

Public Access to School Space (PASS): Implication for Childhood Physical Activity in Underserved Neighborhoods

**137th American Public Health Association Meeting &
Exposition**

Philadelphia, Pennsylvania

November 7, 2009

Mathilda B. Ruwe, MD. MPH, Ph.D.

Genoveva Islas Hooker, MPH

Mariana Ramirez

John Capitman, PhD



Central California
**REGIONAL OBESITY
PREVENTION PROGRAM**
Healthy Environments · Healthy Choices · Healthy People



**Central Valley
Health Policy Institute**
California State University, Fresno

Funded by



The California Endowment

Disclosures

- None

Background-1

- **This study is part of the Central California Regional Obesity Prevention Program's (CCROPP) effort to determine how policies and environment influence childhood obesity**

- **CCROPP is**

 - **An environmental and policy approach to obesity prevention**
 - **A partnership between 8 County Public Health departments and 8 community based organizations**
 - **Funded by the California Endowment**
 - **Administered by Fresno State through the regional obesity Prevention Program**

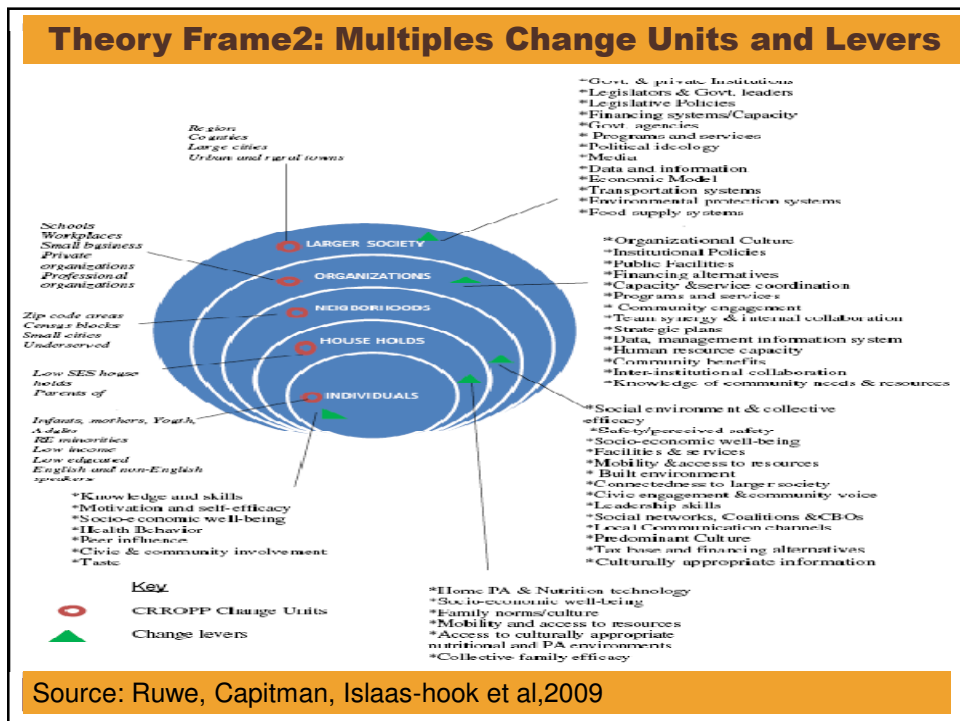
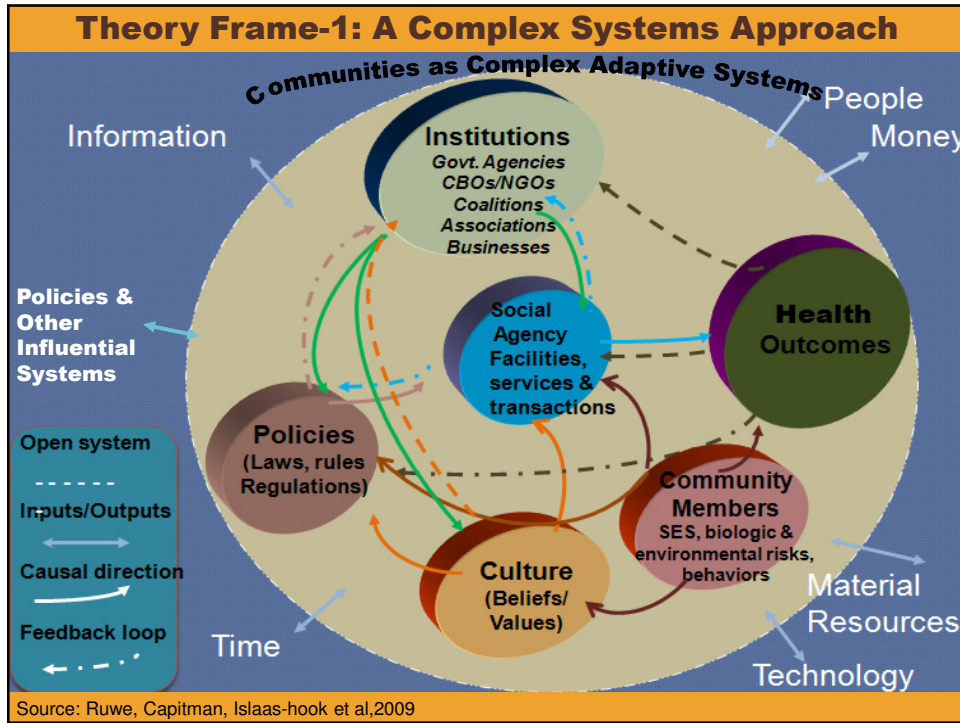
Background-2: Central California Regional Obesity Prevention Program (CROPP) Sites

**CCROPP sites
2007 estimates**

**Median household
income: \$38,426
(2007 estimates)**

%under 18 years:33%

**%unemployed:17%
(2007 estimates)**



Goals/objectives

- **This study focused on determining:**
 - **The extent to which schools made their physical activities facilities open for public use during non-school hours**
 - **Policies and assets that support their decision to open school physical facilities to the public**
 - **Perceived barriers to open school to the public**
 - **Determine differences by: urban vs. Rural, being CCROPP vs. non-CCROPP site; school size, district size and neighborhood poverty level.**

Significance-1

- **Rural and underserved communities in the Central Valley of California face greater challenges in finding safe places to support their children's physical activity**
- **These communities are also more likely to be poor and lack funding-base to develop basic infrastructure to support physical activities**

Significance-2



- **In some communities a school is the only public facility available**
- **Despite a policy that allows schools to open facilities for public use, some schools continue to keep them locked after school hours**

“I see people at this school in my neighborhood jumping the fence. It’s hard to be active because the school is closed.”

– Fabiola, Age 13 Fresno, CA

Goals and Objectives

- **Determine**
 - **Prevalence of joint agreements between the school and the community to share school physical activity facilities**
 - **Factors the influence schools’ reluctance to participate in joint use agreements.**

Learning Objectives

- **Describe the prevalence of agreements to share school physical activity facilities with the community**
- **Understand factors that may influence schools' reluctance to participate in joint use agreements to share school physical activity facilities with the community**
- **Appreciate the role played by schools in providing safe places for children's physical activity**

Methods

- **Study Design: A quantitative cross-sectional**
- **Target Sample: 400 schools– i.e. 40% of all San Joaquin Valley (8 counties) schools**
 - **600 schools were selected in order to get 400**
 - **Random samples were selected from four strata:**
 - ✦ **Urban, small school**
 - ✦ **Urban, large school**
 - ✦ **Rural, small school**
 - ✦ **Rural, large school**
 - ✦ **260 schools (65% of target sample) have been surveyed as of this presentation**

Measure-1

- **Dependent or outcome variable:**

- ✦ **School's physical activity facilities open to public during non-school hours (yes, No).**

Measures2

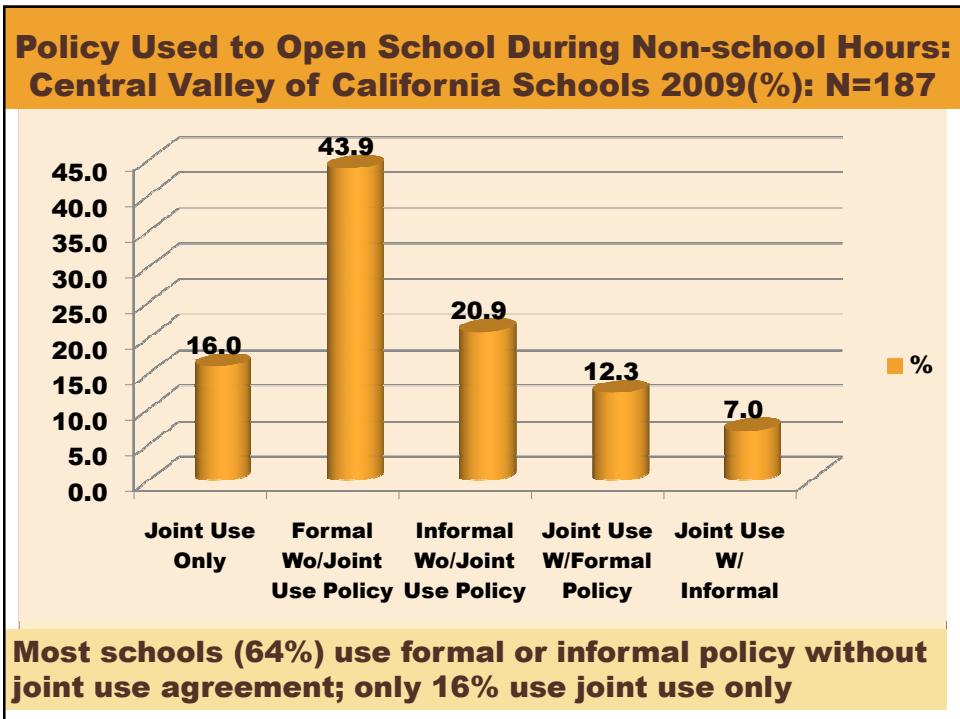
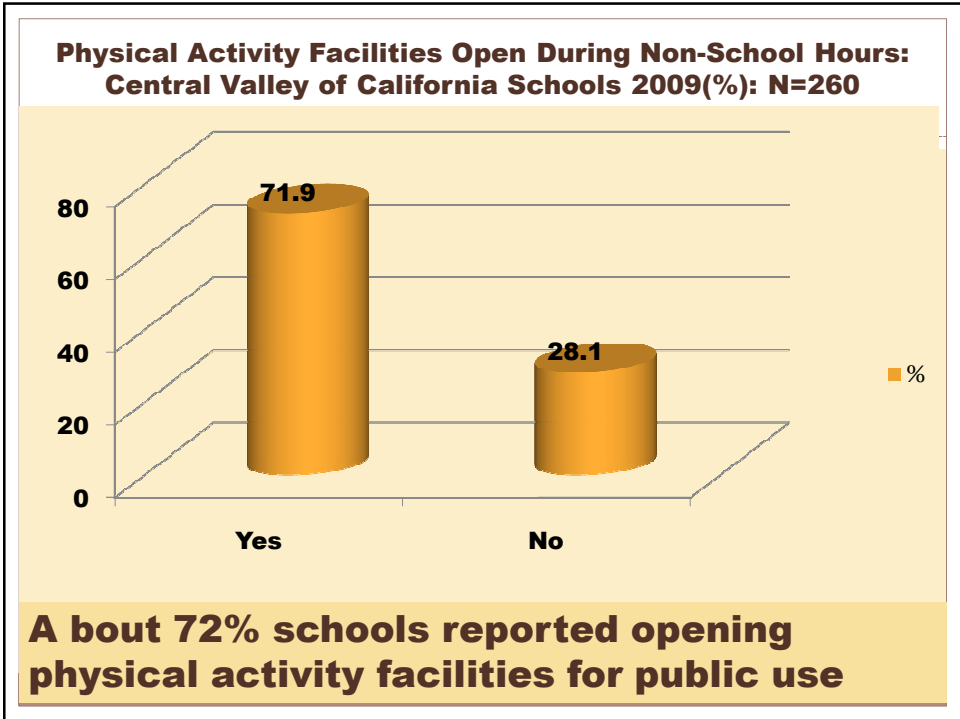
- **Primary independent variables**
- **School characteristics**
 - School size (500 or less vs. >500students)
 - Percent of total school acreage that is open space
 - School district size(10 vs. >10 schools in district)
- **Neighborhood characteristics**
 - Urban vs. Rural
 - Percent children receiving free or reduced price meals (F/RP meals) as indicator of neighborhood poverty level(<60% vs. >60%).

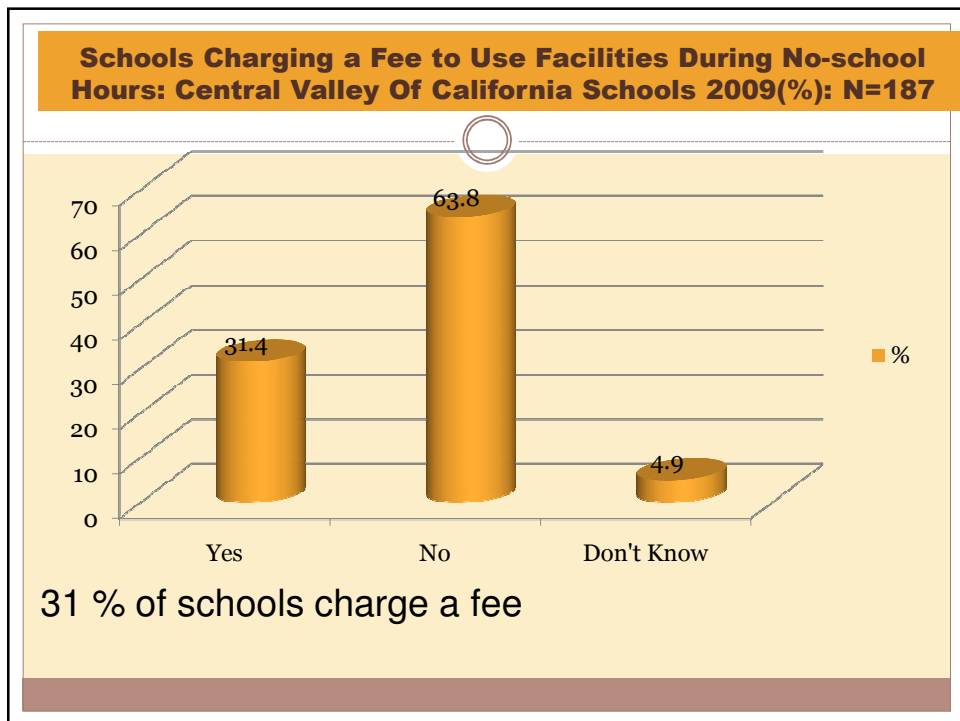
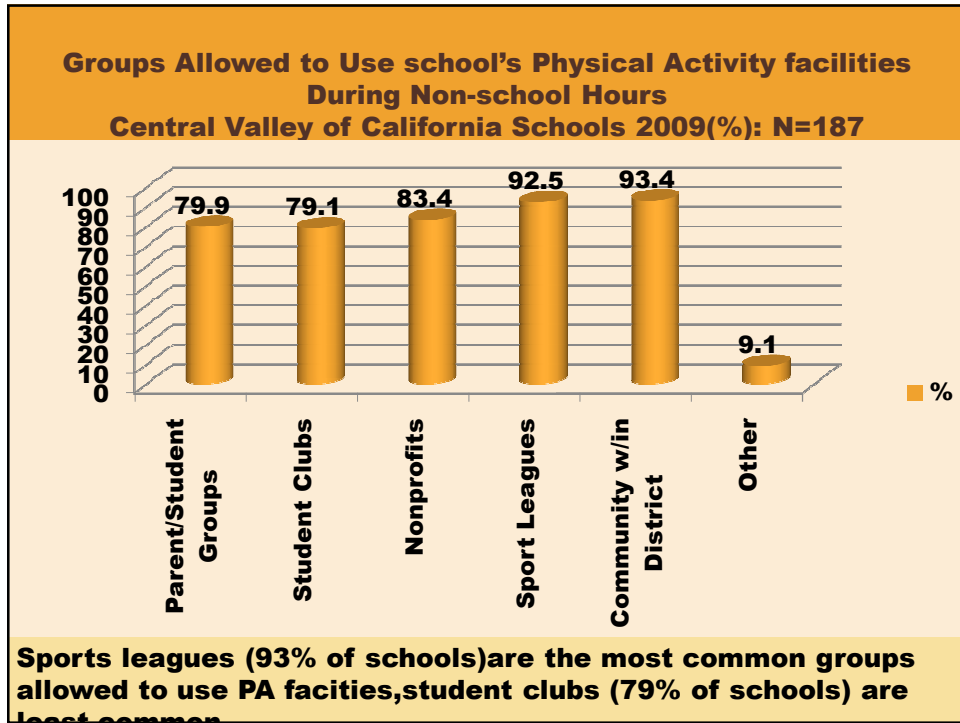
Data Analysis

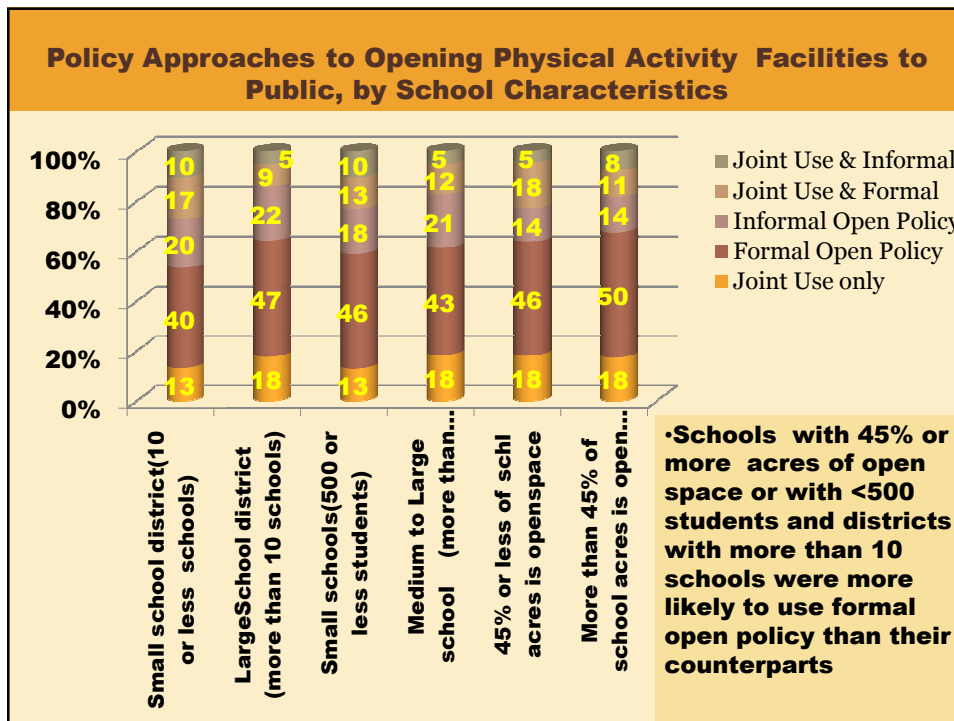
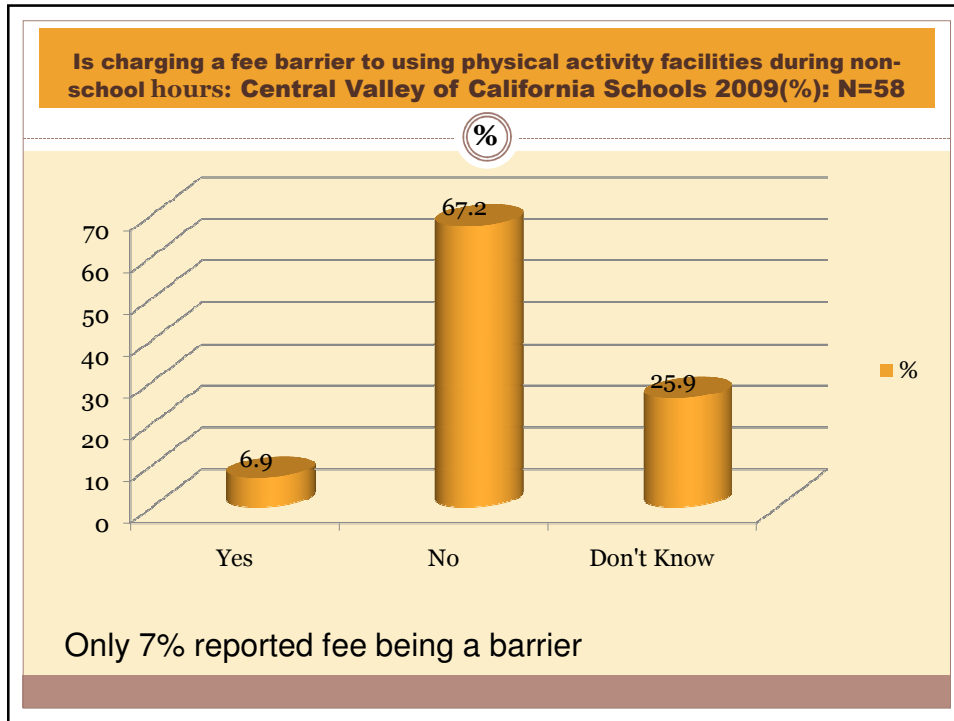
- **Descriptive Statistics**
 - **Univariate analysis to assess distribution of variables**
 - **Bivariate analysis to determine factors associated with having opening physical activity facilities to the public**
- **Multivariate Statistics--Logistic regression will be used to determine independent effect of these factors**
 - **We present descriptive statistics only**

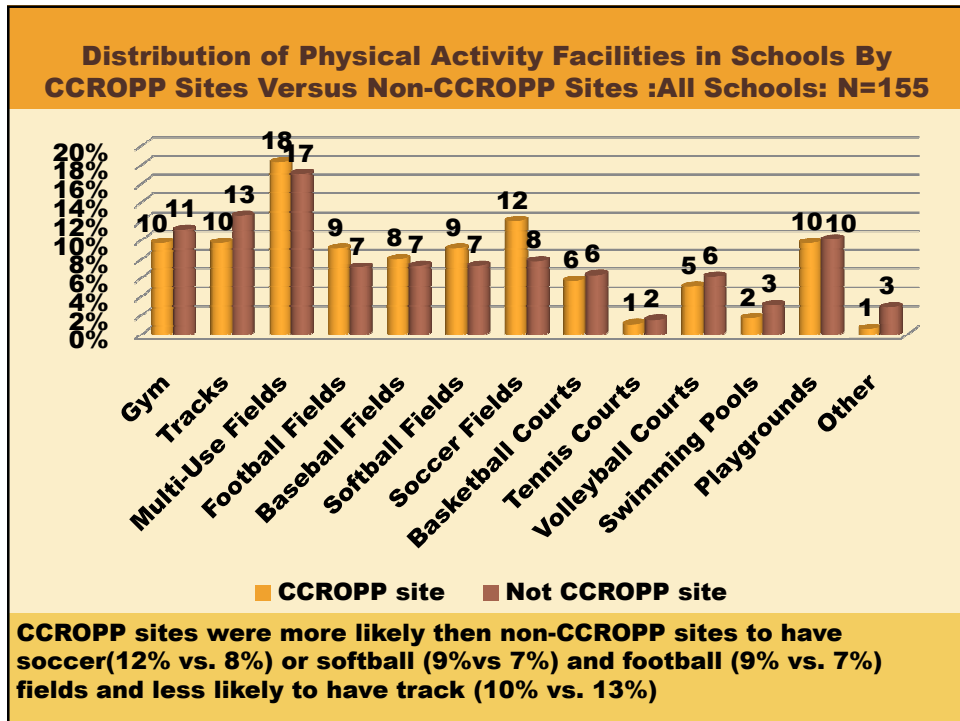
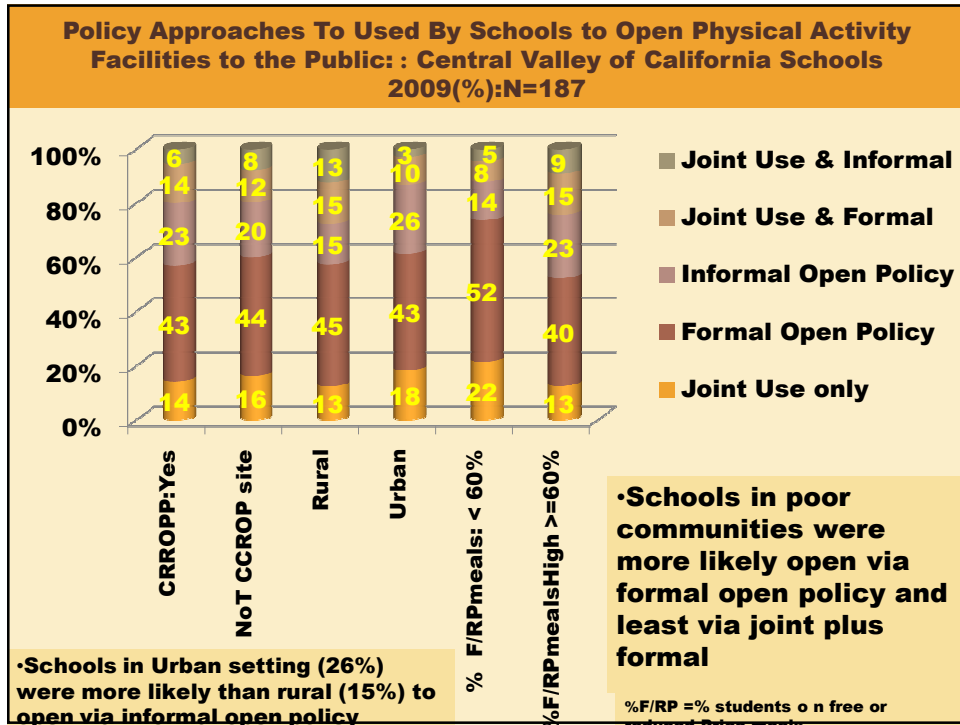
PRELIMINARY FINDINGS

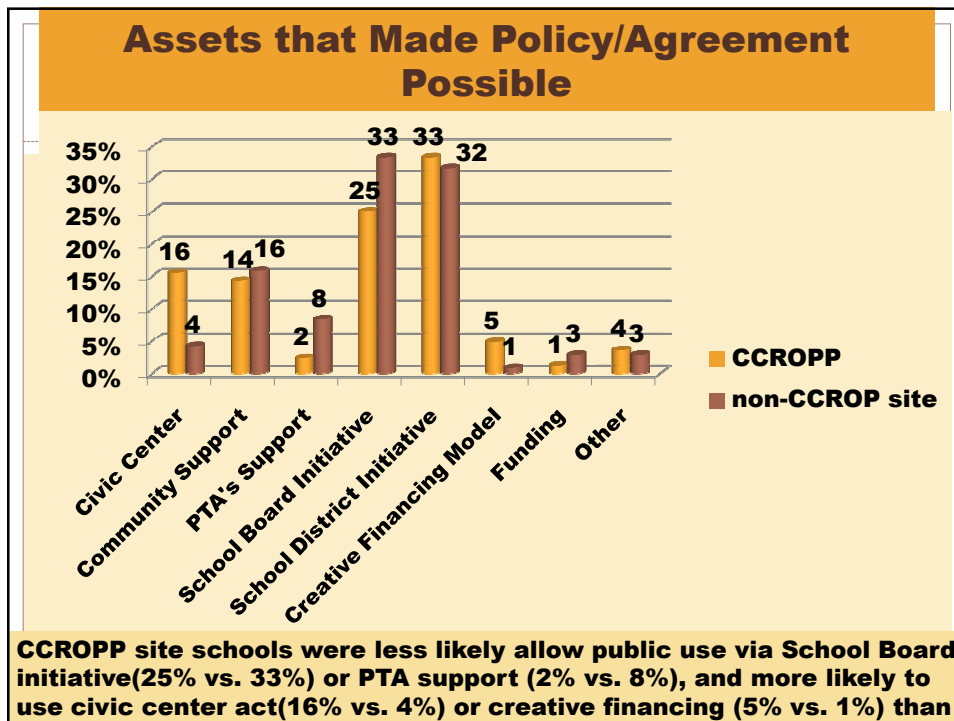
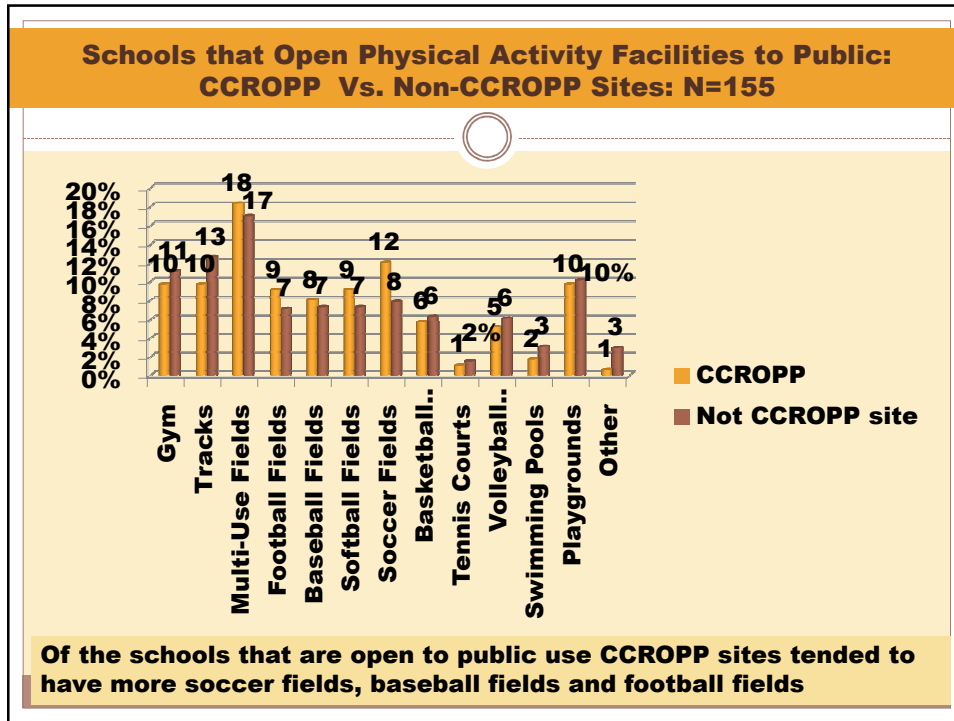
DISCRIPTIVE STATISCS

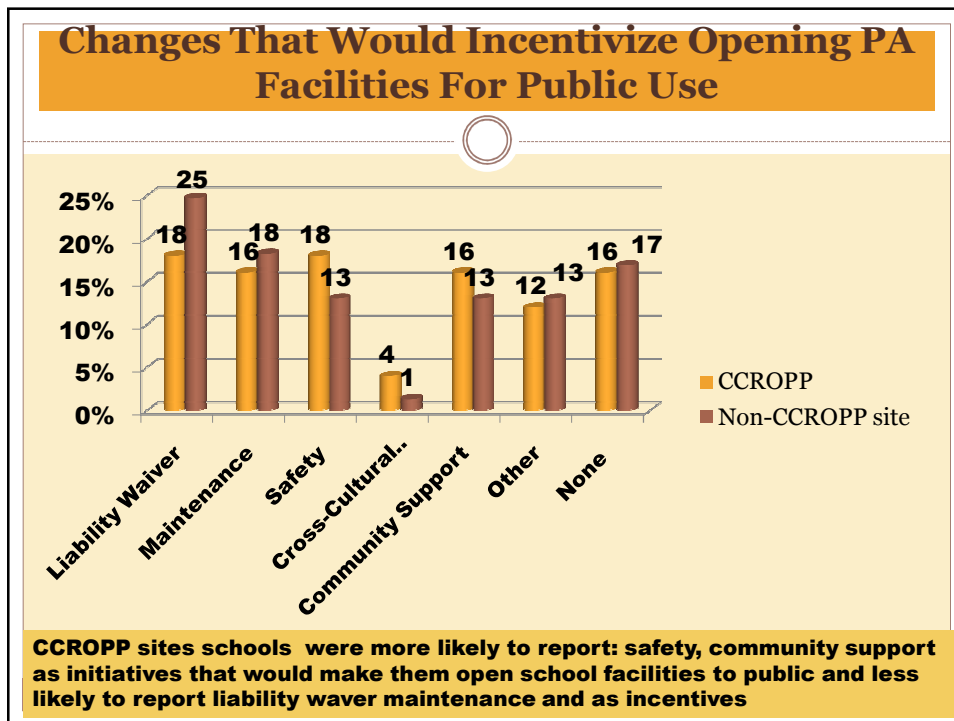
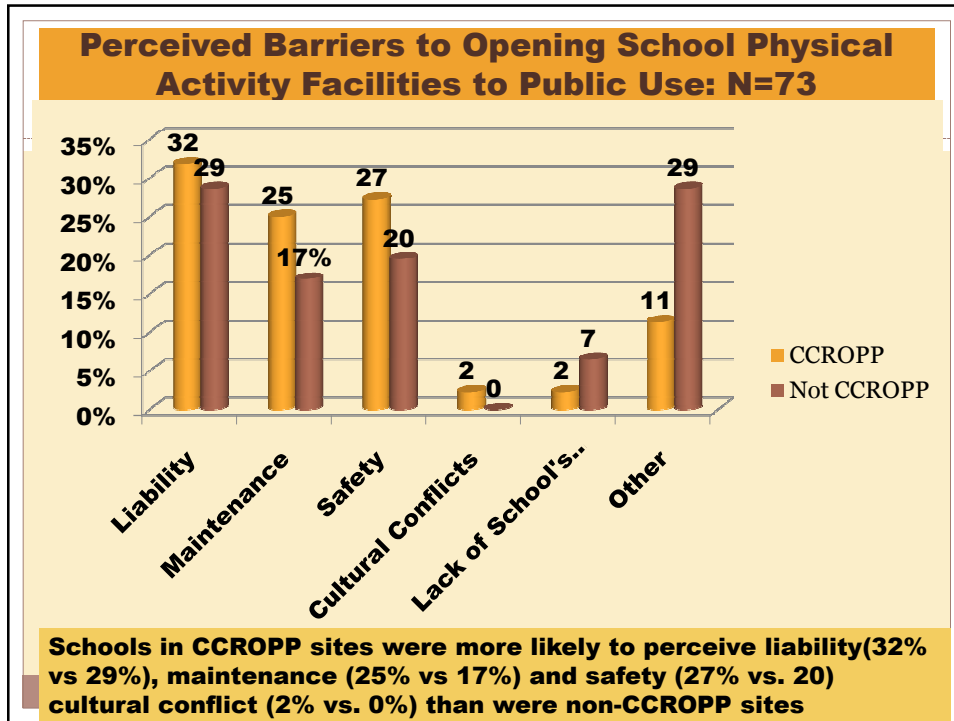












Summary -1

- **Formal policy, was the most common method used to open schools to the Public**
- **Schools in CCROPP sites were significantly less likely to open for Public use**
- **Schools that had more than 45% acreage of school as open space were more likely to open PA facilities to public**
- **There was no statically significant difference by:**
 - **School size defined as number of children, Urban or rural(defined by population density)**
 - **District size defined as (small,10 or less schools) and large(more than 10 schools) in the district**
 - **waver maintenance and as incentives**

Summary .2

- **School board and school district initiatives were the most methods through which schools were open to public use**
- **There were also differences in perceived barriers CCROPP sites schools were more likely to report: safety, community support as initiatives that would make them open school facilities to public and less likely to report liability Schools in CCROPP sites were significantly less likely to open for Public use**

Conclusion

- **Knowing factors that influence schools to open their physical activity facilities to the public may help directing effort to increase access to Public access to school PA facilities**

Contact Information

For Further information on this presentation contact

Mathilda Ruwe, MD, MPH, PhD
Senior Research Scientist
Central Valley Health Policy Institute
1625 E Shaw Ave., Suite 146
California State University,
Fresno, CA 95710-8106
mruwe@csufresno.edu

Visit us on the web at: www.ccropp.org
and www.cvhpi.org