

# Student Mobility

in the Village Creek area of Brooklyn Park, MN



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# Background: 2005 Village Creek Area SNAP

- Brooklyn Park is a diverse northern suburb of Minneapolis
- In 2005, BP City Council called for creation of Stable Neighborhoods Action Plan for the Village Creek area of the city in response to:
  - High resident turnover
  - Limited housing options
  - Increased calls for service
  - Declining property values
  - **High student mobility**
- Significant redevelopment in the last decade to combat these problems, yet challenges remain
- The city is now in the process of updating the SNAP to measure changes since 2005

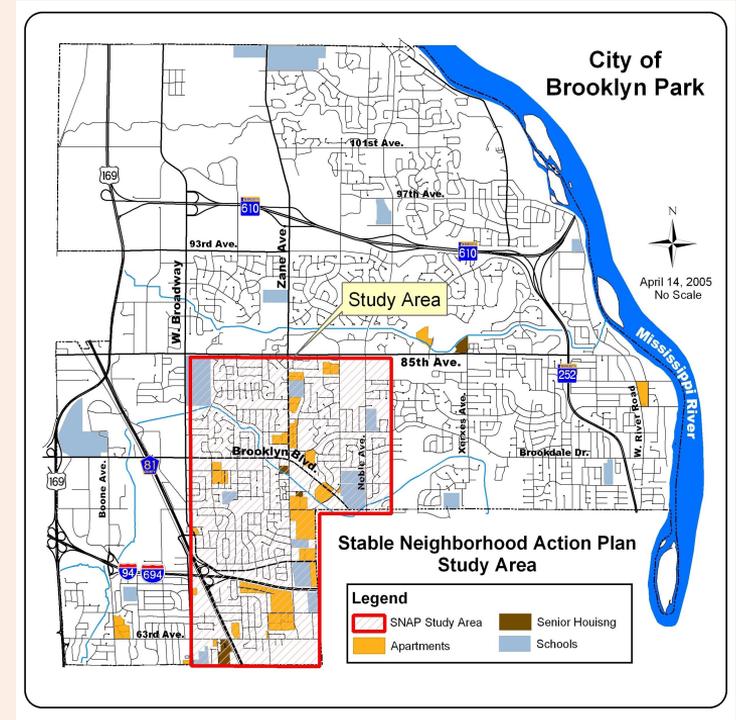


Photo: Brooklyn Park Stable Neighborhoods Action Plan, 2005

# The Problem

- What is student mobility?
  - A measure of how frequently students are transferring in and out of a school at non-promotional (non-graduation) points in their educational careers
  - Typically expressed as a percentage between 0% and 100%
- Why is high student mobility a problem?
  - “Mobility is highly disruptive to the individual student and has significant impacts on the classroom learning environment.” (Source: 2005 SNAP)
  - Adjusting to new school is stressful for student, peers and instructors experiencing change (Source: 2005 SNAP)
- My task
  - Update the 2005 SNAP’s research section on student mobility in the Robbinsdale and Osseo schools that serve the SNAP area
  - Explore possible relationships between mobility rates at schools serving the SNAP area and these other variables:
    - Test scores (proficiency in math/reading)
    - Percentage of students on reduced or subsidized school lunch
    - School demographics



Photo: Robbinsdale Area Schools



Photo: Discover Osseo

# Prior Research: the 2005 SNAP

- 2005 report specified the schools that serve students from the SNAP study area (4 in Robbinsdale Area Schools; 13 in Osseo Area Schools)
- Provided data for the Osseo schools (at right)
  - Identified a likely positive correlation between mobility rate and poverty rate, and negative correlation between mobility rate and test scores
- Concluded the SNAP study area experiences “high” student mobility, expressing particular concern over schools with > 25% mobility
- No maps, and no data for Robbinsdale

Table 3.8: Mobility, Poverty and School Achievement Data, Osseo School District (2004)

	School Name	Enrollment	Mobility Rate	Poverty Rate	Achievement	
					Reading	Math
High Schools	Park Center	1444	27.15	40.37	48.30	54.53
	Osseo Senior	1633	14.70	18.92	75.39	66.14
Junior High Schools	North View	1213	27.37	52.10	52.53	45.50
	Brooklyn Junior	1090	19.45	36.42	55.79	57.70
Elementary Schools	Birch Grove	618	22.33	39.64	55.10	55.90
	Crest View	416	44.23	65.87	49.00	42.70
	Eden Brook	880	11.14	24.20	77.20	73.20
	Palmer Lake	714	17.09	34.73	63.70	63.80
	Park Brook	377	24.67	60.21	57.80	50.00
	Zanewood	464	38.36	71.34	49.60	36.40
	Edgewood*	393	21.63	39.69	57.80	54.90
	Fair Oaks*	598	29.77	69.40	45.10	34.50
	Garden City*	425	29.41	66.12	45.80	44.40

\* Denotes schools that service a very small portion of the SNAP study area.

Above: The school mobility data included in the 2005 SNAP. Only data for the schools within the Osseo district were provided; there was no data for Robbinsdale schools.

# Data Requirements

Dataset Needed/Desired	Data Source	Data Availability	Metadata?	Vintage	Notes
Reading and Math Proficiency by School	MN Department of Education	Yes, downloadable	Yes	2016	Available on MN Report Card
School District Boundaries	MN Department of Education	Yes, downloadable	Yes	2016	Available on MN Geospatial Commons
School Demographics	MN Department of Education	Yes, downloadable	Yes	2016	Available on MN Report Card
School District Boundaries	MN Department of Education	Yes, downloadable	Yes	2016	Available on MN Geospatial Commons
School Point Locations	MN Department of Education	Yes, downloadable	Yes	2016	Available on MN Geospatial Commons
Student Mobility Rates	Osseo and Robbinsdale School Districts	Yes, upon request	No	2016 and earlier	Provided upon request
Students on Free/Reduced Lunch	MN Department of Education	Yes, downloadable	Yes	2016	Available on MN Report Card
Village Creek Area Demographics	U.S. Census Bureau	Yes, downloadable	Yes	2010-2014	Available on MN Geospatial Commons

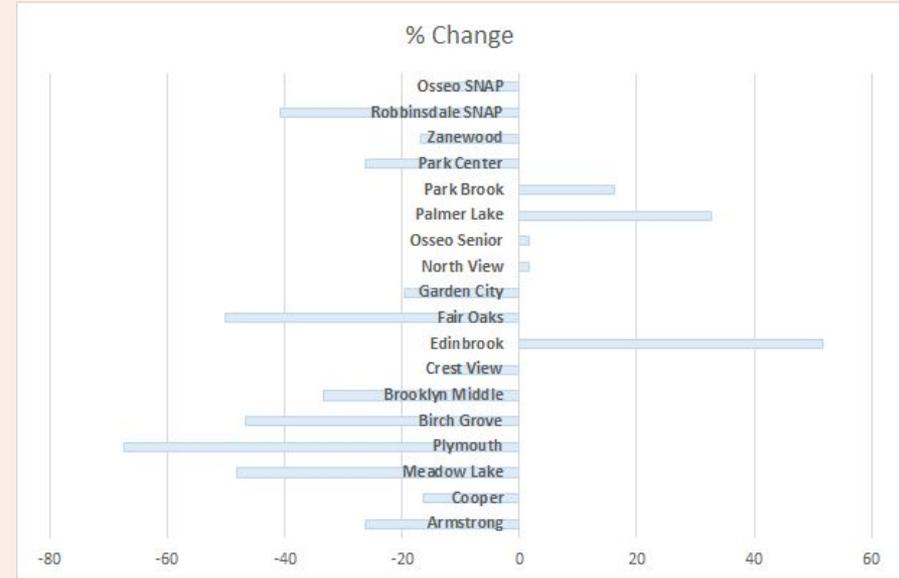
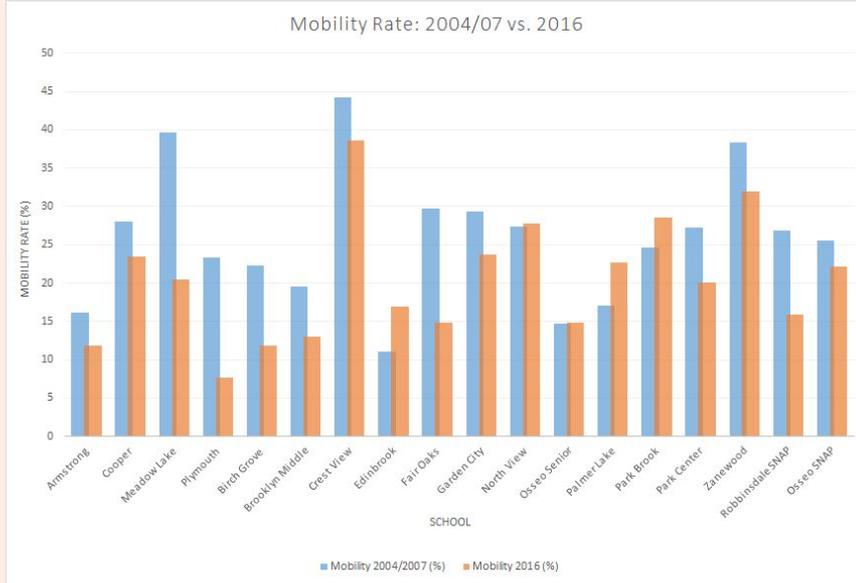
# Limitations

- ...of the data:
  - Difficult to parse out students of each school who reside inside versus outside the SNAP area
  - Difficult to parse out data of mobile students only
- ...of school mobility as a measure of neighborhood instability:
  - While most isn't, some mobility is arguably good: students/parents making choices
- ...of my analysis:
  - My lack of familiarity with the schools and the area
  - No qualitative data or anecdotes to help explore possible causes
  - Not a statistical analysis; this would be needed to dive deeper into relationships between mobility, poverty, test scores and demographics



Park Center High School in Brooklyn Park (Photo: Osseo Area Schools)

# A Downward Trend in Student Mobility



Mobility fell in 11 of the 16 schools studied

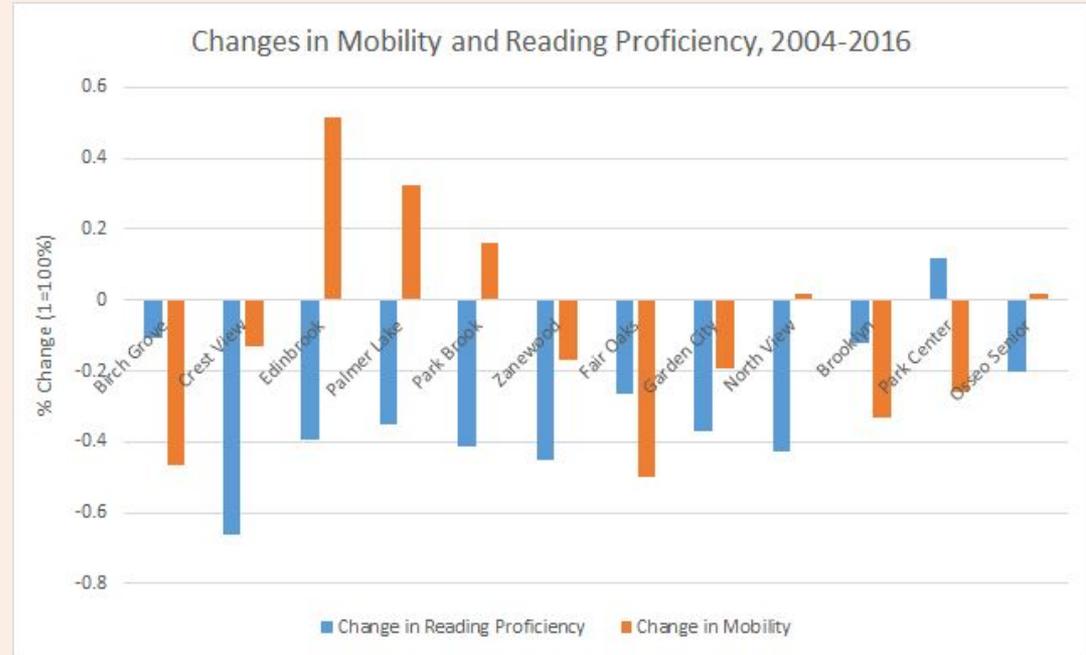
Mobility dropped 40.7% on average in the 4 Robbinsdale schools that serve the SNAP area

Mobility dropped 13.3% on average in the 12 Osseo schools that serve the SNAP area

# Change in Mobility & Change in Test Scores (Osseo)

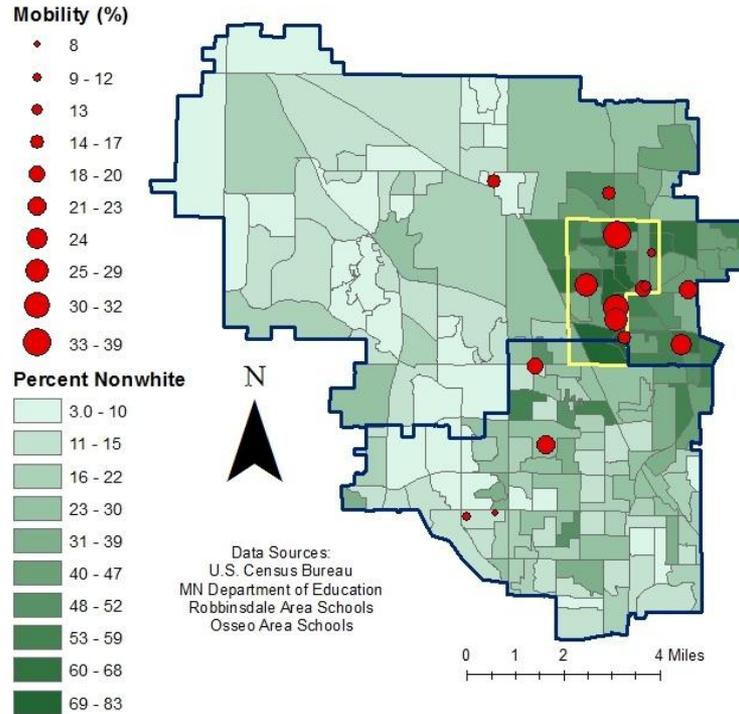
The assumption that lower student mobility is associated with higher test scores doesn't seem to hold in the case of eleven of the twelve Osseo schools.

However, maybe the standards changed dramatically between 2004 and 2016, enough to make this comparison unuseful.

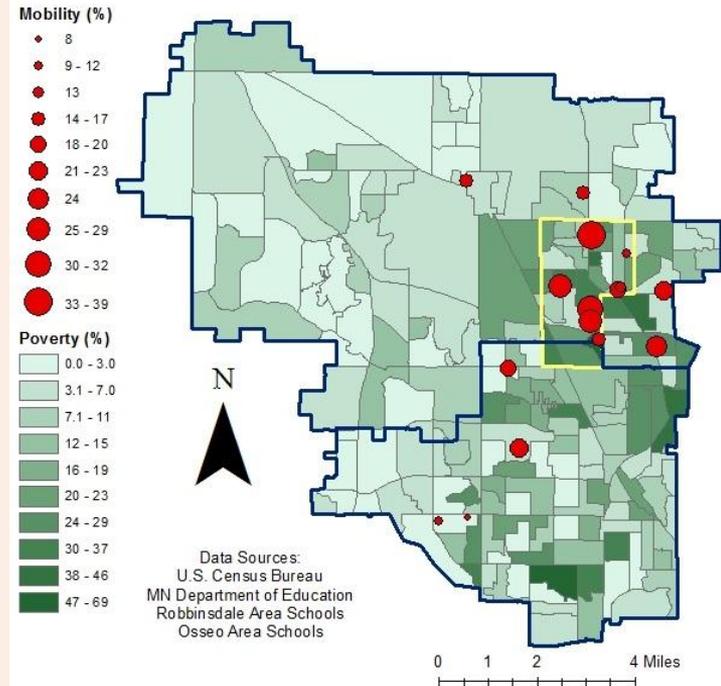


# 2016 School Mobility

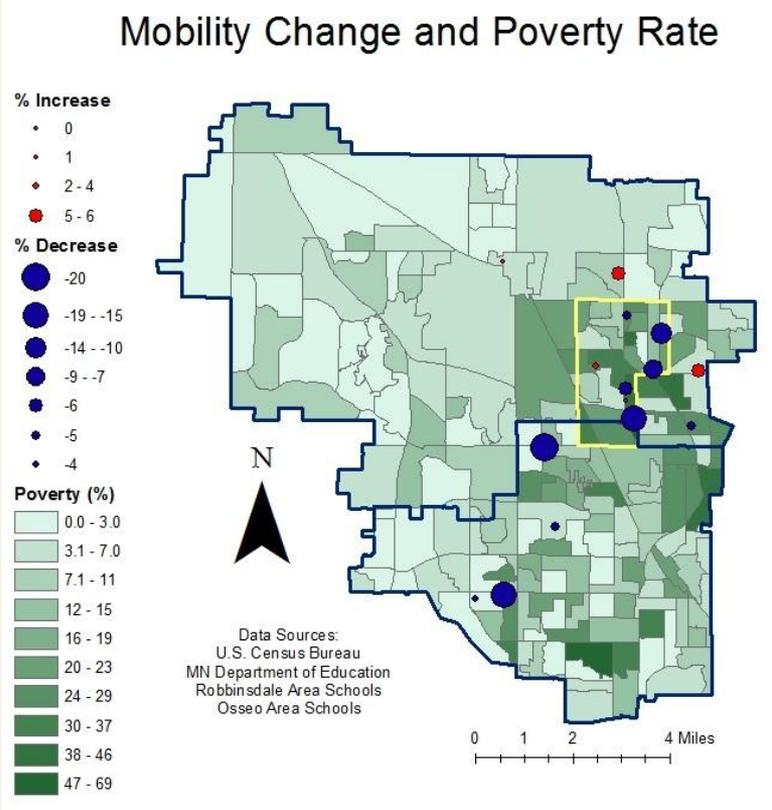
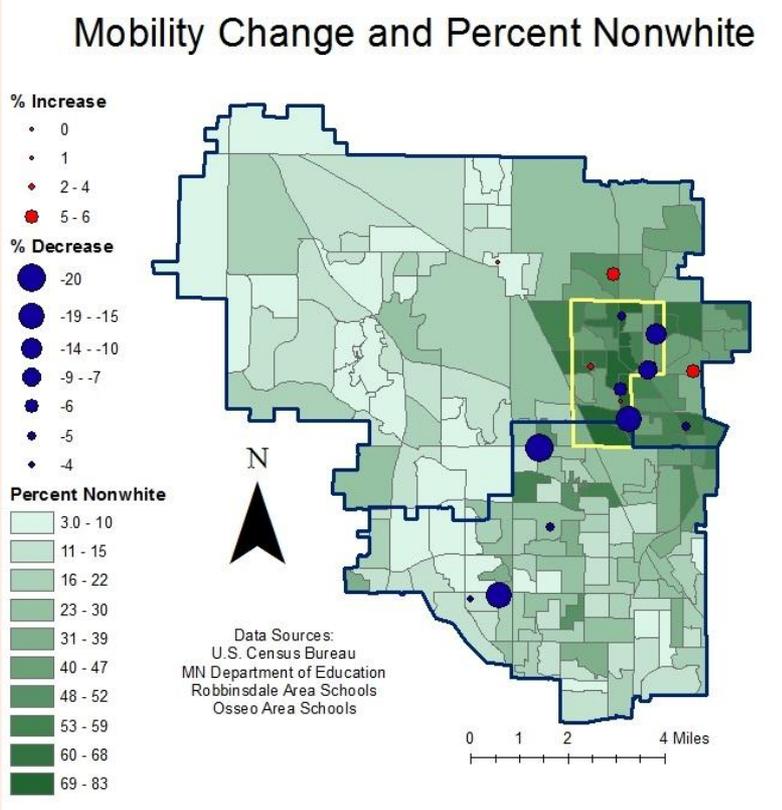
## 2016 Mobility and Percent Nonwhite



## 2016 School Mobility and Poverty Rate



# Change in School Mobility, 2016 vs. 2004/07



# Suggestions for Further Research and Analysis

- Perform rigorous statistical analysis to evaluate mobility as it relates to poverty, test scores and demographics in schools that serve the SNAP area
- Interview stakeholders (school administrators, teachers, parents, students, etc.) to obtain qualitative data to complement quantitative data
  - Why bigger decrease in Robbinsdale than Osseo?
- Consider how to collect data that distinguishes between harmful forms of student turnover and benign or beneficial forms
- Make comparisons with surrounding areas and/or similar areas in other metropolitan areas



Plymouth Middle School in the Robbinsdale district experienced the greatest percent decrease in student mobility (67%) of all schools studied. (Photo: GiveMN.org)