

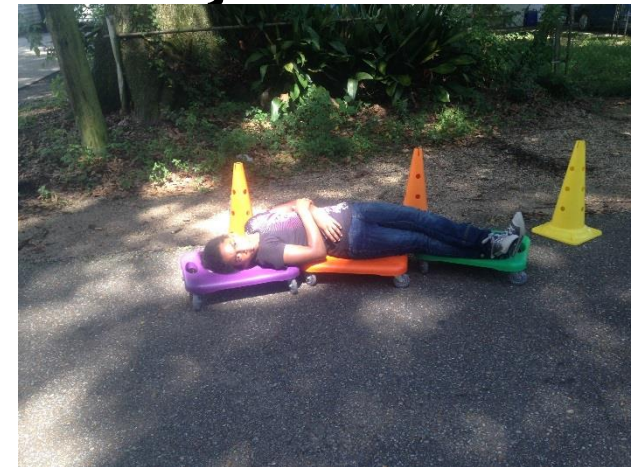


# Effect of Play Streets on Physical Activity in Children

Robert L. Newton, Jr., PhD

# Physical activity in children

- Only 1 in 3 children in the US are active daily
- Only 24% of Louisiana children meet the national recommendations
- Children living in lower SES environments face more barriers to physical activity
  - lack of safety
  - physical activity deserts
  - lack of physical structures
  - lack of open space



American Alliance for Health, 1999; City-data, 2011

# Increasing activity in children

- Play streets
  - similar to “open streets”, “pop-up parks”, “ciclovias”
  - streets are closed to motorized vehicles and opened for recreational activities
  - increasing in frequency
- Results of similar studies
  - higher prevalence of meeting physical activity recommendations
  - report feeling safe
  - score higher on social capital scales
  - effective at increasing physical activity
  - effective at increasing neighborhood social capital and connectedness
  - ~25% indicating they are not regularly active

# Limitations of previous studies

- Single assessment of physical activity
- Lack of objective measurement
- Few lower SES individuals participate
- Most report results related to adults
- Few studies
- Largely “open streets” studies

# Play Streets for Safe Play

- In neighborhoods characterized by high poverty and crime, The “Play Streets for Safe Play” (“Play Streets”) pilot was designed to answer the following questions
  - Is it feasible to conduct a series of Play Streets events?
  - Do children get more physical activity during a Play Street event than they do on a comparable day of the week without a PS event?
  - Do parents report better perceptions of the social environment (i.e. social connectedness, safety) of their neighborhoods than they did before the Play Streets events?



# Major Elements

- Advisory board
- High risk (high poverty, high crime) neighborhoods
- Focus groups in targeted neighborhoods
- Organization
  - City planners, police, permitting, traffic department
- Neighborhood organizers
- Play Streets events
- Evaluation

# Feedback from Focus Groups

- *What is keeping kids in the neighborhood from being active?*

“Safety issues ... There’s a, too many strangers walking the streets. I’ve seen kids out there on playgrounds and things like that unsupervised ... we could do it when we were younger but you can’t do that now.”

“Most kids have a desire to play in the street because there’s no other adequate place to play. But then again my main concern is traffic.”

“Because of the economy in some of the areas the children don’t have things that they need to play with properly.”



# Feedback from Focus Groups

“...I sit out here on afternoons and some kids walk the street and they’ll just stop by and want to talk. They are just looking for something to do other than walk the streets. There is nothing available to them so with a Play Street, even if it is every weekend or every Saturday in July and August. That’s a start.”





- Conducted in Glen Oaks and Brookstown neighborhoods
  - 47.4% and 47.1% of children below poverty level respectively
  - Crime rate higher than national average
- Glen Oaks
  - Observation
- Brookstown
  - Observation + objective measure of activity



# Play Streets events

- June 13<sup>th</sup>, July 20<sup>th</sup>, June 27<sup>th</sup>
- July 18<sup>th</sup>, July 25<sup>th</sup>, August 1<sup>st</sup>
  - Chosen by neighborhoods
- 10am to 2pm
  - Chosen by researchers
- 3 consecutive Saturdays in each neighborhood



# Participants

- Parents
  - willing to provide consent
  - have a 6-16 year old child
  - reside in immediate area
  - willing to allow child to attend Play Streets event
  - willing to complete questionnaires
- Children
  - age 6-16
  - reside within 1 mile radius of event
  - willing to wear activity monitor
  - willing to attend a Play Streets event
  - willing to provide assent
  - have smartphone capable of running FitBit app



# Recruitment

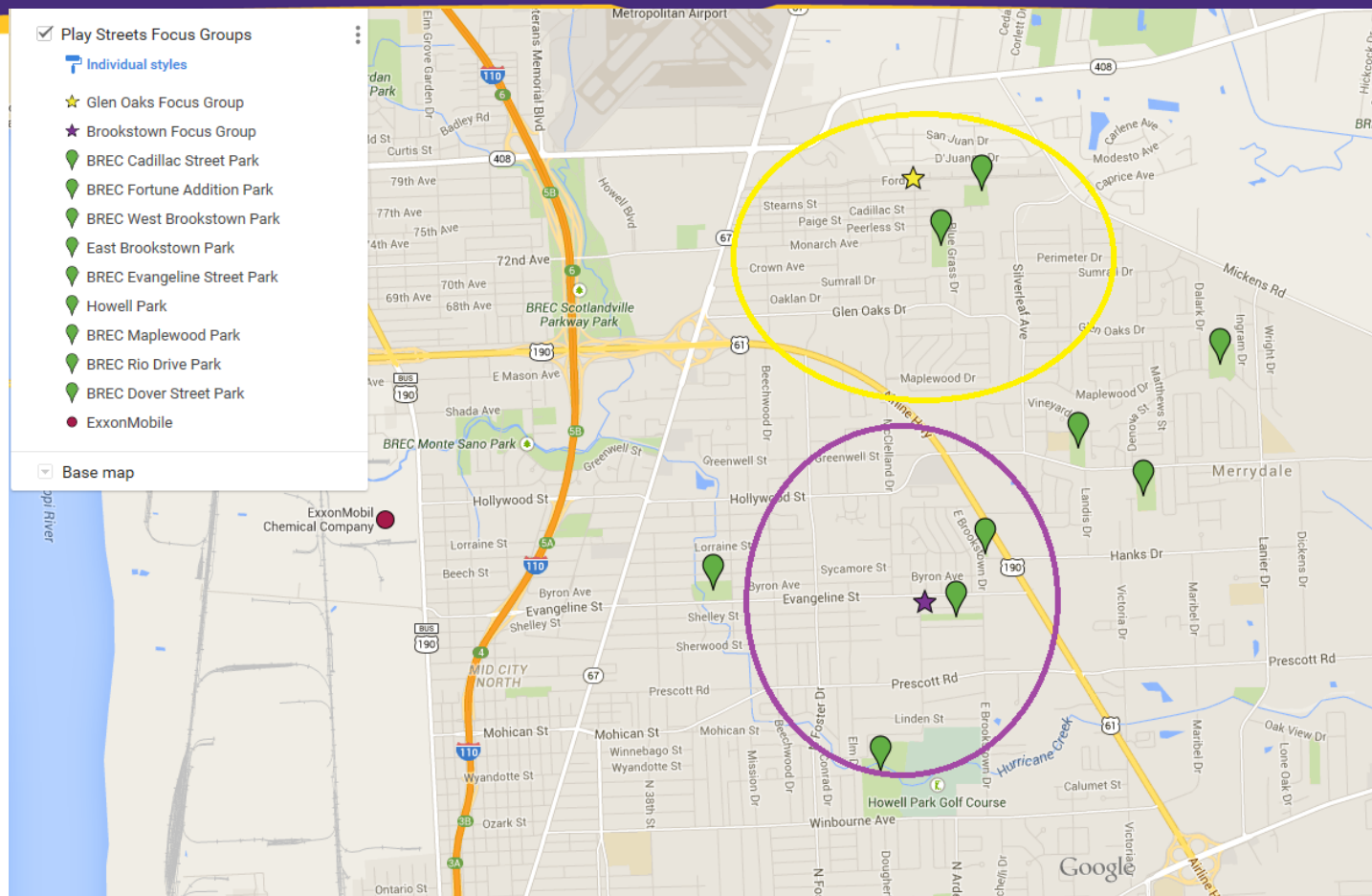
- Fliers
- Word-of-mouth
- Community members recruited participants for the study



- Glen Oaks & Brookstown
  - System for Observing Play and Recreation in Communities (SOPARC)
    - observations every ½ hour
  - Satisfaction with Play Streets event
    - 1 page anonymous survey
- Brookstown
  - Fitbit
    - worn by child for 5 weeks
  - Physical activity enjoyment
    - completed by child
  - Perceptions of the neighborhood
    - completed by parent
    - Home and Neighborhood Environment Questionnaire







# Play Streets activities-Glen Oaks

- 5K walk/run
- Space Walk
- BREC on the Geaux
- Food/drinks
- Music
- Face-painting
- Police
- Firemen
- DA





# Play Streets activities-Brookstown

- Sprinkler
- BREC on the Geaux
- Food/drinks
- Music
- Police



# Demographics



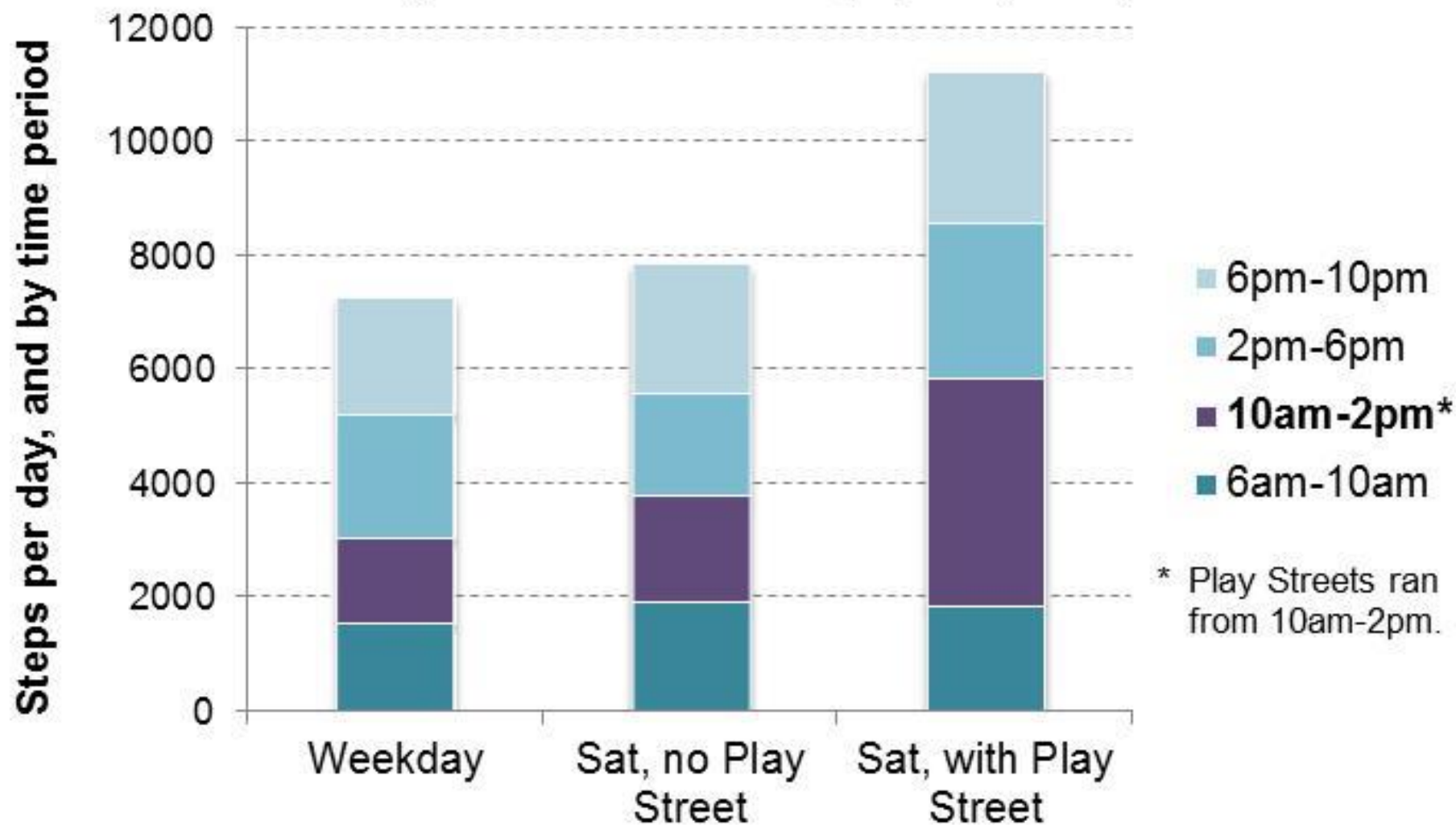
- $N = 25$
- Children
  - 11.6 (6-16) years old
- Gender
  - 32% female
- Mother's education
  - 52% HS diploma
- Father's education
  - 52% HS diploma

# SOPARC results

- M = 10 adults and 22 children at each scan
- Maximum of 29 adults and 44 children present at any one time.
- 43% of children were engaged in moderate physical activity
- 25% of children were engaged in vigorous physical activity



## Steps per Day among Children participating in the "Play Streets for Safe Play" pilot (n=21)





# Neighborhood social environment

	Pre	Post	p
Cohesion	3.0	3.0	0.999
Response	3.2	2.9	0.100

# Neighborhood perceptions

- Residents were strongly supportive of having nearby Play Streets.
  - 91% considered it “very important” or “essential” to have a Play Street near their home
  - 98% very important/essential to help kids play
  - 98% very important/essential to help to know neighbors
  - 100% very important/essential to feel safe.



# Conclusions



- Main questions:
  - Is it feasible to conduct a series of Play Streets events?
    - YES!
  - Do children get more physical activity during a Play Street event than they do on a comparable day of the week without a PS event?
    - YES!
  - Do parents report better perceptions of the social environment (social connectedness, safety) of their neighborhoods than they did before the Play Streets events?
    - YES & no



# Conclusions

- Play Streets events can increase physical activity in children
- Likely that more sustained efforts are needed to create overall physical activity/cohesion increases
- Sustained efforts will be required through neighborhoods & city government

# Acknowledgements

- Stephanie T. Broyles, PhD<sup>1</sup>
- Kaitlin Hanken, MPH<sup>1</sup>
- Arwen Marker<sup>2</sup>
- Diane Drake, CPRP<sup>3</sup>
- Kathryn Eagan<sup>1</sup>
- Samantha Olivero<sup>1</sup>
- Michael Edwards, PhD<sup>4</sup>



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# Acknowledgements

## Funding

BREC Foundation

ExxonMobil  
Foundation



## Special thanks

- *Baton Rouge Coca-Cola*
- *Glen Oaks West*
- *Councilwoman Ronnie Edwards (posthumously)*
- *New Beginning Baptist Church*
- *The Chapel of LSU*
- *BRAVE*
- *CPEX*
- *Black Family Initiative*
- *Bordelon's Pharmacy*
- *YMCA*
- *Traffic Solutions, Inc.*
- *BR Fire Department*
- *BR Police Department*

- [http://s629.photobucket.com/user/RobNewJr/media/New%20pics/IMG\\_1644.mp4.html](http://s629.photobucket.com/user/RobNewJr/media/New%20pics/IMG_1644.mp4.html)
- Questions?!

