### An unused facility is a terrible thing to waste.

Michael Kanters<sup>1</sup>, Jason Bocarro<sup>1</sup>, Mary Filardo<sup>2</sup>,

University

Michael Edwards<sup>3</sup>, Thomas McKenzie<sup>4</sup>, Myron Floyd<sup>1</sup>

School Fund, <sup>3</sup>Texas A&M University, ASan Diego State

INC State University, 221st Century

Shared use of School Facilities with Community Organizations and Physical Activity Program Participation: A Cost-Benefit Assessment

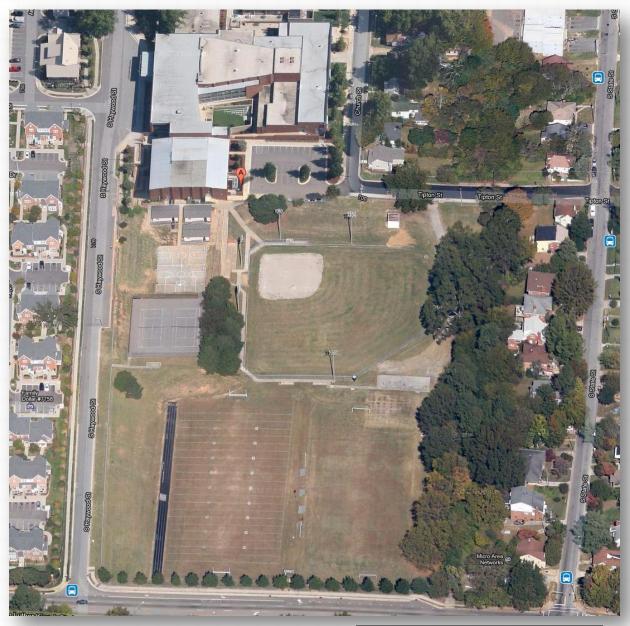
# School **facilities** create opportunities for **physical activity** during and after school

(Durant et al., 2009).

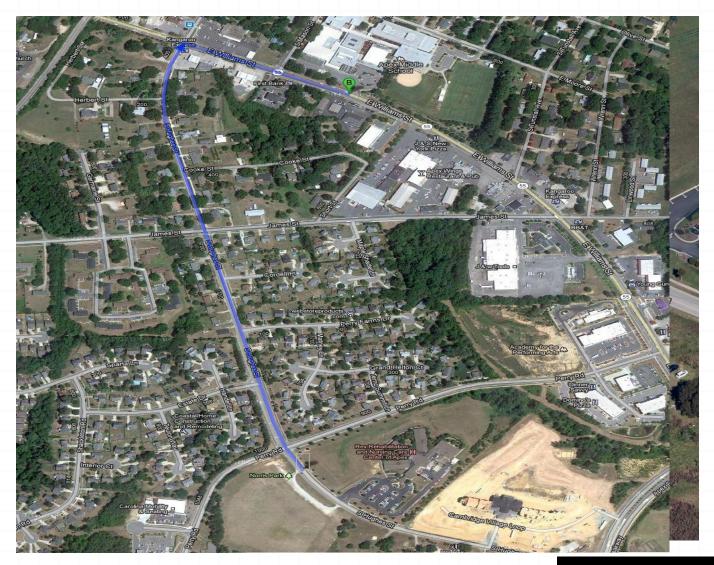


# School athletic facilities are often empty after school

Bocarro, Kanters, Cerin, Floyd, Casper, Suau, & McKenzie, 2012



## A tale of two **Athletic Fields**





Middle School Athletic Field: Tuesday, 5:30 p.m.



Middle School Lacrosse Team Practice at Private field: Tuesday, 5:35 p.m.

# **Shared use** of **school** athletic **fields** can increase **Physical Activity**

Health People 2020, Institute of Medicine



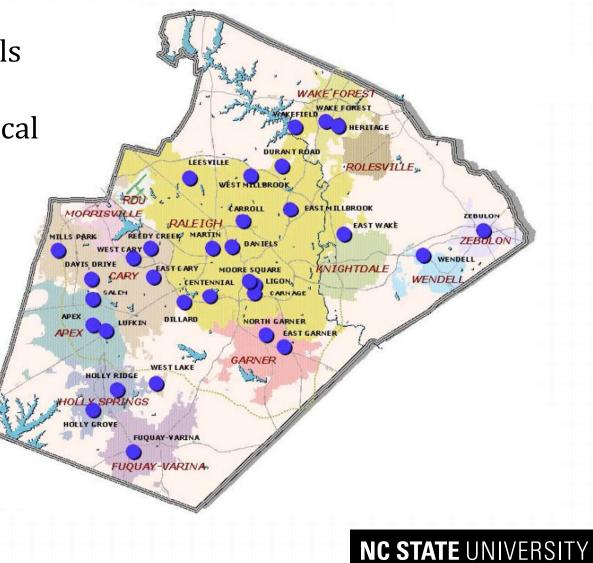
# **Barriers** to Shared Use include increased Liability, Scheduling, and Costs

Spengler, Connaughton, Maddock, 2011; Filardo, Vincent, Allen, Franklin, 2010



# **Methods**

- 30 Middle Schools
- Structured Physical Activity Survey (SPAS)
- School Facility Operating Costs



# **Categorizing Level of Shared Use**

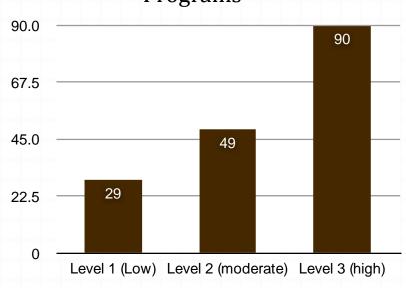
Level of Shared Use	Community Administered Programs/Year	Participants in Community Administered Programs/Year
1	0-1	<100
2	2-4	100-250
3	>4	>250

# **Results**

physical act	orrelations between nur tivity (N=30 Schools)	nber of community progra	ams and mi		1	Т	ype of activity	Corre per ft2	lation with Cost 2 ( $\tau$ )	Correlation with Correlation to $C_{\tau}$
Population		Type of activity		Correlation wi		Ν	Ainutes of activity		- (- )	058
		school-based LTPA Minutes of activity in school127		ITA	S	school-sponsored				
Overall school population         sponsored programs           Minutes of activity in         .78           community-sponsored programs		.127		р	rograms					
		Minutes of activity in .788** community-sponsored programs		0	, N	Ainutes of activity in .073			240	
				Overall schoo	l c	ommunity-sponso	munity-sponsored			
		Minutes in all afterscho	ol	.590**	population	population prog		ograms		
	Table 2. Mann-Whitney U-tests of differences in minutes in physical act				al act	Ň	Ainutes in all after	school .025	.025	235
	based on level of school shared use.						physical activity			
	Comparison	N School	ls Mear	n rank Z-sc	ore	1	rograms			
Girls						Ainutes of activity	in .007		217	
	Total Student Po Shared Use Level	Total Student Population					chool-sponsored			
	<ul> <li>Shared Use Level</li> <li>Shared Use Level</li> </ul>		8.95 14.		-			7		1
	Shared Use Level	12 11	14.	Compariso	n	N Schools	Mean rank	Z-score	r	1
	Shared Use Level	11 11	6.0							
Boys	Shared Use Level		15.		perating Cost					
	Shared Use Level	8	15.	per Squar	e Foot					_
	Shared Use Level	2 11	6.3	Shared Us	e Level 1	11	11.45			-
	Shared Use Level		15.	Shared Us	e Level 2	11	11.55	033	-0.0007	
	Girls			Shared Us	Level 1	11	9.09			
	Shared Use Level		7.5	Shared Us		8	11.25	826 -0.19	-0.19	
	Shared Use Level	12 11	15.	Shared Os		0	11.20	020	-0.19	-
	Shared Use Level	1 11	6.0	Shared Us	e Level 2	11	8.64			
	Shared Use Level		15.	Shared Us		8	11.88	-1.24	-0.28	
				Sharea OS		0	11.00	-1,47	-0.20	-
	Shared Use Level	2 11	7.1	Annual O	perating Cost					
	Shared Use Level	3 8	13.							
					ed Student	11	10.45			
	Boys			Shared Us		11	13.45			
	Shared Use Level		8.7	Shared Us	e Level 2	11	9.55	-1.41	-0.30	_
	Shared Use Level	12 11	15.							
		1 11	6.7	Shared Us	e Level 1	11	11.18			
	Shared Use Level		0.7 14.	Shared Us	e Level 3	8	8.38	-1.07	-0.25	
	Shared Use Level	0	14.			_				-
	Shared Use Level	2 11	8.0	Shared Us	Level 2	11	10.45			
	Shared Use Level		12.			8	9.38	412	-0.09	
			-	Shared Use	e Level 3	ð	9.38	413	-0.09	

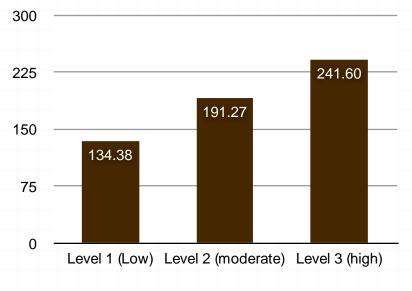
# **Physical Activity**

#### Participants per week in Afterschool Programs



Level of Shared Use

#### Minutes of PA per week in Afterschool Programs

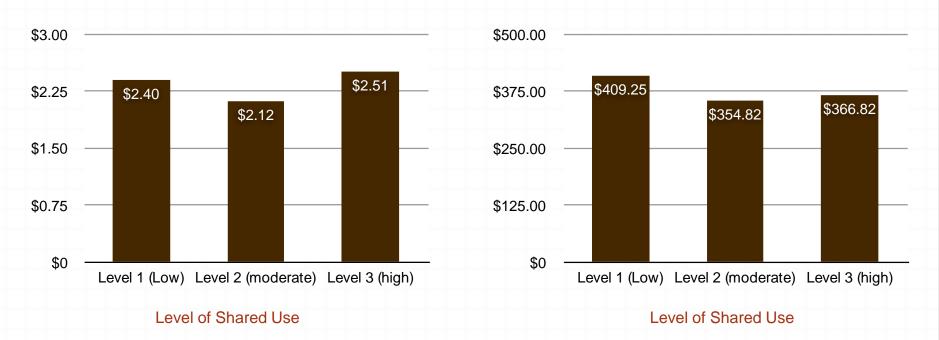


Level of Shared Use

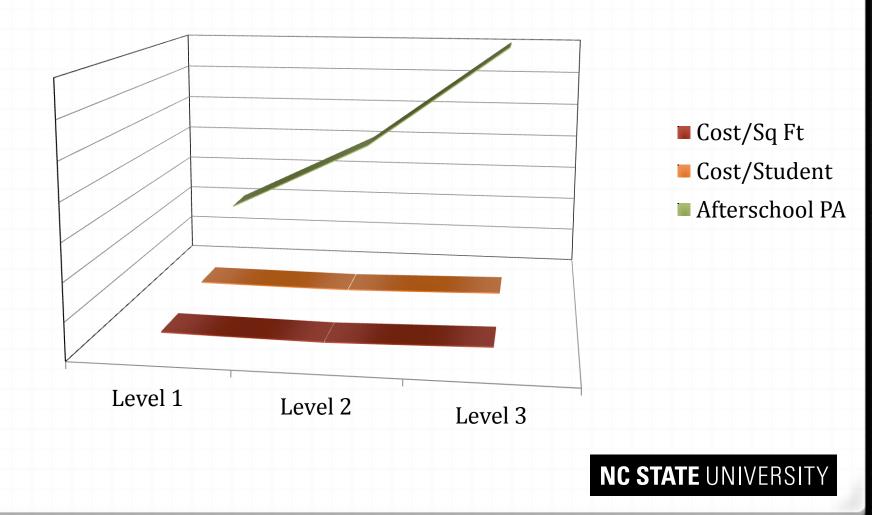
# **Facility Operating Costs**

#### Facility Operating Cost Per Sq. Ft.

#### Facility Operating Cost Per Student

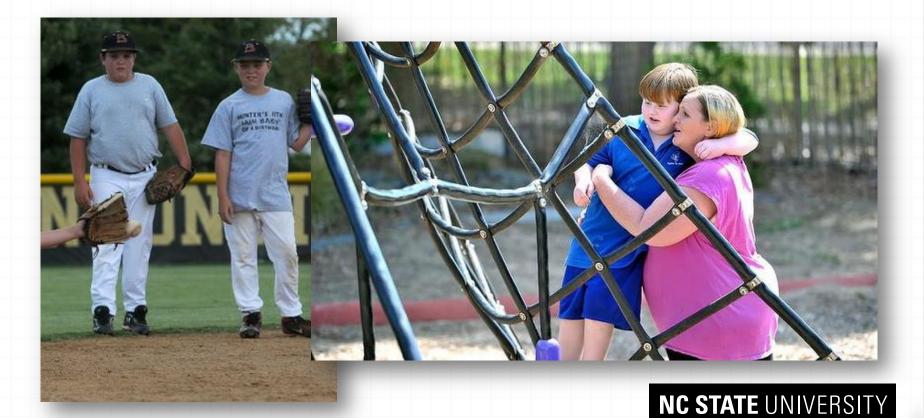


# Shared use Increased Physical Activity without increasing expenses



# **Discussion**

69% of middle school students would like to play more afterschool sports.



# Almost one third of children's recommended 60 minutes MVPA is provided through afterschool programs.

Trost, Rosenkranz & Dxewaltowski, 2008



Shared use with community partners can **Increase** the number of Participants in afterschool physical activity EXIT 1A programs and increase the number Active, Healthy Community of Children achieving V ONLY EXIT recommended amounts **MVPA**.

# Joint Use Agreements can control Liability, address Scheduling issues

and generate

**Revenues** to offset unanticipated

**Expenses** 



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#### What is a Joint Use Agreement? A Fact Sheet for Parents, Students, and Community Members

Many summaries lack raik, solvpare place for children and their facilities to rememe and pair Schools angle have a matery of regational dualities—generations, poppersonal, before constraints in the loss many distants done from property to the palate data status. To many distants done from property to the palate data status for the many distants done to day, remaining any data status to any for same of constraints done to day, remaining any data status to any and induity in the overse of any pro-

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The good areas in flux only smartly, and town governments can partner with robod distributions; what are known as just in a spreaments in address flow concerns.



Andrews, Name I also assesses with





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