Edward J. Bloustein School of Planning and Public Policy

HEALTHY HOMES INITIATIVE

Masters in Public Policy Practicum



Prepared for: New Jersey Housing and Mortgage Finance Agency

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Road Map

- 1) Brief Background
- 2) Data Review
 - a) SEC Demographics
 - b) Housing Quality & Health in NJ
 - c) Health in Paterson & Newark
 - d) Interview Analysis of Key Stakeholders
- 3) Program Benchmarking
 - a) Existing Resources for Addressing Health-Related Housing Quality
 - b) BPU Comfort Partners
 - c) Potential Costs of Healthy Homes Program Services
- 4) Program Recommendations
- 5) Barriers to Implementation
- 6) Conclusion & Discussion

Background

The Connection Between Health and Housing



The Connection Between Health & Housing

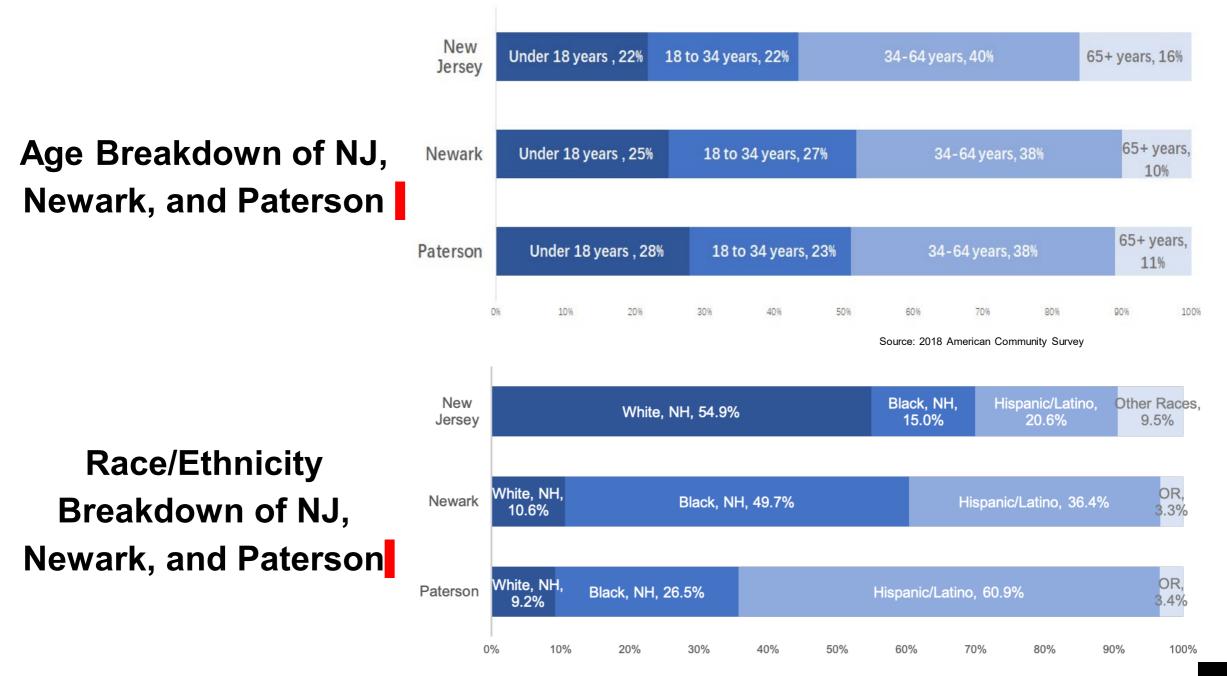
Based on a literature review on the relationship between health and housing the following themes emerged:

- → Race/Ethnicity, Housing, and Health Housing
- → Environment-Related Health Problems
- → Housing Stability and Health
- → Poor Housing Structural Quality and Asthma
- → Housing Quality and Mental Health

Data Review

Housing, Housing Quality, and Health in New Jersey, Paterson, and Newark





Source: U.S. Census Bureau (2019)

Housing Conditions Vary Widely by Race/Ethnicity

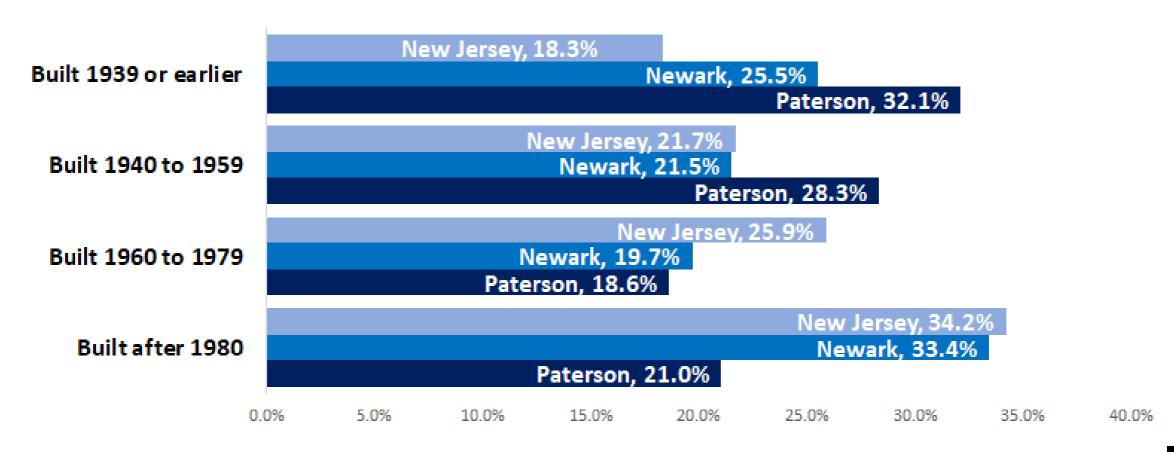
- Non-Hispanic Black and Hispanic NJ residents reported unsteady housing at significantly higher rates than non-Hispanic Whites
- Who in NJ experiences what poor housing conditions the most?

	Housing Security					
race	Steady Not Steady & Worried					
White NH	94.6%	5.4%				
Black NH	87.7%	<mark>12.3%</mark>				
Hisp	79.0%	<mark>21.0%</mark>				
Asian	97.6%	2.4%				
Other	91.4%	8.6%				

					No	No Smoke	Water
race	Pest	Mold	Lead	No Heat	Stove/Oven	Detector	Leak
White NH	5.9%	3.3%	1.7%	1.0%	1.5%	3.4%	6.5%
Black NH	<mark>12.3%</mark>	<mark>7.4%</mark>	<mark>8.6%</mark>	<mark>11.1%</mark>	2.5%	3.7%	<mark>9.9%</mark>
Hisp	<mark>17.8%</mark>	<mark>10.8%</mark>	<mark>6.4%</mark>	<mark>10.2%</mark>	<mark>6.4%</mark>	<mark>6.4%</mark>	<mark>7.0%</mark>
Asian	<mark>11.9%</mark>	0.0%	2.4%	<mark>9.5%</mark>	0.0%	4.8%	2.4%
Other	8.6%	6.9%	<mark>6.9%</mark>	6.9%	3.4%	5.2%	<mark>10.3%</mark>

Aged Housing Stock

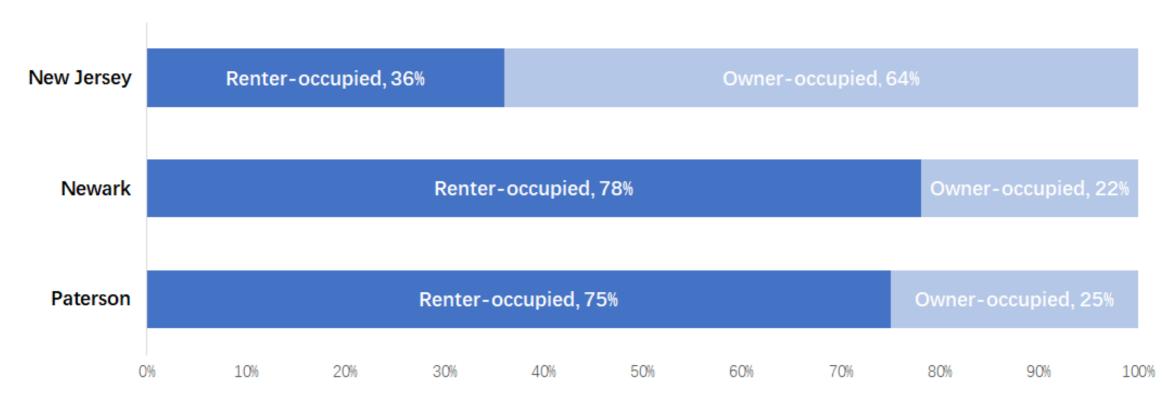
In **Paterson (32.1%)** and **Newark (25.5%)**, there were higher percentages of homes built before 1939 than the in the state of **New Jersey as a whole (18.3%)**. There were more homes built in **New Jersey after 1980 (34.2%)** than in **Paterson (21%)** and **Newark (33.4%)**.



Source: 2018 American Community Survey

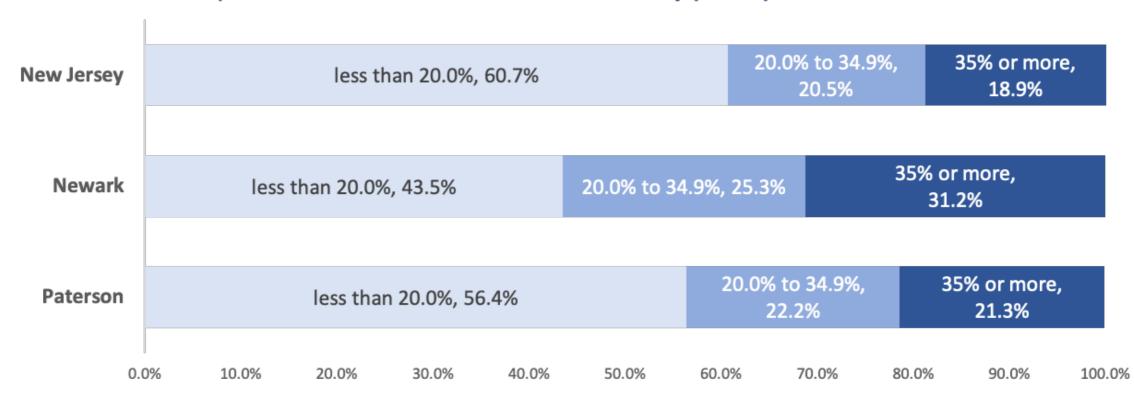
Communities of Renters

Both Newark (78%) and Paterson (75%) had drastically higher percentages of renter-occupied units than the state of New Jersey as a whole (36%).



Housing Cost Burden

Both Newark (31.2%) and Paterson (21.3%) have higher percentages of Renters whose gross rent exceeds 35% of the monthly household income than that of New Jersey (18.9%).



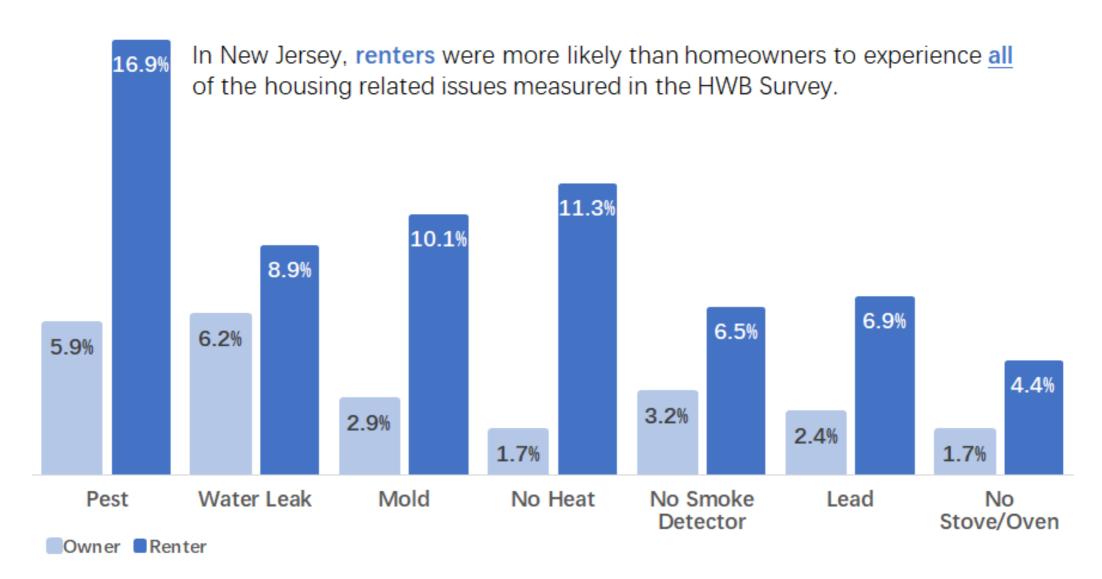
Source: 2018 American Community Survey

The Relationship Between Income and Housing Conditions

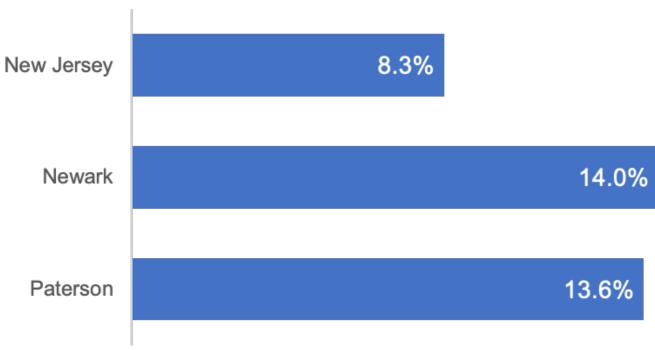
Of respondents who earned \$20K or less, about 77% experienced some kind of housing problem

	Housing Issues							Housing Security		
	Any Housing						No Smoke	Water		Not Steady &
income category	Problem	Pest	Mold	Lead	No Heat	No Stove/Oven	Detector	Leak	Steady	Worried
\$0-\$20K	<mark>76.6%</mark>	<mark>15.6%</mark>	<mark>10.9%</mark>	<mark>9.4%</mark>	<mark>15.6%</mark>	<mark>4.7%</mark>	<mark>6.3%</mark>	<mark>14.1%</mark>	85.9%	<mark>14.1%</mark>
\$20K-\$40K	<mark>67.8%</mark>	<mark>18.6%</mark>	<mark>13.6%</mark>	<mark>8.5%</mark>	<mark>6.8%</mark>	<mark>5.1%</mark>	<mark>6.8%</mark>	8.5%	66.1%	<mark>32.2%</mark>
\$40K-\$60K	41.0%	9.8%	6.6%	3.3%	1.6%	4.9%	3.3%	11.5%	91.8%	8.2%
\$60K-\$80K	32.7%	7.7%	5.8%	5.8%	1.9%	0.0%	3.8%	7.7%	90.4%	9.6%
\$80K+	22.2%	5.3%	1.6%	2.1%	2.9%	0.8%	2.5%	7.0%	97.5%	2.5%

Prevalence of Housing Quality Issues



Asthma Rates in NJ, Newark, and Paterson Residents

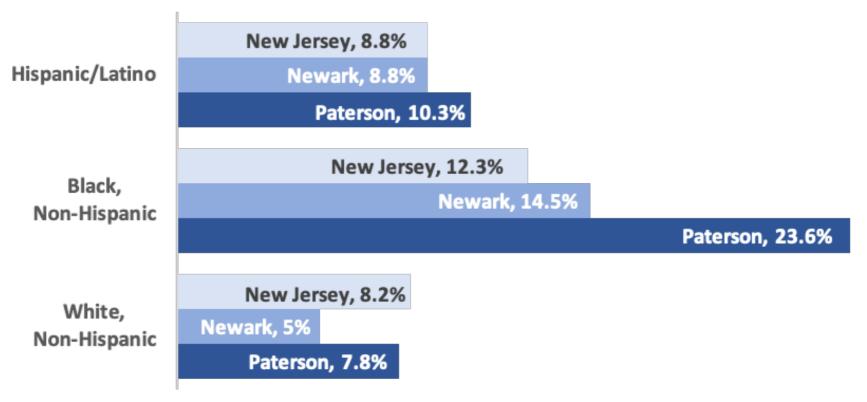


Source: New Jersey Behavioral Risk Factor Surveillance System, NJ Department of Health (2013-2017)

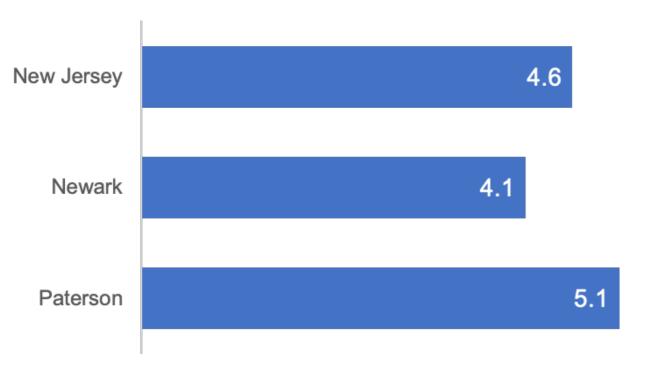
Both Newark (14.0%) and Paterson (13.6%) had higher asthma rates than the state of New Jersey as a whole (8.3%).

Asthma Rates in NJ, Newark, and Paterson Residents By Race and Ethnicity

Non-Hispanic Blacks had the highest asthma rate in Paterson (23.6%), compared to Newark (14.5%) and the state of New Jersey as a whole (12.3%). Hispanic/Latino also had higher asthma rates than Non-Hispanic Whites in Newark (8.8%), Paterson (7.8%) and the state of New Jersey as a whole (8.8%).



Rates of Death Due to Unintentional Falls per 100,000 Population (Age-Adjusted) in NJ, Newark, and Paterson



Paterson (5.1) had a higher rate of death due to unintentional falls per 100,000 population than the state of New Jersey as a whole (4.6), while Newark (4.1) had a lower rate than the state of New Jersey.

Source: New Jersey Death Certificate Database (2010-2018)

Percentages of Residents Had Poor Mental Health (Age-Adjusted) in NJ, Newark, and Paterson



Source: New Jersey Behavioral Risk Factor Surveillance System, NJ Department of Health (2013-2017)

Paterson (11.2%) had a higher percentage of residents had 14 or more of past 30 days suffering mental distress than the state of New Jersey as a whole (10.8%), while Newark (10.7%) had a lower percentage than the state of New Jersey.

Interview Methodology

- → We identified potential study participants through a mix of *purposive and* snowball sampling methods
- → 12 participants agreed to be a part of the study and to be interviewed
 - ◆ Newark (n=3): 2 are employed by hospitals and 1 by a community health organization
 - ◆ Paterson (n=5): 2 are employed by community-based organizations, 1 by a community health organization, 1 by a hospital, and 1 is a city government official
 - Faculty from the Bloustein School of Planning and Public Policy at Rutgers New Brunswick (n=4): 4 are experts in housing and social policy

Perspectives of Housing and Health Stakeholders:

Systemic Issues

- → High Poverty
- → Affordability
- → Old Housing Stock
- → Absent landlords
- → Mental Health & Public Safety

Perspectives of Housing and Health Stakeholders:

Housing Issues

- → Asthma and Asthma Triggers
- → Senior Accessibility
- → Overcrowding

Program Benchmarking

Existing Programs in New Jersey, Paterson, and Newark Potential Costs of Interventions



Existing Resources for Addressing Health-Related Housing Quality

- → Only two programs specifically targeted home repairs, both initially in Paterson, but no longer operational
- → Most of the home improvement programs that operate in Newark focus on either sustainable energy or health related issues (lead and asthma exposure)
- State Level programs in New Jersey:
- 1. Comfort Partners Program
- 2. Home Energy Assistance Program
- 3. Weatherization Assistance Program (WAP)
- 4. In-Home Asthma Intervention Pilot Project

Existing Resources (Continued.)

→ Newark Program:

- New Jersey Health Initiative (NJHI)
- Advancing Safe and Healthy Homes Initiative (ASHHI)

→ Paterson Programs:

- Homeowner Rehabilitation Program
- ◆ Paterson Minor Home Repair Program

Two Major Gaps Identified in Newark and Paterson Healthy Home Programs:

- 1. Paterson is in dire need of healthy housing programs, given the demographics of the neighborhood and the lack of operational healthy housing programs
- 2. Newark and Paterson home improvement programs contingent on income; many families may not meet income requirements but could still benefit

Board of Public Utilities (BPU) - Comfort Partners Program

- → Aligning objective: to increase participant's health, safety, and comfort in their homes
- → Comfort Partners (CP) and Healthy Homes both:
 - ◆ Target lower-income NJ
 - Seek to implement some of the same interventions: reinforcing building envelope, upgrading HVAC, kitchen appliances, plumbing, and other measures
- → Spending is a barrier to collaboration, however.
 - ◆ CP scrutinizes for review any "out-of-scope" interventions

Potential Costs (Average Cost in Dollars) of Healthy Homes Program Services

Housing-Based Intervention Recommendation	Average Cost (\$)*
Roof Remediation	\$859
Roof Replacement	<u>\$7,920</u>
Improved insulation; weatherstripping	<u>\$4,317</u>
Install energy efficient appliances	\$2,880
Installing necessary appliances (refrigerator, oven, stove, smoke detector)	<u>\$3,800</u>
Improved HVAC system (80% AFUE)	\$4,050
Mold Removal	\$2,232
Pest control; pest elimination	<u>\$173</u>
Toxic lead mitigation (paint)	\$2,900
Radon gas abatement	\$969
Fixing uneven flooring (warping, buckling)	\$1,750
VOC intrusion mitigation - low porosity sealant**	\$2,500
Carbon monoxide detectors	<u>\$82</u>
At-Home Air Inspection Kits (VOC, Formaldehyde, Asbestos, Mold and/or Dust, Carbon Monoxide, Lead, Radon)	<u>\$325</u>

*National average cost values determined for a 2,000 sq ft house

Source: See hyperlinks in report EJB 25

Program Recommendations

Collaborative Opportunities



Overall Recommendations

- → Adopt a community-based approach
 - ◆ Hire local firms when possible
 - Design an inspection program to incentivize landlords to keep up homes
 - Stakeholder meetings with community leaders
- → Focus on improving physical AND mental health
- → Conduct an initial housing audit to survey housing issues in the areas of interest, as the first stage of program implementation.
 - ◆ A second housing audit should be conducted at the completion of program implementation.
 - Periodic audits may be necessary during implementation

Overall Recommendations

- → Asthma is a major health issue, particularly for children; Healthy Homes Initiative should provide for the removal of asthma triggers
 - We recommend prioritizing roofing, primary HVAC system remediation, mold, and pest removal as most urgent
- → Homes should be accessible to seniors and those with disabilities'. Housing Repairs can include making homes more accessible to seniors and those with disabilities
- → Healthy housing repairs must be maintained periodically and consistently (every 1-2 years)
- → Utilize a program evaluation to assess the progress and impact of the program (refer to appendix in the report)

Overall Recommendations

- → Collaborate with Comfort Partners to monitor and manage the energy efficiency intervention component of the Healthy Homes program, because BPU has:
 - 1) Experience running similar low-income energy efficiency programs
 - 2) Predetermined list of trustworthy contractors, trade allies, and program administrators
 - 3) Firmer technical grasp on lighting, baseload measures, HVAC, insulation, windows, and thermostats, etc.

Barriers to Implementation



Barriers to Designing and Implementing Healthy Housing Initiatives

- → Lack of resources and cost issues
- → Logistical issues and administrative problems
- → Reaching renters effectively
- → Absentee landlords
- → Displacing residents
- → Insufficient advocacy (and resources to advocate) on behalf of tenants

Conclusion



THANK YOU



Discussion

Any Questions?

