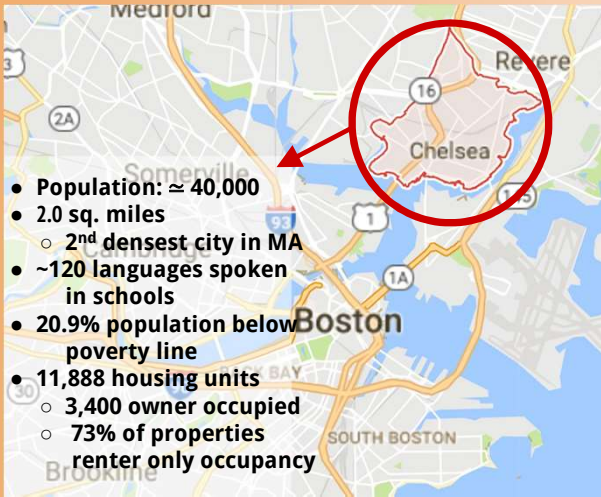




Assessing Heat Risks to Prepare Chelsea, Massachusetts for a Changing Climate

Sponsor: Department of Planning and Development, City of Chelsea
 Advisors: Professor Seth Tuler and Professor Jennifer deWinter

Ermina Damlamayan (ME/CE), Conrad Mera (IE), Michael Munroe (ME), and Elizabeth Walkes (BBT)



Factors That Contribute to Vulnerability			
Characteristic	Exposure	Sensitivity	Adaptive Capacity
Babies/Children		x	x
Dependent on Medical Devices		x	x
Elderly		x	x
High Density Household	x	x	x
Isolated Socially			x
Lack of Air Conditioning			x
Low Cooling Shelter Access			x
Low Green Space Access			x
Low Education			x
Low Income		x	x
Non-English Speaking			x
Old Residency			
Construction	x	x	
Outdoor Worker	x		
Pet Owner			x
Renter			x
Sick/Disabled		x	x
Special Needs			x
Top Floor Level	x		
Undocumented Workers			x

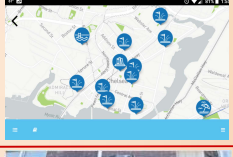
Recommendations



- ### Cooling Centers
- Utilize public buildings
 - Implement the usage of locations near public pools
 - Update parks to incorporate more shade



- ### "Plan and Plant" Methodology
- Plant shade trees wherever possible
 - Use surfaces that reflect heat
 - Incorporate public water features, such as hydration stations

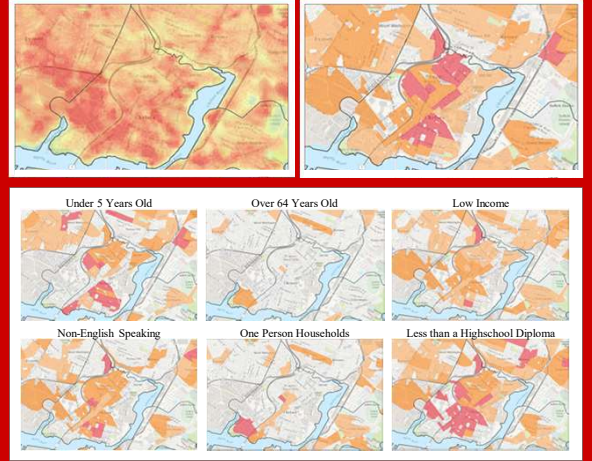


- ### Information Systems
- Produce applications
 - Establish a bilingual website to disperse information on extreme heat events
 - Promote an education plan



- ### Air Conditioning
- Advocate for policies to reduce cost
 - Install in-wall air conditioning in locations with just one window

Map of Daytime Surface Temperatures in Chelsea | Map of Social Vulnerability Distribution in Chelsea



Aspects of Chelsea:

- Overcrowded residencies
- Little available space (public + private)
- Undocumented residents, afraid to seek help when in need
- Lack of awareness of how to cope to heat
- Drug abuse and homelessness prevalence
- Low income population
- Old constructions



- ### Community Action Plan
- Organize training workshops
 - Inform the local stakeholder about their responsibilities
 - Create a tiered alert system



- ### Cool Roofs
- Incentivize the conversion to white roofs

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