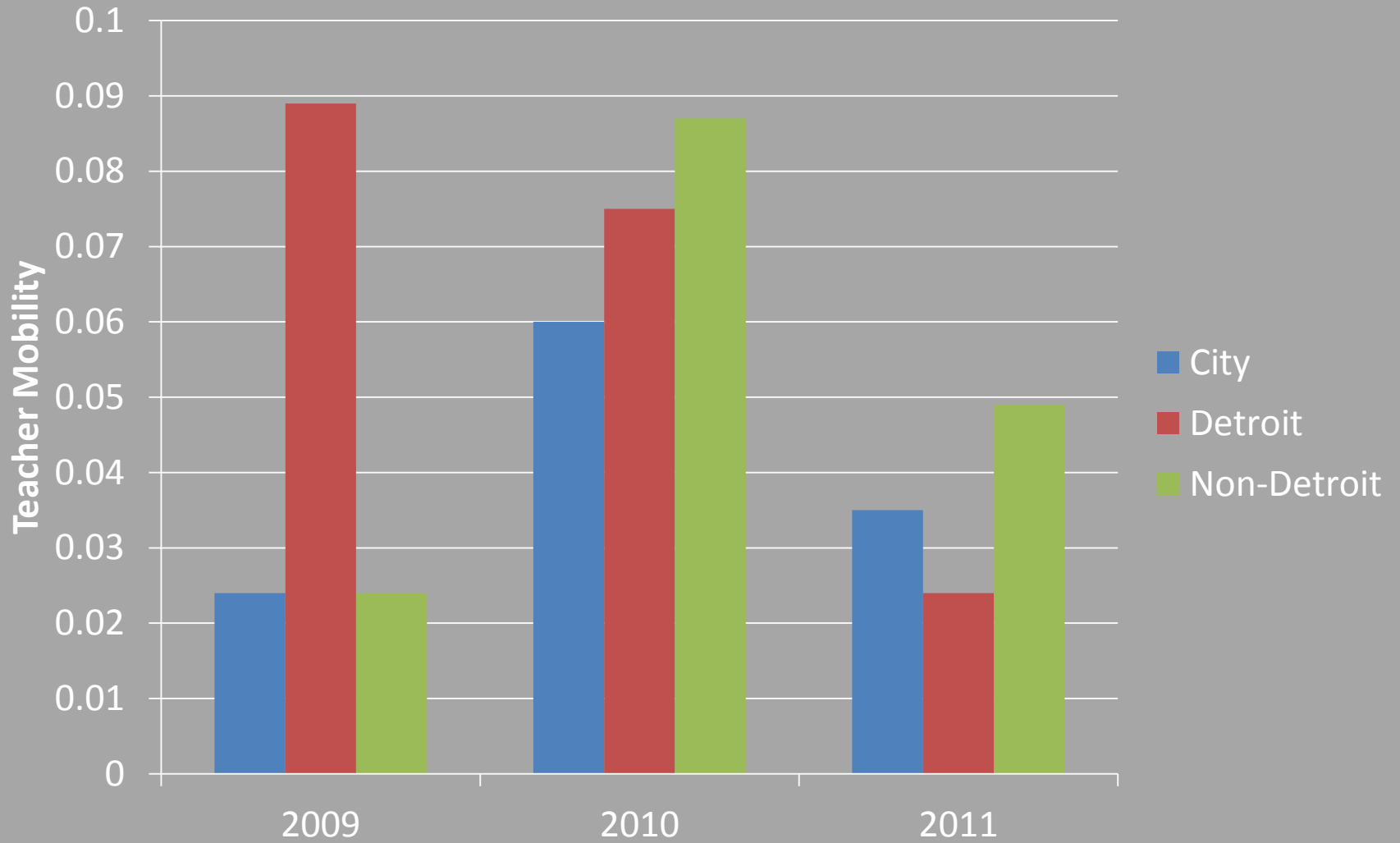
# Context and Teacher Mobility



# Location



# Detroit





# Conclusions

- Teachers leave more disadvantaged schools
- Fall mobility is higher than we would expect
- Significant increases in mobility around the MMC and the recession
- Patterns are not the same by location

**THANK YOU**