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#### Climate Change and Resulting Floods: Using Social Capital to Strengthen Community Resilience in Eastwick, Philadelphia a known floodplain

Natasha Bagwe, MD, MPH Jefferson College of Population Health, Thomas Jefferson University, natasha.bagwe@jefferson.edu

Richard Pepino, PhD, MSS University of Pennsylvania

Erin Johnson, MPH, MSN, RN Drexel University

Julie Becker, PhD, MPH University of the Sciences

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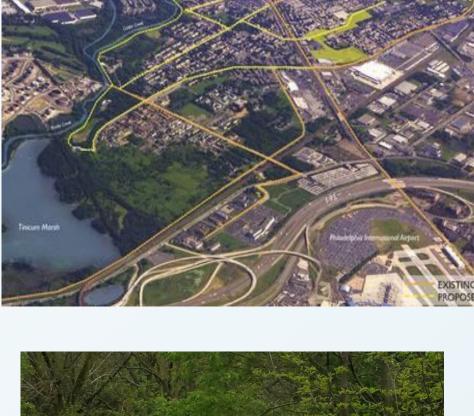
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### Background

- Climate change will produce intense weather events like increased precipitation and flooding
- Based on climate projections, Philadelphia will be hotter and wetter, and will experience more frequent and intense weather events (OOS, 2016)
- Floods are the second most common hazards in our city (OEM, 2017)
- Vulnerable population such as children, people of color, elderly population and people with disability are severely impacted by climate change









# Methods

- 20 African American participants were recruited for this study aged 65 years and above, living in Eastwick for more than 5 years through a method of snowball sampling
- Eastwick Disaster Impact Questionnaire (DIQ), a non valid instrumental tool was developed for this study
- Door to door survey administration







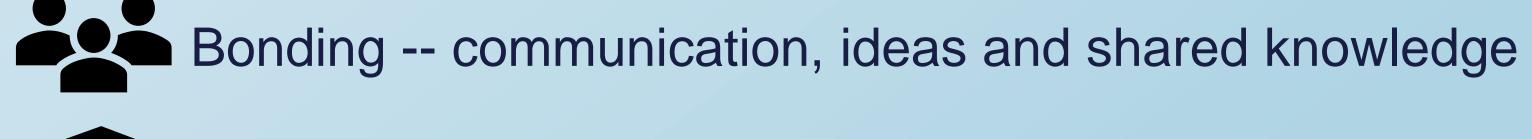
# **Climate Change and Resulting Floods: Using Social Capital to** Strengthen Community Resilience in Eastwick, Philadelphia a known floodplain

Natasha Bagwe, MD, MPH Thomas Jefferson University and PSR-Philadelphia, Philadelphia Richard Pepino, PhD, MSS University of Pennsylvania; Erin Johnson MPH, MSN, RN Drexel University; Julie Becker PhD, MPH University of the Sciences

# Social Capital Definition and Methods

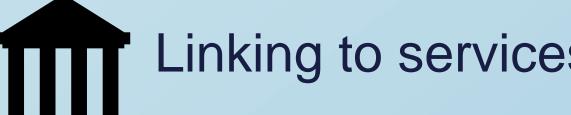
- Social capital consists of three components bonding, bridging, linking to services
- Interdisciplinary approach
- Built on trust, reciprocity, shared interest and collective action among community members
- Increase community resilience
- Faster recovery from disasters

Bridging (between community members and surrounding communities)





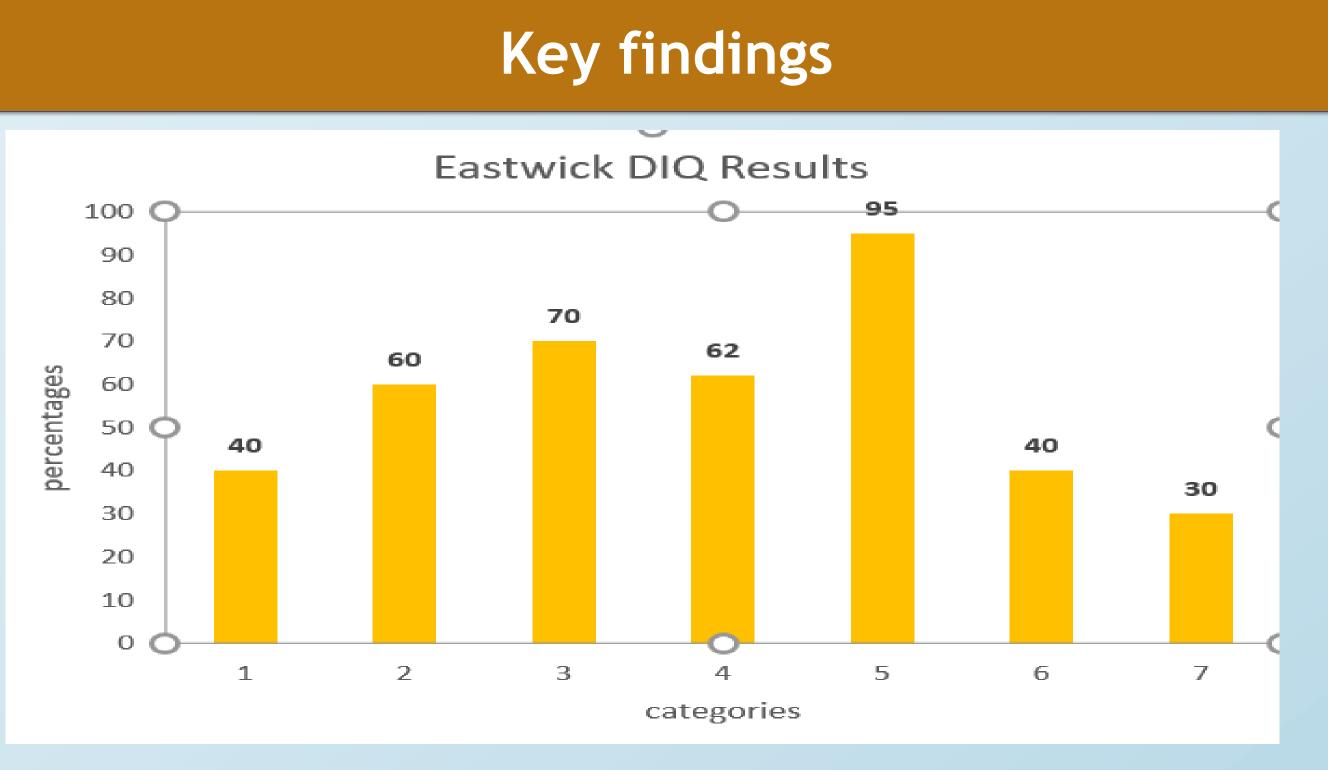
Bridging -- exchange of vita resources, tools and knowledge



Linking to services -- maximize positive end impact

Linking (between community and government)

> Bonding (between community members)



Legend 1=university degree 2=employed full time 3=experienced flood and described it as stressful 4=no involvement of government authority 5=no basic skills, evacuation plan in place 6=no access to internet and flood maps 7=warning received from community members, word of mouth

#### **Conclusion and Future Public Health** Implication

- plain maps are outdated

increased levels of stress.

- (linking and bridging)

Office of Sustainability, Philadelphia (OOS,2015). Green works report. Retrieved on August 7,2017 from tps://beta.phila.gov/media/20161101174249/2016-Greenworks-Vision\_Office-of-Sustainability.pdf Office of Emergency Management (OEM, 2017). Ready Community Eastwick, power point presentation presented on April 29,2017.in Eastwick community Philadelphia



#### • Eastwick will remain as a vulnerable community,

Community perceives that the current FEMA flood

People are highly concerned and show

Educating and building awareness about negative impacts of climate change among vulnerable population is key (bridging and linking)

Establishing an updated warning system

T Drafting and practicing local disaster

evacuation plan is critical (bonding and bridging)

## Acknowledgments

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#### References