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A BETTER BUILDING CODE:

Recommendations for Increasing Housing Resilience and Racial Equity for Minnesota Renters

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INTRODUCTION

In 2021, HF831/SF2077, known as the Better Building Code, was introduced at the Minnesota legislature. The legislation would require new commercial buildings, including multifamily buildings four stories or greater, to have increasingly higher standards for energy efficiency until reaching net zero energy by 2036.

This report analyzes the potential impact the Better Building Code would have on multifamily buildings in Minnesota, with a particular focus on buildings serving households most impacted by economic and racial disparities. We examined data for four+ story multifamily buildings and interviewed renters and property owners, developers, and managers to develop the report's recommendations.





How does an advanced state building code affect and shape the lives of the people of Minnesota?

Increased energy performance results in healthier homes and higher quality of life, reduced utility costs for residents, and reduced costs for thousands of Minnesota business owners.

TOP TAKEAWAYS



The Better Building Code will decrease energy burden and increase livability to meet equity expectations for multifamily 4+ story residential homes. Affordable homes, as well as market rate ones, deserve this increase in quality.



Energy efficient housing, which results in healthier homes and higher quality of life, is a right that must be paired with sufficient regulatory, compliance, and enforcement resources. This is especially true for BIPOC residents, who disproportionately experience harm from environmental and poor housing quality.



An ecosystem approach is needed, coordinating resources, education, and expertise among developers, architects, contractors, and residents.



Accelerated energy codes require intentional inclusion strategies for the construction and design industries, ensuring business development and growth opportunities are targeted to Black, Indigenous, people of color, and women entrepreneurs and workforce.



Affordable properties that require major retrofits should be an area of particular policy focus, with goals of preserving homes and retaining affordable rents.

KEY FACTS ABOUT HOUSING AND ENERGY

Everyone should have a safe, stable place to call home, However, Minnesotans are experiencing a crisis in housing—one which harms Black, Indigenous, people of color (BIPOC), and those with low incomes the most. COVID-19 has exacerbated these inequities, including housing instability, housing cost burden, and the health cost of poor housing quality.

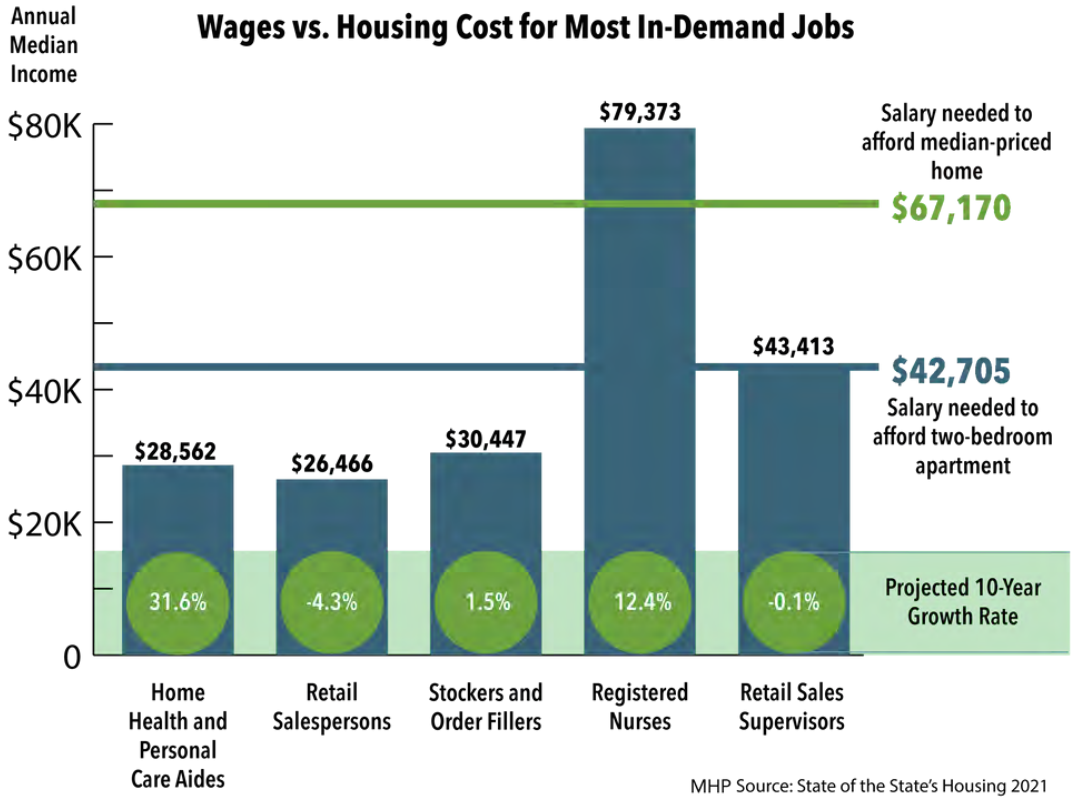


Low-wealth households and communities of color consistently face disproportionately higher energy burdens. In Minnesota, extremely low-income residents at 30% AMI have an energy burden of 13% of income, while the average for all Minnesotans is 2%.



Over 100,000 of Minnesota's lowest income residents, with an average income of $27,950 or less for a four-person household, or 30% of AMI, do not have housing that is available or affordable to them, forcing people into unsafe and unstable housing situations and homelessness.

Wages are not keeping up with housing costs. Of the top five in-demand jobs in the state, three do not earn enough for quality housing to be affordable.



KEY FACTS, CONTINUED

Housing costs are increasing, and continue to increase disproportionately to income. Between 2000 and 2019, the median renter income in Minnesota increased by just 1%, while median gross rent increased by 14%.

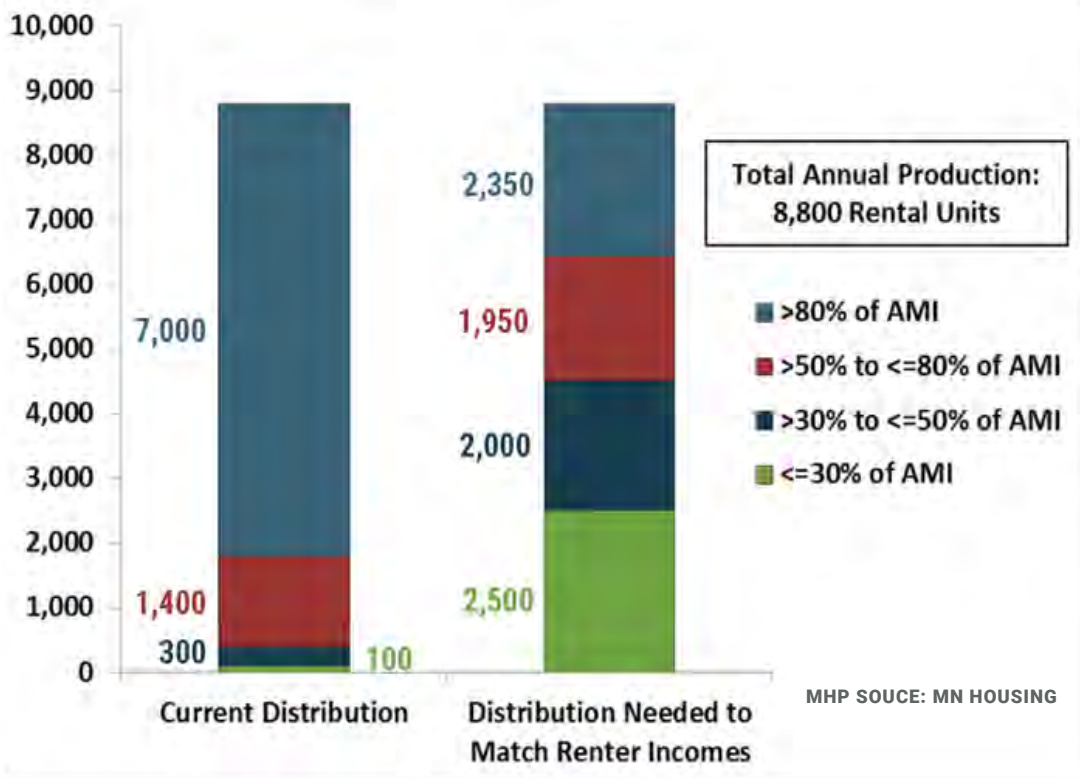


Indigenous households and households of color in every part of the state are paying too much for housing compared to white Minnesotans. The cost-burden disparity for renters of color is stark; forty-four percent of white renters are cost burdened; in contrast, 58 percent of Black renters—82,364 renter households—pay more than they can afford on housing.

44%
of white renters are cost burdened

58%
of Black renters pay more than they can afford on housing

There is a severe discrepancy between market supply and market demand for housing. Of approximately 8,800 rental units constructed each year, almost all are only affordable to people making more than 80% of area median income (AMI), or $74,500 for a four-person household.



MHP SOUCE: MN HOUSING

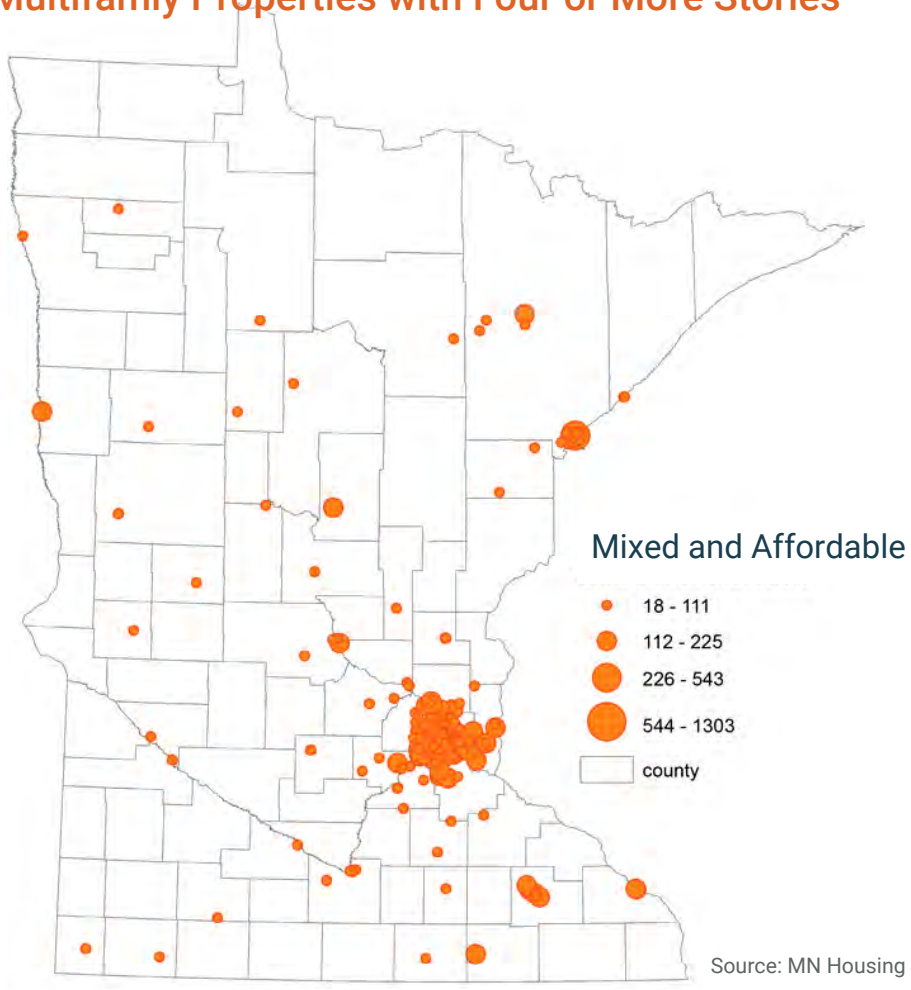
RACE EQUITY IMPACT ANALYSIS

In 2020, project partners conducted a race equity impact analysis of the Better Building Code, which spurred commitment to explore potential impacts through this report. To assess potential housing impacts of the Better Building Code for racial and ethnic groups, we examined housing data and interviewed residents and multi-family property developers, owners, and managers.

A race equity impact assessment (REIA), examines how different racial and ethnic groups would likely be affected by an action or decision.

We updated the Race Equity Impact Analysis to include these findings, which reflect that structural systems withhold equitable energy and housing resources from Black, Indigenous, Latino, and Asian people and other economically marginalized communities. Black and Brown residents have the most to lose from failure to provide energy efficient buildings, as these populations disproportionately experience harm from climate change, environmental pollution, and general poor housing quality.

Multifamly Properties with Four or More Stories



Source: MN Housing

We examined data for 4+ story multifamily buildings, including location, age, substantial renovations, and type (affordable or market rate). People of color, particularly Black and Latino, disproportionately live in areas zoned for multifamily housing."

DATA FINDINGS FOR FOUR OR MORE STORY MULTIFAMILY BUILDINGS IN MINNESOTA

Several counties that are home to 4+ multistory buildings have both high rates of housing cost burden and high rates of energy-burdened households, including St Louis, Blue Earth, Hennepin, and Ramsey.

People of color, particularly Black and Latino families, disproportionately live in areas zoned for multifamily housing.

40%

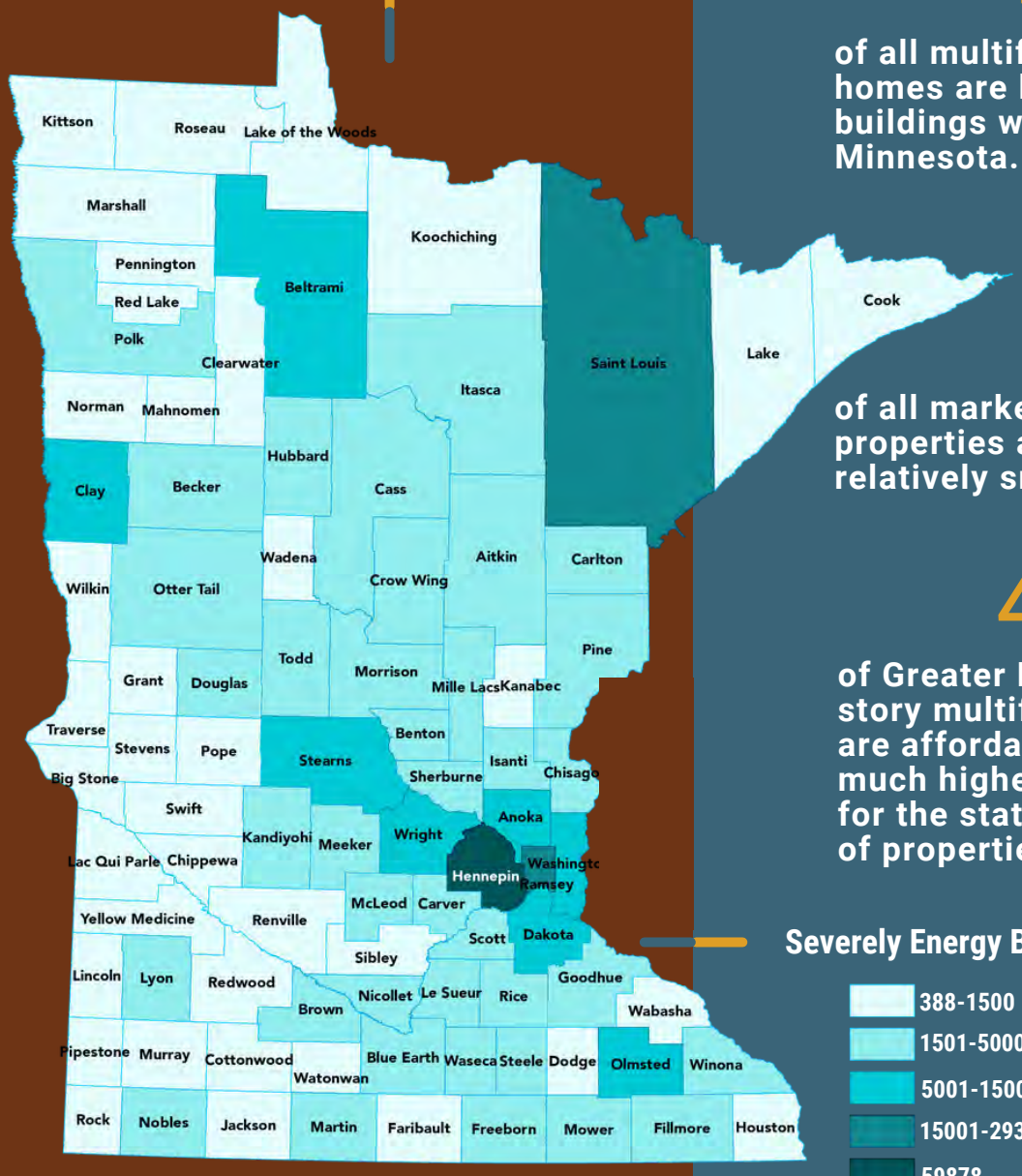
of all multifamily affordable homes are located in buildings with 4+ stories in Minnesota.

8%

of all market rate multifamily properties are 4+ stories, a relatively small portion.

42%

of Greater Minnesota's 4+ story multifamily properties are affordable. This is a much higher percentage than for the state, for which 28% of properties are affordable



Households with Severe Energy Burden

COMMUNITY SNAPSHOTS: An Examination of Community Characteristics within Two Miles of Select Four+ Story Multifamily Buildings

Naturally Occurring Affordable Housing (NOAH) property, 4+ stories

(Rents are affordable to those at 60% AMI, but subject to change by owner.)



Parkview Apartments

Maplewood: Parkview Apartments

(4 stories with 100 units, built 1965, Class C)

- Greater percentage of renters in 2-mile community (42/58% renters/homeowners) than in city (30/70%).
- 2-mile community is more diverse than city: While Maplewood is 63% European American; the 2-mile community is 42% European American, 58% BIPOC (30% Asian, 12% Black or African American, and 11% Hispanic).

Market rate new construction, 4+ stories



The Lofts at Mayo Park

Rochester: The Lofts at Mayo Park

(29 units, built 2017, Class A)

- Median household income in 2-mile community, $59,764, is lower than city median income of $73,106.
- Since 2020, the area has seen an increase of 74% in new units, with 180 units under construction in 2021.

Affordable property, 4+ stories, that has undergone substantial renovation

(A substantial renovation costs 50% or more of the property's total market value.)



Riverside Plaza Apartments

Minneapolis: Riverside Plaza Apartments

(1,303 units, built 1973 renovated 2012, Class B)

- High population growth of 5% over the next 5 years, compared to the state average of 1%.
- Higher than the city average population of (BIPOC) Black, Indigenous, and people of color.
- Minneapolis' population is 40% BIPOC, while the 2-mile community of Riverside Plaza is 46% BIPOC and 54% European American.



Malcolm Shabazz Apts

St. Paul: Malcolm Shabazz Apartments

(73 units, built 1970 renovated 1974, Class C)

- The 2-mile community includes 492 multifamily buildings of 4+ units.
- 44% of households within 2-miles earn less than $50,000, compared to city's median income of $59,256.

ENGAGEMENT

We conducted focus groups with residents and interviews with nonprofit and for-profit multifamily housing developers, owners, and managers. Focus group participants were over two-thirds Black and people of color, aged from teenagers to seniors and were immigrants and American-born residents. Engaging residents around their current and past housing experiences is a proxy for understanding the quality of life needs for homes not yet constructed.



What We Learned



"My son is allergic to mold; I've had to move out of apartments because of this."

"We need to buy space heaters in the winter; we buy a heater when the heat in the house is not working."

Quality of life and health, including financial health, is profoundly impacted by housing quality.

"In addition to 'new,' we need to make existing housing more livable."

"We want to look at the area as a whole, not just certain buildings and types."

Energy efficiency adds value to all homes. A consistent message from residents was that "there should be the same standards for all buildings."

From the Residents



"There are different standards for buildings based on where they are, what neighborhood. These are underserved, underrepresented communities that get lower quality."

Race, income, and neighborhood too often determine access to energy efficient homes.

"Homeowners can make choices and changes; for renters, it is up to the owner to make changes and then you are stuck."

Legal remedies and enforcement resources do not meet the current need.

What We Learned

"What will be important will be the right level of incentives along with regulations. As this goes to net zero there will be costs associated with these upgrades. If we increase the benchmark too quickly, and no subsidy, production will lag."

Resources for affordable multifamily must be matched to regulatory requirements.

"The most vulnerable property class is the 1960s and 70s buildings that will fail over the next 10-30 years. Galvanized plumbing was the preferred approach up until the 70's when they realized the useful life was not as long as anticipated. Replacing this plumbing is complex because we had to go behind every wall in every unit."

Older high-rise buildings have unique investment needs.

FROM



MANAGERS

> "Architects and engineers get excited about something. But then you need a general contractor and subs that are comfortable with the issues. You also need to think about maintenance people and vendors—do they understand the new system?"

Ecosystem support is critical to program success.

Underwriters, architects, installers, and maintenance providers all contribute to the lifecycle of building construction and operations.

CO-BENEFITS OF THE BETTER BUILDING CODE

Quantifying direct and indirect benefits (aka co-benefits) and costs, as well as centering the perspectives of a diverse set of impacted residents and stakeholders, is important to assessing the impacts of the Better Building Code.

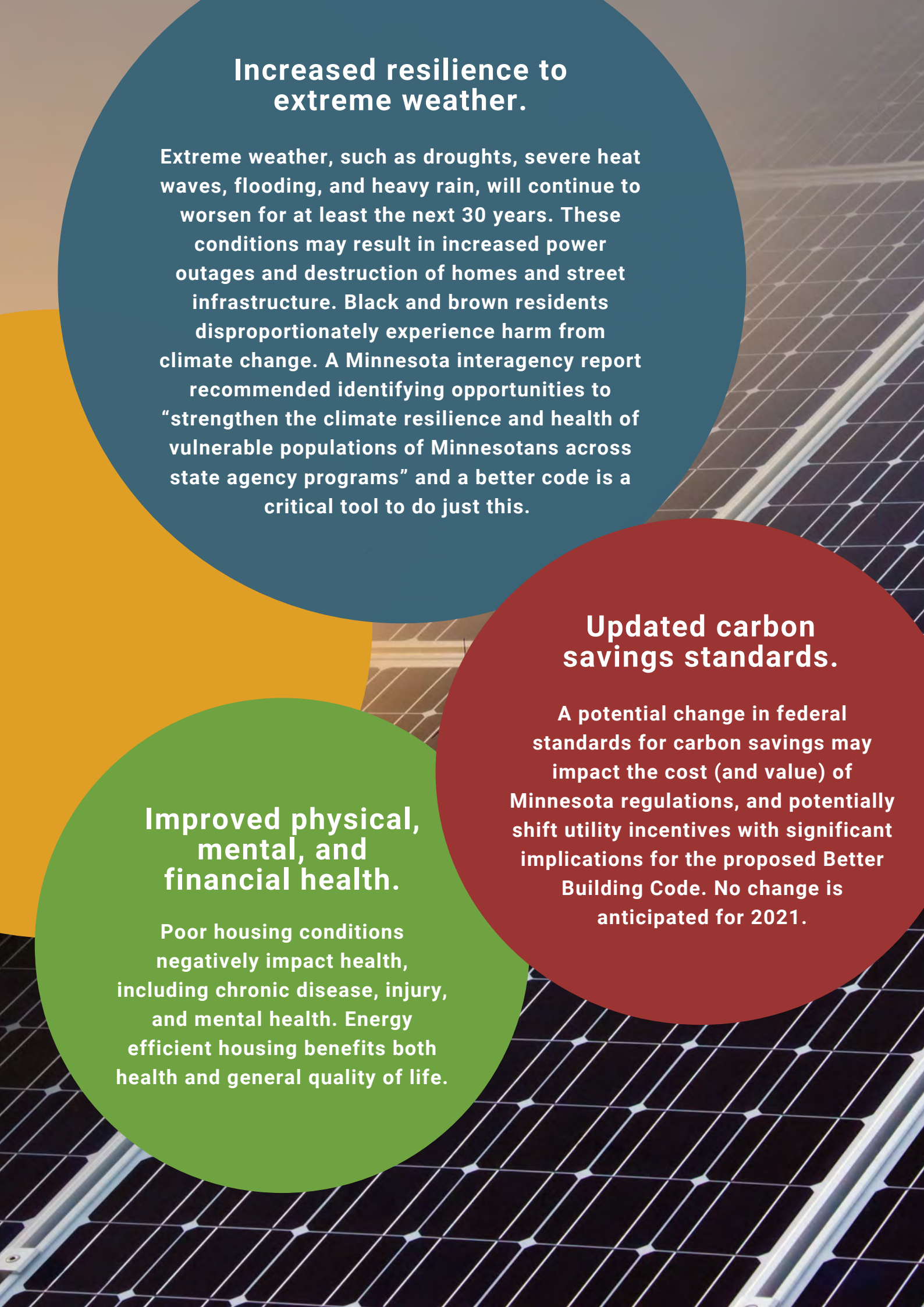
Cost effectiveness: spending now to save later.

New construction and significant retrofits built to updated energy efficient standards will result in longer building life and cost savings on future renovation and retrofits. Ensuring new buildings are built to standards will mean fewer costs associated with decarbonizing future building stock.

Reduced energy costs for tenants and owners.

According to a June 2021 study, households in high-rise multifamily buildings would experience utility bill savings (reduced energy burden) and buildings would realize life cycle savings in 2024 if the Better Building Code had been adopted in 2021. In future years, cost impacts will depend on new design approaches and declining cost of high efficiency building components.

$319 = estimated annual savings for households in a 2-bedroom apartment.



Increased resilience to extreme weather.

Extreme weather, such as droughts, severe heat waves, flooding, and heavy rain, will continue to worsen for at least the next 30 years. These conditions may result in increased power outages and destruction of homes and street infrastructure. Black and brown residents disproportionately experience harm from climate change. A Minnesota interagency report recommended identifying opportunities to "strengthen the climate resilience and health of vulnerable populations of Minnesotans across state agency programs" and a better code is a critical tool to do just this.

Updated carbon savings standards.

A potential change in federal standards for carbon savings may impact the cost (and value) of Minnesota regulations, and potentially shift utility incentives with significant implications for the proposed Better Building Code. No change is anticipated for 2021.

Improved physical, mental, and financial health.

Poor housing conditions negatively impact health, including chronic disease, injury, and mental health. Energy efficient housing benefits both health and general quality of life.

RECOMMENDATIONS

Invest in energy-efficient affordable multifamily buildings.

For decades, affordable homes and cost-burdened households have been underfunded, reducing supply and contributing to the state's housing crisis. With improvements to energy efficiency standards, affordable homes must not be left behind. Support is needed as these properties have fewer options to identify revenues to cover costs and accommodate uncertainty. State and local grant and loan programs, property tax relief, project-based rental assistance, utility provider incentive programs, and existing tools (like the 4d property tax rate), are ways to match affordability resources to costs.

Quantify co-benefits as part of policy justification.

The Departments of Commerce and Labor and Industry should engage the Department of Health, Minnesota Housing, and others to quantify impacts on health, cost savings over the life cycle of buildings, reductions to energy burden, and improved weather resiliency. Analysis should incorporate updated carbon savings standards.

Utilize an accelerated cohort or phased implementation.

Utilize an accelerated cohort or phased implementation to test new systems, evaluate contractor availability, and assess performance, maintenance, and replacement costs of construction strategies and building systems. This approach will allow a smaller group of properties, to be the first to provide implementation and performance feedback as the policy is applied to all sectors.

Stimulate Black, Indigenous, Asian, and Latino business ownership and growth in energy efficiency industries.

Including installation and maintenance of new systems and technology. Set goals for BIPOC business and workforce participation and provide business growth incentives. Direct benefits from new investments to communities surrounding large multifamily buildings, which are disproportionately more inclusive of households of color.

Develop an “ecosystem” approach to education, training, and engagement opportunities.

Coordinating resources, education, and expertise among developers, architects, contractors, and residents and providing training on advanced code updates for building officials, will build an ecosystem of support. Examples include: reducing barriers to new technology for general contractors and subcontractors with attention to the handoff from construction to operations; developing high-skill training for maintenance issues; prioritizing opportunities for BIPOC-owned businesses; and developing renter and community accessible education and resources, to allow active participation in building and energy system improvements.

Identify targeted strategies to retain affordable rents for older high-rise buildings.

Older buildings in need of renovation, especially properties at risk of failing systems, risk conversion to higher market rents to meet expenses, and the resulting displacement of thousands of residents. Minnesota Housing should lead by example, in cooperation with the Department of Commerce, in developing a focused program for the preservation of high-rise multifamily properties (e.g. a program to replace galvanized plumbing systems).

SYSTEM RECOMMENDATIONS

Participants identified these recommendations as important to systems change alongside the Better Building Code.

Use a rights frame for energy efficiency.

Just like the air we breathe and the food we eat, energy efficiency - which brings healthier homes and higher quality of life - is a basic need. This frame will guide investment in shared benefits for owners and renters, as well as regulatory standards and enforcement mechanisms.

Ensure impacted communities are equitably represented within decision-making structures.

Engage impacted parties, such as residents, for their expertise and leadership, to influence and evaluate implementation, outcomes, and impact. Value end users as contributors to wealth building and reinvestment opportunities.

Apply energy efficiency standards to all homes.

Energy efficiency has a direct impact on housing quality, as well as creating environmental benefits. Focusing resources solely on new construction may exacerbate disparities for low wealth and communities of color. The Departments of Commerce, Labor & Industry, Health, and Minnesota Housing should develop an intra-agency strategy to ensure all housing has a common standard of energy efficiency necessary for adequate public health outcomes and quality of life.

Invest in training, compliance, and enforcement.

Consistent housing quality standards and equitable access to funds require greater public resources. In addition, regulatory standards need to be updated to meet current conditions. Examples include developing a "hot weather rule" to match cold weather safety and health standards, and support for a renter's right to identify changes needed to improve health, safety, and comfort - without fear of displacement or retaliation.

DEFINITIONS

AFFORDABLE PROPERTIES

For the purposes of this report, “affordable” refers to those properties with income affordability restrictions, usually due to receipt of a public subsidy.

ENERGY COST BURDEN

The percent of median yearly income that households pay for electricity and gas bills. Paying more than 6% on energy bills is considered a high energy burden, while a household that pays more than 10% is considered to have a severe energy burden.

HOUSING COST BURDEN

When households spend more than 30% of their income on housing (including utilities). Severely cost burdened is when they spend more than 50% on housing. In such cases, residents may have difficulty affording necessities such as food, clothing, transportation, and medical care.

MARKET RATE

Rents that are set by the owner/operator and are independent of any regulatory conditions or restrictions.

MULTIFAMILY HOUSING

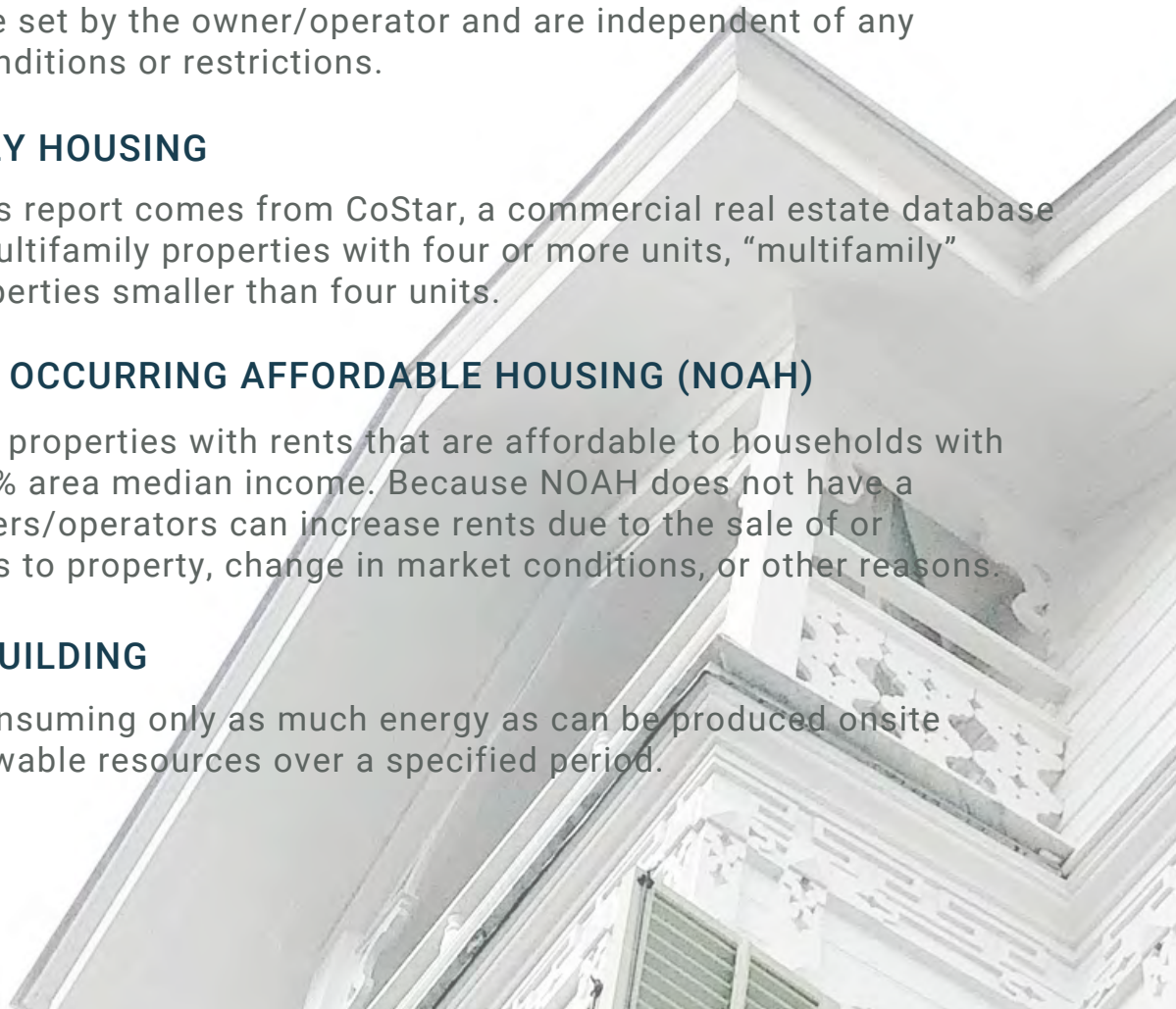
As data in this report comes from CoStar, a commercial real estate database that tracks multifamily properties with four or more units, “multifamily” excludes properties smaller than four units.

NATURALLY OCCURRING AFFORDABLE HOUSING (NOAH)

Unsubsidized properties with rents that are affordable to households with income at 60% area median income. Because NOAH does not have a subsidy, owners/operators can increase rents due to the sale of or improvements to property, change in market conditions, or other reasons.

NET ZERO BUILDING

A building consuming only as much energy as can be produced onsite through renewable resources over a specified period.



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APPENDIX

A Better Building Code: Recommendations for Increasing Housing Resilience and Racial Equity for Minnesota Renters

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A. Data Tables

1. Minnesota 4+ Story Multifamily Building Characteristics

	Total Number of Buildings	Total Number of Units	Average Year Built	Average Number of Units	% Properties in 7 County Metro	Count with Renovation	% Class A Property	% Class B Property	% Class C Property
Market Rate	614	66,353	1983	115	85%	32	33%	36%	31%
Affordable	275	30,167	1982	110	73%	7	13%	45%	41%
Mixed	90	11,832	1997	132	90%	2	33%	51%	16%
NOAH (subset of market rate)	176	10,935	1949	62	74%				
Totals	979	10,8352							

Note: CoStar defines building class in the following way. CLASS A buildings include high quality finishes such as hardwood floors, granite countertops, and/or stainless-steel appliances, as well as on-site shared facilities. CLASS B buildings are aesthetically average and contextually appropriate. They include average quality finishes and a few on-site shared facilities and spaces. CLASS C buildings are purely functional, often with below average finishes, small windows and likely no on-site facilities or shared spaces.

2. Percent 4+ Story Buildings of all Multifamily Buildings by Type

Percent 4 Story + Buildings of All Multifamily Buildings	% of multifamily housing stock that are 4 stories or more (bldgs)	% of multifamily housing stock that are 4 stories or more (units)
Market	8.10%	22.45%
Affordable	20.88%	39.92%
Mixed	25.64%	43.35%

3. County Count of 4+ Story Buildings and Sum of Units

County	Count of 4+ Story Properties	Sum of Number of Units
Anoka	13	1489
Becker	1	85
Beltrami	1	100
Benton	1	60

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County	Count of 4+ Story Properties	Sum of Number of Units
Blue Earth	7	496
Brown	1	30
Carlton	2	126
Carver	5	326
Cass	1	30
Chippewa	2	71
Clay	1	120
Cottonwood	1	58
Crow Wing	1	125
Dakota	8	1017
Douglas	1	105
Freeborn	1	81
Goodhue	1	41
Hennepin	170	21568
Hubbard	1	80
Isanti	3	149
Itasca	1	41
Lake	2	99
Mcleod	2	162
Mille Lacs	1	71
Morrison	1	60
Mower	1	205
Nobles	1	60
Olmsted	9	941
Otter Tail	2	144
Pennington	1	66
Polk	1	81
Ramsey	73	9935
Rice	2	154
Rock	1	55
Scott	6	310
Sherburne	4	302
St Louis	18	1689
Stearns	2	106
Steele	1	98
Stevens	1	60
Todd	1	60
Washington	6	685
Winona	2	248
Wright	3	156
Yellow Medicine	1	54
Grand Total	**365**	**41,999**

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4. City Count of 4+Story Buildings and Sum of Units

City	Count of 4+ Story Properties	Sum of Number of Units
Albert Lea	1	81
Alexandria	1	105
Anoka	3	212
Apple Valley	2	330
Arden Hills	1	60
Austin	1	205
Bemidji	1	100
Blaine	1	54
Bloomington	3	355
Brainerd	1	125
Brooklyn Center	2	252
Brooklyn Park	1	110
Buffalo	2	114
Burnsville	2	248
Cambridge	3	149
Cannon Falls	1	41
Champlin	1	184
Chaska	3	229
Chisholm	1	41
Cloquet	1	85
Cold Spring	1	61
Columbia Heights	2	337
Coon Rapids	4	586
Cottage Grove	1	184
Crystal	1	130
Detroit Lakes	1	85
Duluth	13	1330
East Grand Forks	1	81
Eden Prairie	4	528
Edina	5	676
Elk River	3	158
Eveleth	1	54
Faribault	1	90
Fergus Falls	2	144
Forest Lake	1	40
Fridley	1	60
Golden Valley	1	234
Granite Falls	2	94
Hibbing	1	48
Hopkins	3	288

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City	Count of 4+ Story Properties	Sum of Number of Units
Hutchinson	2	162
Jordan	2	102
Lake Crystal	1	43
Lexington	1	180
Lino Lakes	1	60
Little Canada	1	69
Little Falls	1	60
Luverne	1	55
Mankato	6	453
Maple Grove	1	102
Maplewood	1	50
Milaca	1	71
Minneapolis	124	15428
Minnetonka	7	1078
Montevideo	1	31
Moorhead	1	120
Moose Lake	1	41
Morris	1	60
Nashwauk	1	41
New Brighton	1	154
New Hope	1	35
New Prague	1	44
New Ulm	1	30
North Saint Paul	1	117
Northfield	1	64
Norwood Young America	1	51
Oak Park Heights	1	120
Osseo	1	88
Owatonna	1	98
Park Rapids	1	80
Plymouth	3	320
Prior Lake	1	40
Proctor	1	60
Richfield	3	560
Robbinsdale	1	57
Rochester	9	941
Rosemount	1	39
Roseville	2	323
Saint Anthony	2	432
Saint Cloud	3	249
Saint Louis Park	6	989
Saint Michael	1	42
Saint Paul	64	8730
Shakopee	2	124

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City	**Count of 4+ Story Properties**	**Sum of Number of Units**
South Saint Paul	2	321
Staples	1	60
Stillwater	1	96
Thief River Falls	1	66
Two Harbors	2	99
Virginia	1	156
Waconia	1	46
Walker	1	30
Wayzata	2	154
West Saint Paul	1	79
Windom	1	58
Winona	2	248
Woodbury	2	245
Worthington	1	60
Grand Total	365	41999

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B. Community Snapshots (Two-mile Radius from Property)

Community Snapshots (for Select 4+ Story Multifamily Buildings)

Naturally Occurring Affordable Housing (NOAH) property, 4+ stories: NOAH properties are market rate properties with rents that are affordable to households with income that is 40-60% of area median income; typically, NOAH properties are Class C. Because NOAH properties do not have rent restrictions, an owner can raise rents.

- **Maplewood: Parkview Apartments (100 units 4 stories, class c, built 1965)**
  (132 multifamily buildings with 4+ units in 2-mile radius)
  - Community Characteristics (2-mile radius from property)
    - Median year housing (all types) built: 1956
    - Median income of community members is $57,840, lower than the city median income of $70,484.
    - Greater percentage of renters in 2-mile community (42/58% renters/homeowners) than in city (30/70 %)
    - Average Household Size: 2.9 (slightly larger than the average renter household size of the state, which is 2.2)
    - Past population growth (previous 10 years): .3% annual growth rate, (858 households); future pop growth also anticipated to be low (.3% annual growth rate increase projected over next 5 years)
    - **2-mile community is more diverse than city:** While Maplewood is 63% European American; the 2-mile community is 42% European American, 58% Black, Indigenous and people of color (30% Asian, 12% Black or African American, and 11% Hispanic)
- **Hopkins: Knollwood Towers East (129 units 6 stories, class b, built 1969)**
  (44 MF buildings with 4+ units in 2-mile radius)
  - Community Characteristics
    - Median year housing built: 1964
    - Median household income: $74,087.
    - 45% Renters; 55% Homeowners
    - Past population growth (previous 10 years): .1% or 1,124 households.
    - 74% European American; 26% BIPOC (11% Black, 6% Asian and 6% of Hispanic origin.

Affordable property, 4+ stories, that has undergone substantial renovation (For an affordable property, 100% of the units are rent restricted. A substantial renovation is defined as renovation for which costs are 50% or more of the properties total market value).

- **St Paul: Malcolm Shabazz Apartments (73 units, built 1970 renov 1974, class c)**
  (492 MF buildings with 4+ units in 2-mile radius)
  - Community Characteristics
    - **57% Renters; 43% Homeowners**
    - Median year housing built: 1949 (median year built is more recent, as you extend further away from this property)
    - 44% of households earn less than $50,000; the median household income in St Paul is $59,256
      Median age is 34, which is slightly younger than the average age in the state (38); Average household size: 2.2

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        - Projected population growth (next 5 years): cumulative growth of 11%, (annual growth .5%), or 1,017 households; Past population growth (last 10 years) is .7%, or 3,916 households (what % is this?)
        - 50% European American; 50% BIPOC (23% Black/African American; 16% Asian)
- **Minneapolis: Riverside Plaza Apartments (1,303 units, built 1973 renov 2012, class b)**
  (1,044 MF buildings with 4+ units in 2-mile radius)
    - Community Characteristics
        - Population growth since 2010: 28%, or 14,592 households; projected growth (next 5 years) is 3,672 households/ roughly 7,880 people (5% projected growth)
        - Median year housing built: 1971
        - 74% of homes (or units) in buildings with 5+ units; 60% of homes in buildings with 20+ units.
        - Median household income: $48,663.
        - More renters, or 73%, in 2-mile community compared to city average of 53% renters and 47% homeowners.
        - Higher than the city average population of Black, Indigenous, and people of color (BIPOC). Minneapolis' population is 40% BIPOC, while the 2-mile community of Riverside Plaza is 46% BIPOC and 54% European American.

Market rate new construction (277 market rate new construction properties have been built since 2011, 178 built since 2016)

- **Rochester: The Lofts at Mayo Park (29 units, built 2017, Class A)**
  (111 multifamily properties with 4+ units in 2-mile radius)
    - Median year housing built: 1964
    - 43% Renters; 57% Homeowners
    - Since last year (2020), the area has seen an increase of 74% in new construction units (in 2021 180 units were under construction, versus 47 in 2020)
    - 71% of the population is European American; 29% is BIPOC (10% African American/Black; 9% of Hispanic origin)
    - Median household income in 2-mile community, $59,764, is lower than the city median income of $73,106.
- **Minnetonka: Residences at 1700 (115 units, built 2017, Class A)**
  (25 multifamily properties with 4+ units in 2 mile radius)
    - Median year housing built: 1982
    - 40% Renters; 60% Homeowners
    - Single family homes amount to a slight majority of the overall housing stock within a 2-mile radius of this property, with an estimated 52% of housing units being single family.
    - **Median household income: $91,154; household income decreases further from the 2-mile radius**
    - Median age: 40 years, slightly older than other case studies
    - 82% population is European American; 18% is BIPOC

C. Focus Groups and Interviews

1. Summary of Activities and Participants

The project team conducted three focus groups with residents on energy efficiency and housing issues and introduced the Better Building Code as a policy proposal. The groups represented a wide range of backgrounds and experiences including living in multifamily rental homes.

- The first focus group, conducted June 23, 2021 in King's Crossing in Saint Paul, included 12 residents, ten of whom were residents of King's Crossing, a senior living residence. Participants brought a broad range of experiences as homeowners, renters, and owners of rental property. Eleven residents were African American and one European American, as identified by sight.
- The second focus group, conducted June 25, 2021 at location in Eden Prairie, included 27 residents, ranging in age from middle school students (early teenagers) to elders, Participants shared a range of experiences as renters, home owners, and owners of rental property; residents' homes were generally in Hennepin County cities. All participants were, based on sight, East African community members, including immigrants and U.S. born residents and citizens.
- The final and third focus group, conducted July 7, 2021 in Saint Paul, included 7 women, all of whom were living or working at Recovery House, a sober house in St Paul. The group shared a range of renter and homeowner experiences; based on sight the group included individuals ranging in age from approximately their 20s to 50s and included 5 European Americans and 2 African American women.

As well, six interviews were conducted with representatives of nonprofit and for-profit multifamily housing developers, owners, and managers during June and July of 2021.

Individual interviews included:

- Skip Duchesneau, President, D.W. Jones (developer, owner and manager of affordable and market rate multifamily properties)
- Stacy McMahon, Vice President, Asset Management, Aeon (non-profit developer, owner and manager of affordable multifamily properties)
- Pat Stockhaus, Director of Facilities Management, CommonBond Communities (non-profit developer, owner and manager of affordable multifamily properties)
- Christopher Sherman, President, Sherman Associates (developer, owner and manager of affordable and market rate multifamily properties)
- Sarah Larson, Housing Development Specialist, Landon Group (consultant firm providing services to developers of affordable and market rate multifamily properties)
- Will Delaney, Associate Director, Hope Community, Inc. (non-profit affordable housing developer, manager, and owner of affordable multifamily properties)

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2. Interview Questions: Residents

1. **What is important to you about energy efficiency?** Are you interested in energy efficiency for your home/apartment, or a home that is designed to save energy?
2. **What concerns do you have about climate change, including extreme heat and cold?** How do you think extreme heat and cold may impact your home? What other impacts are you concerned about for your home?
3. **What makes your home comfortable?** How is temperature (heat and cold) part of comfort in your home? What makes your home uncomfortable?
4. **What makes your home healthy or unhealthy?** What concerns do you have about your health that may be caused by your home? How important is indoor air quality to you and your family's health? Do any of your family members have health conditions, such as asthma, that can be impacted by indoor air quality?)
5. **How is the cost of your home impacted by utility costs?** How do you think energy efficiency solutions might impact residents, including home costs or utility costs?
6. **Do you think that the state should require builders of apartments & multifamily homes to construct more energy efficient buildings in the coming years as one way to fight climate change?**

3. Interview Questions: Property Owner/Manager/Developer

1. **What is important to you about energy efficiency in multifamily buildings?** What is not important to you? What about energy savings or maintenance cost savings or reduced turnover with energy efficient buildings? Tenant preference for energy efficiency?
2. **If you have worked with energy efficiency requirements for buildings, including SB2030 and Minnesota Green Communities, how have those requirements shifted the construction process or the results?**
3. **What is important to residents, in your opinion, that is a result of energy efficient buildings**? Do your tenants have challenges paying utility costs?
4. **What impacts, if any, will result from higher energy efficiency standards for new constructions and substantial renovations?** How might your sales and rents be impacted? Are there impacts on the general market?
5. **Are there any changes to the current proposal that would lead to more successful outcomes?** Is there a vulnerable class of buildings that needs a special approach? Are there potential unintended consequences of the Better Building Code?
6. **Are there sufficient resources for energy efficiency improvements?** Where are resources needed (for what types of costs and types of properties)? Other recommendations on how to access or focus resources?
7. **Any other feedback?**

4. Summary of Resident Focus Groups

Quality of life and health are profoundly impacted by housing quality.

- Many residents and their families experience significant negative health impacts from their housing
- Family caregivers experience multiple impacts, including economic (from having to care for dependents & others recovering from health issues)

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- Residents have minimal options, in many cases, to improve quality of housing - and some options make homes less safe (space heaters)

"My son is allergic to mold; I've had to move out of apartments because of this"

"When it is hot (inside) it affects my behavior; I mean, I'm angry."

"I had to leave work when my son could not go to daycare due to the heat"

"My sister lived in a house that was raggedy, her son had asthma and got pneumonia … they had to stay at my house due to their living conditions; their home was cold - even when you walked on the floor it was cold"

"We need to buy space heaters in the winter; we buy a heater when the heat in the house is not working."

"I live in a townhouse and my home has mold. The owner told me I had to pay for repairs."

Energy costs and benefits are holistically experienced.

- Residents care about the environment, but for many this is secondary to housing quality and cost
- Costs in home not siloed: energy & housing costs viewed together
- Costs related to climate not limited to those in the home

"During the recent heat wave, I had to turn my AC up and increased my bills"

"Buying clothes for the weather is very expensive"

"My car's AC is not working, to fix it is $600; very hard to pay for that, so I have to drive without AC."

"It's just adding up - both the rent and the utilities."

"Being surrounded by nature makes homes more healthy"

"I'm helping to save money, I'm always turning off lights"

"I like energy efficient light bulbs - expensive, but makes a difference"

Race, income, and neighborhood can determine housing quality and availability of energy efficiency.

- Demographics and where you live make a difference in housing quality available to you
- In cities, can identify "less quality" areas

"*It would be nice to update your home with windows, with lights that are energy efficient, but can you afford it?"*

"Look at where public housing and Section 8 housing is located."

"There are different standards for buildings based on where they are, what neighborhood. These are underserved, underrepresented communities that get lower quality."

Legal remedies, compliance and enforcement lag need.

- Existing laws not easy to enforce, or have no clear enforcement mechanism
- Residents are eager for education, knowledge and resources
- Need to match issues experienced, have enforcement mechanisms
- Renters frequently lack the ability to influence home maintenance decisions, including decisions impacting health, environment, and comfort

"Can renters pay for and change fixtures? Am I able to make upgrades?"

"Homeowners can make choices and changes; for renters it is up to the owner to make changes and then you are stuck."

"What does the building code apply to? How can we require code structures?"

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"We need programs to help seniors and low income families"

"We need education about energy, what can help."

"I don't like government overhead. But if you rent to other human beings, you should be up to a certain standard."

Housing quality improvements across housing types and property classes.

"There should be the same standards for all buildings."

"We want to look at the area as a whole, not just certain buildings and types."

"In addition to "new," we need to make existing housing more livable."

5. Summary of Property Owner/Developer Interviews

Energy efficiency is viewed as a benefit, with some constraints.

- Energy efficiency is a market trend
- Some energy efficiency options are not cost effective without subsidy

"We have incorporated Minnesota Housing [Green Communities] requirements into our market rate and assisted living housing because it is good business and makes sense."

"We are trying to be at the forefront of energy efficiency and sustainability; we have made this a priority for the last 10-15 years."

"If we can justify a break-even outcome, including subsidy and rebates, that helps us make these decisions."

"In my opinion, there should be an ability to forgo a certain high level of energy efficiency … have a baseline energy standard, without subsidy. We achieve an Energy Star score of mid-80s without subsidy; when we push above that, there is a much greater cost."

Affordable homes in particular need resources to match regulatory requirements.

- It would help to examine how these requirements interface with other costs and resources for affordable homes.
- There is a perception that overachieving buildings, often market rate, get the greatest resources.
- Resources are often not available to cover cost increases; we need to prioritize resources for affordable (rent-restricted) properties
- The assumption of lower operating costs is sometimes not recognized by all necessary parties (i.e. underwriters)
- Cost assessment must include operating expenses and maintenance of new systems

"How does this interact with the 4d tax rate?"

"How can we give resources to meet a baseline, rather than reward overachieving buildings?"

"What will be important … will be the right level of incentives along with regulations. As this goes to net zero there will be costs associated with these upgrades. … If we increase the benchmark too quickly, and no subsidy, production will lag."

"There are challenges in underwriting affordable housing, as there are per unit debt constraints. Since you cannot always increase debt to source the costs, I believe you will see an uptick in owner/operators who are required to rely on utility allowance appeals to fund cost increases. This is a challenging process."

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"With energy efficiency improvements, assessed value will be higher and we will have higher taxes. Is this a place to look? A new tax rate for energy efficient housing?"

Be realistic about all costs incurred.

- Rebates are a small piece of overall project cost
- Focus should be on energy reduction goals and sustainable resources for implementation, not shiny new things
- Where financial benefit is not substantial, red tape and time are significant barriers to participation

"Cost is cost."

"Things like green roofs never pay back … Right now there are incentives for solar. Without those incentives, it doesn't make economic sense."

"We need money for the upfront capital investment."

"More efficiency leads to more costs. If it costs more, can't build as much [affordable]."

"With our initial rollout of solar, filling out paperwork was the barrier [to residents] moving forward about 60-70% of the time. Also, the value of renewable energy was not enough."

"In some cases, I have backed away from a project if it doesn't make sense. For example, we looked at scattered site housing in the Phillips neighborhood; to comply [with Minnesota Housing standards for affordable property funding] would have required ripping up siding to replace insulation; this didn't make sense as the siding was not at the end of its useful life."

Support for an energy efficiency ecosystem is critical to program success.

- Costs of equipment and maintenance must be evaluated
- Need to pay attention to implementation and phasing
- While important to all properties, failure to support an ecosystem may be especially impactful to affordable properties

"The handoff from construction to operations may involve more advanced technology and high skill training needed for maintenance issues."

"One thing I've learned [from implementing Green Communities requirements], architects and engineers get excited about something. But then you need a general contractor and subs that are comfortable with the issues. You also need to think about maintenance people and vendors - do they understand the new system?"

New standards, without additional resources, may exacerbate challenges for vulnerable properties.

- Amenities may need to be reduced to meet energy efficiency standards
- New standards may force conversations to market rate for older properties needing major renovation
- An area to watch is renovations, including if new standards act as a deterrent.
- Impact on historic properties should be explored

"I can see this code applying to all buildings over time. One area of concern is on renovations – we don't want to prevent people from fixing up their buildings.

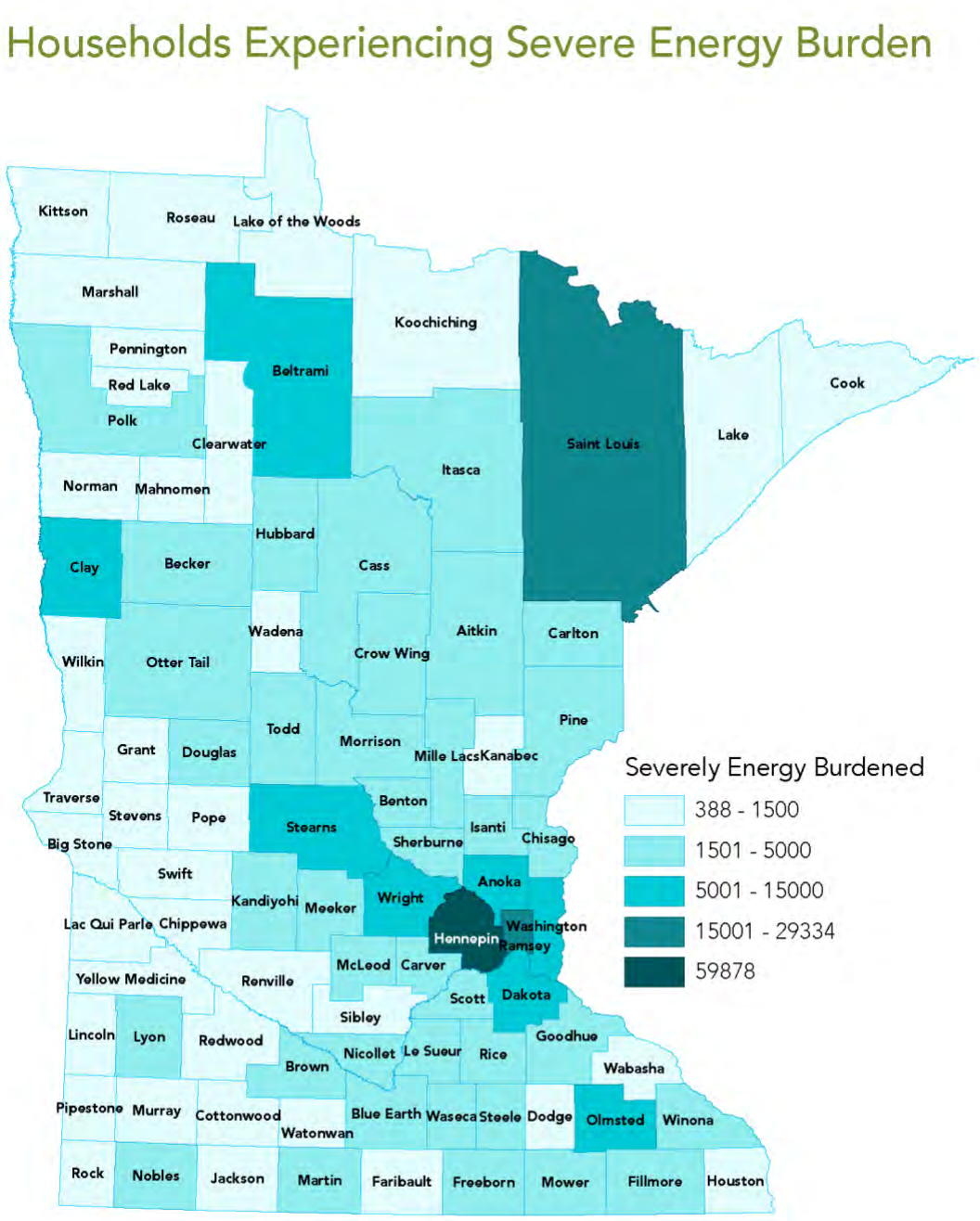
"To achieve the [energy efficiency] standards means a tight [building] envelope - no balconies, no sliding doors. We need to consider what types of amenities are lost due to meeting this higher standard."

"The most vulnerable property class is 1960s and 70s buildings that will fail over the next 10-30 years. We need to work with the city and the state to reposition these buildings, ideally preserved as workforce and affordable. It will be tough for these buildings to meet the new standards. Will they be forced into conversion to market rate? That would not be a good outcome."

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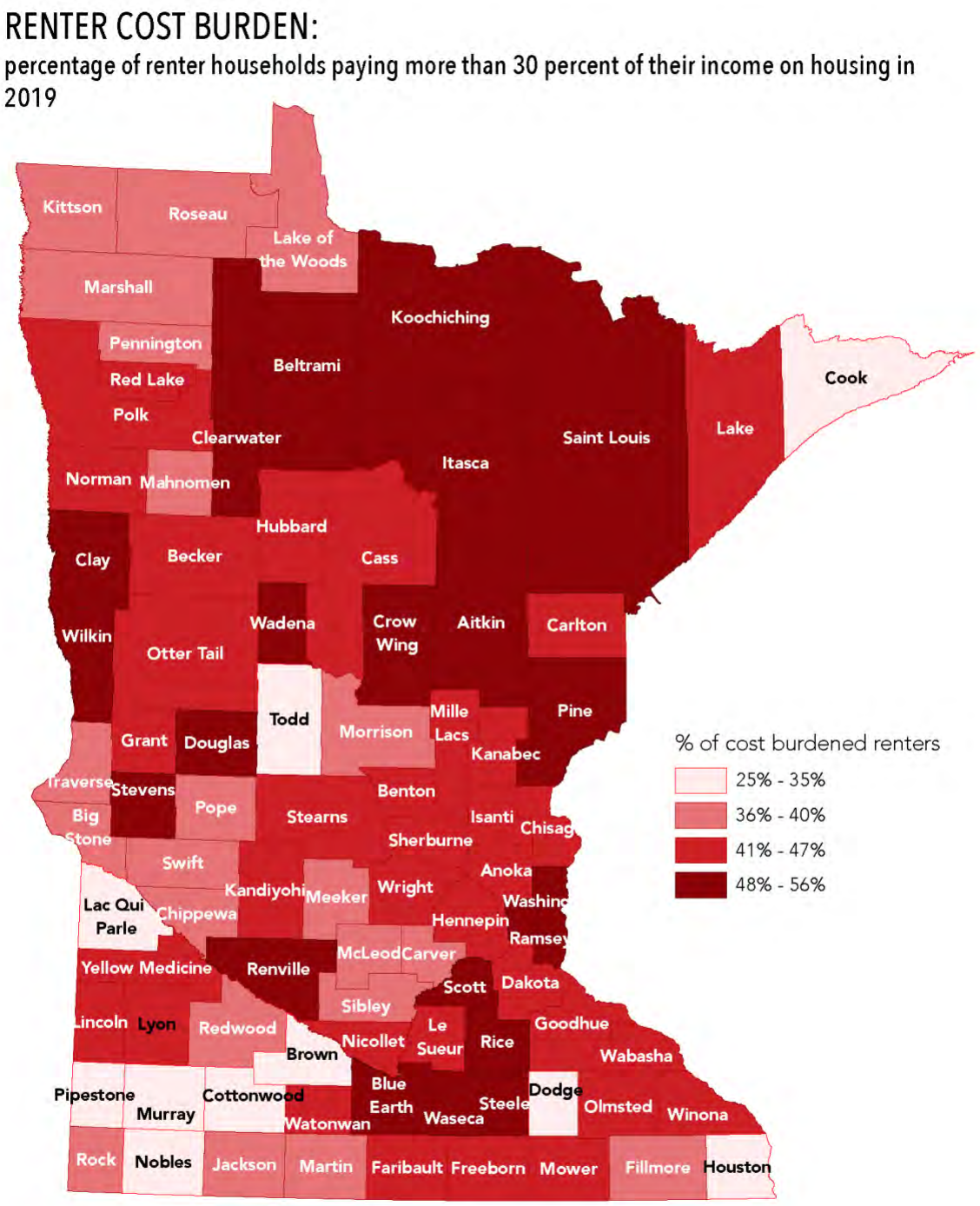
D. Maps

1. Severe Energy Burden



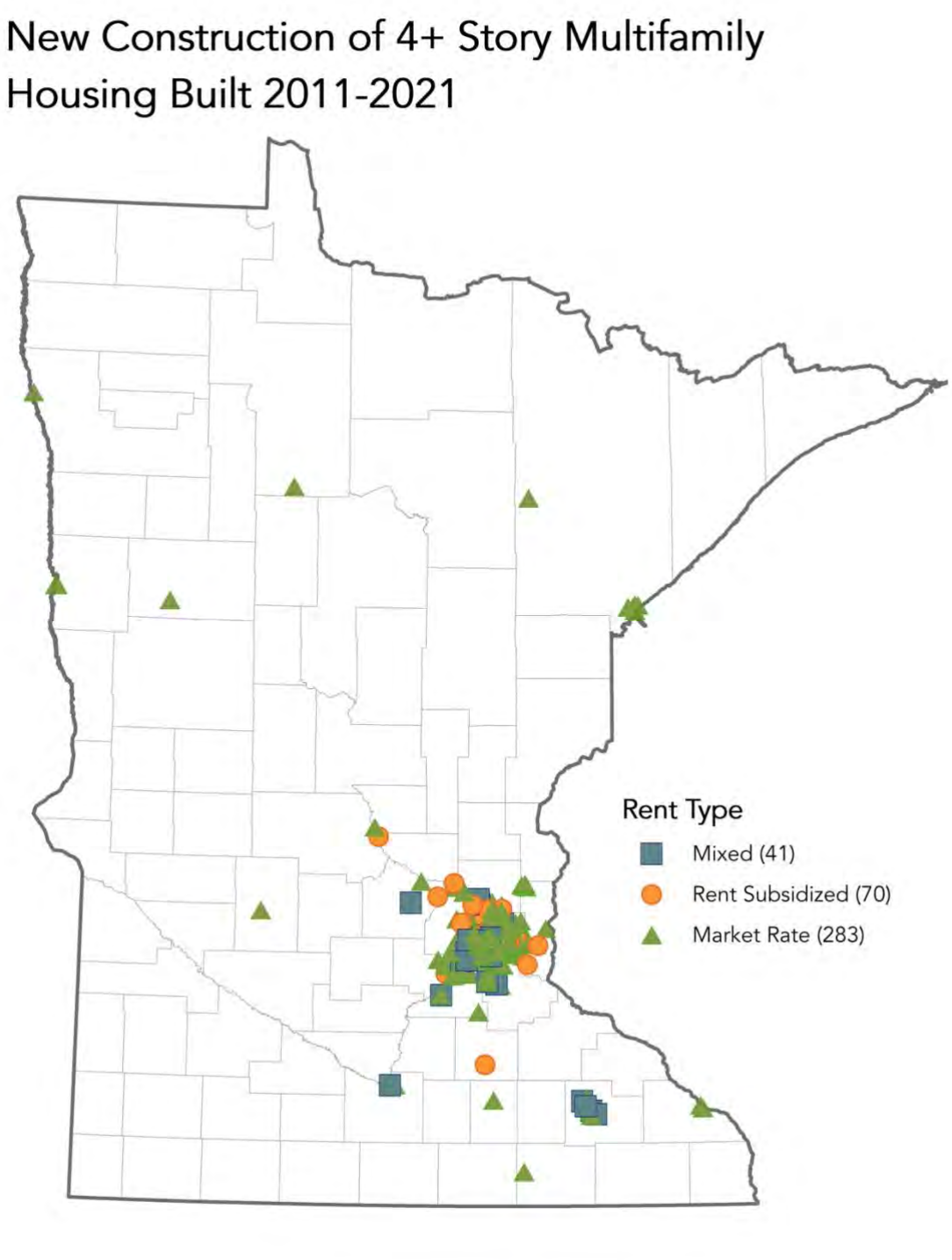
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2. Renter Cost Burden



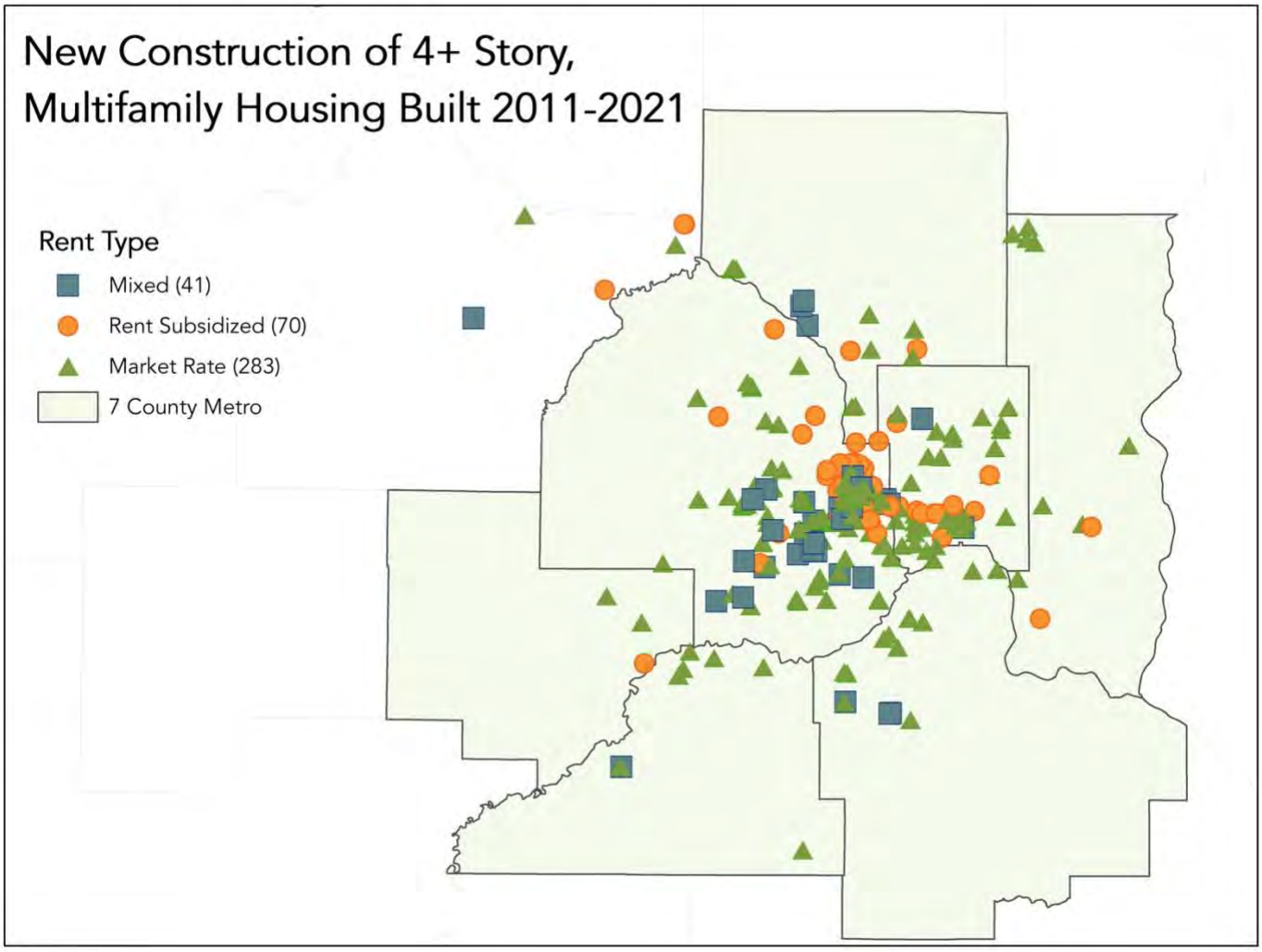
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3. New Construction 4+ Story



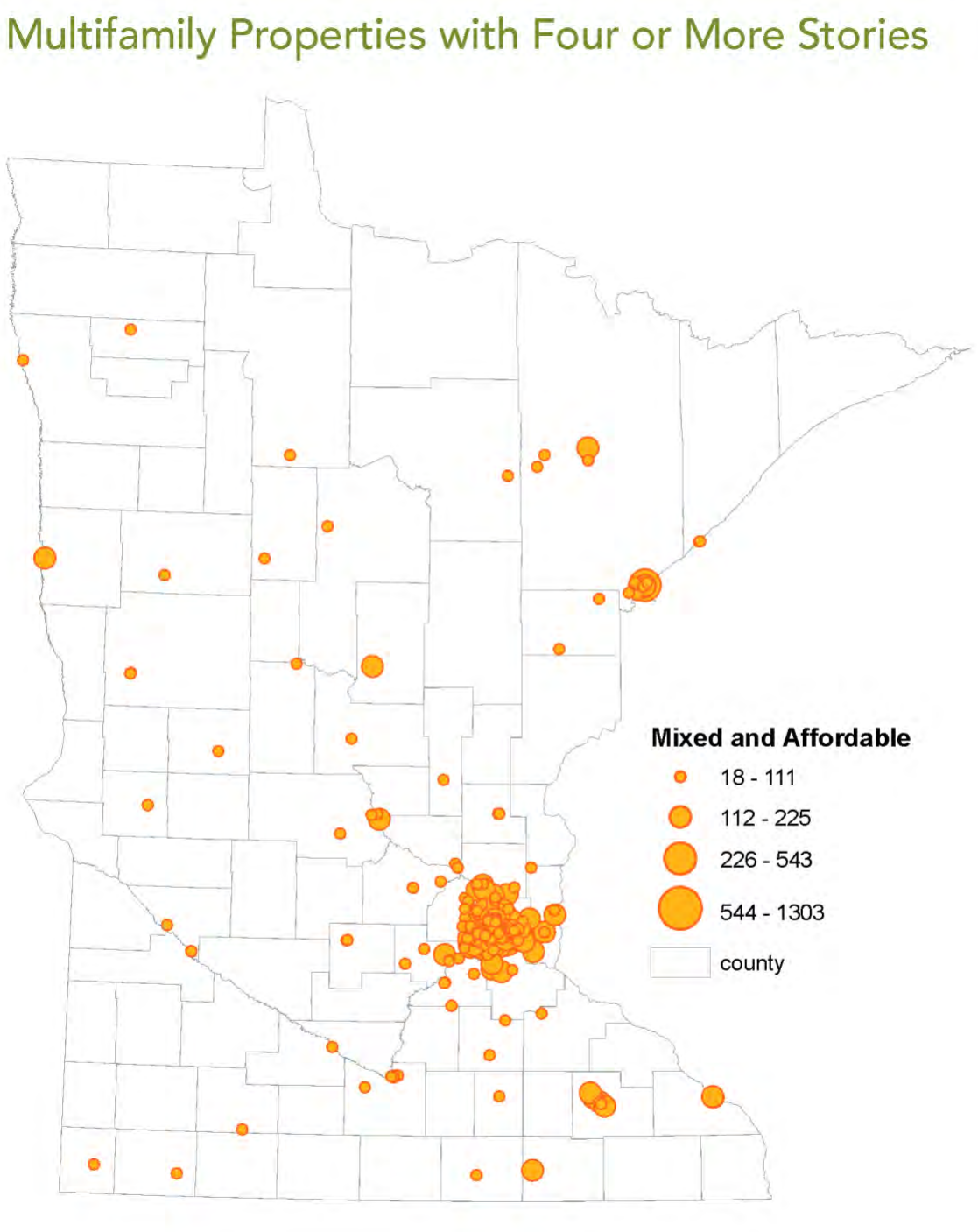
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4. New Construction 4+ Story in 7 County Metropolitan



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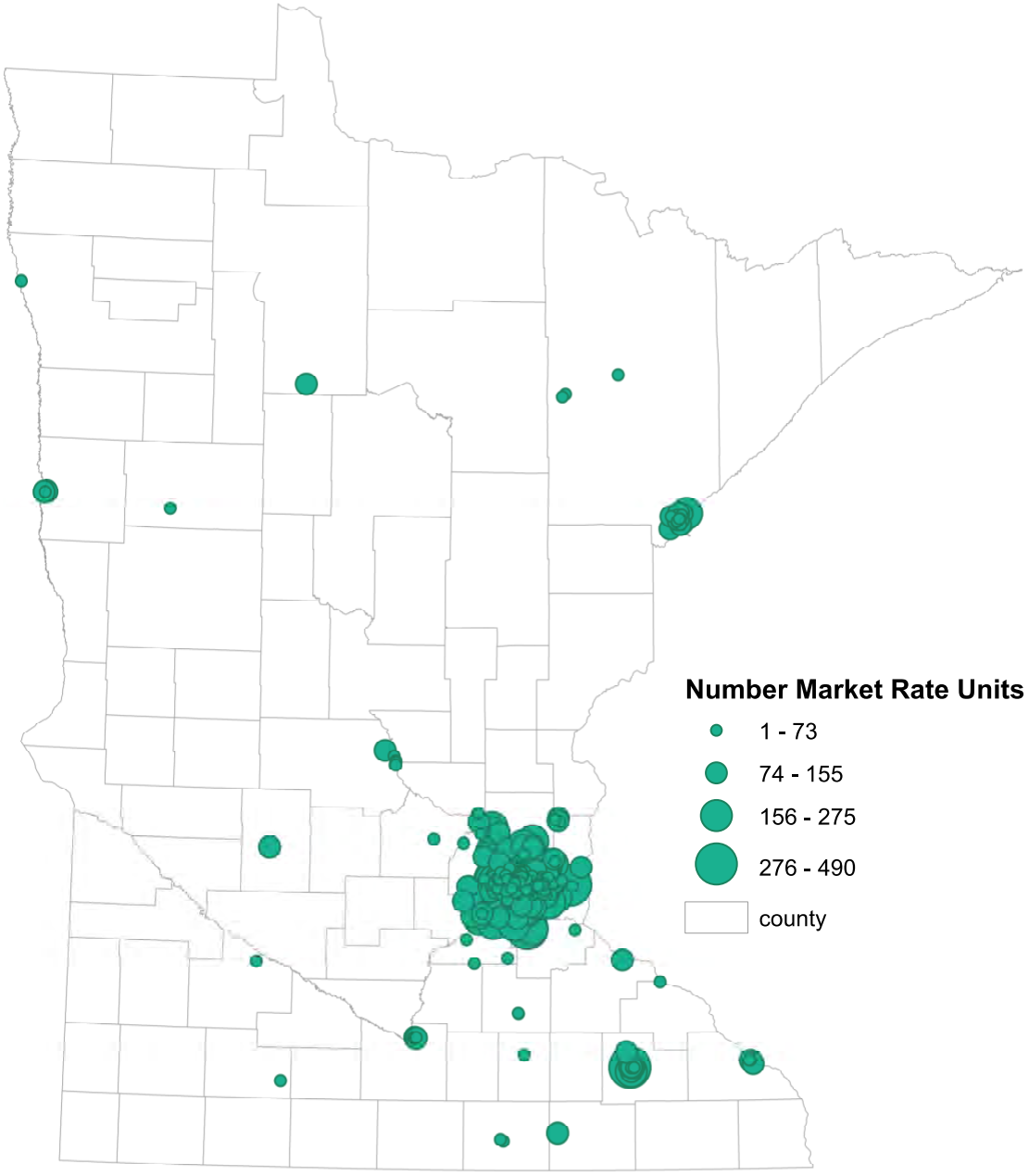
5. Four Stories Mixed and Affordable by Unit



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6. Four Stories Market Rate by Unit

Multifamily Properties with Four or More Stories



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E. Race Equity Impact Analysis

Racial Equity Impact Analysis (REIA) of Better Building Code
Analysis updated September 2021

Section 1: Background

SUBJECT

Passage of statewide energy code leading to net zero for new commercial and multi-family housing in Minnesota

What is the Desired Outcome for This Policy?

Black people, Indigenous people, and people of color (BIPOC) are disproportionately experiencing the impacts of climate change, including rising energy costs, flooded homes, storm damage, threatened drinking water, disrupted local economies, tree canopy loss, and extreme heat waves. Climate change is the result of a legacy of extraction and colonialism. This policy is intended to lead to more equitable outcomes by:

- Reducing greenhouse gas emissions from buildings and energy cost savings.
- Ensuring homes are more resilient in the face of climate change.
- Ensuring new construction meets the newest nationally adopted energy standard with the current proven technology.

Other desired outcomes include:

- people have more affordable home energy bills
- helping households and businesses by reducing energy burden (multi-family buildings and commercial)
- healthier, more comfortable indoor environments for people
- Minnesota's building stock is increasingly efficient and cost competitive to operate for future businesses and occupants

Section 2: Data

List the Specific Geographies that Will Be Impacted and the Racial Demographics of Constituents in Those Areas:

- Geographically this policy impacts 4+ multi family properties throughout the state
- Statewide: Minnesota is 83% white. However, Black and brown residents are disproportionately living in areas zoned for multifamily properties or greater density in communities that are underinvested in.
- Data on housing need, cost burden, and impacts on people of color can be found at mhponline.org/research.

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Other data points:

- In Minneapolis, 53% of residents rent rather than own, and multi-family housing makes up more than 90 percent of new residential construction year after year.
- Minnesota's housing crisis has been exacerbated by the pandemic, with communities of color disproportionately experiencing pandemic related health and economic harms.

What Does Available Data Tell You About How Constituents from BIPOC Communities Currently Relate to the Desired Outcome Compared to White Constituents?

- We note our findings reflect that structural systems withhold equitable energy and housing resources from Black, Indigenous, Latinx and Asian people and other economically marginalized communities.
- In Minnesota, BIPOC communities are disproportionately renters (for instance, ~75% in Minneapolis) while the majority of white households own single family homes.
- A required code update will benefit renters, who otherwise do not have the ability to make decisions about energy efficiency investments.
- The Better Buildings Code will reduce energy burden for covered properties.
- Without affordability protections, landlords can change rents for any reason.
- Additional linked outcomes are important to call out as well as they relate to housing stability and the overall community impacts. The 4d program is an example of protection that stabilizes rent costs.
- Energy burden data for the State of Minnesota is available through Greenlink.
- NREL data for state

What Data is Unavailable or Missing? How Can You Obtain Additional Data?

Minnesota has an affordable housing shortage. One concern that may be raised is whether increasing energy standards will increase the cost of housing. A report by NBI indicates reduced energy burden and cost savings in early years of policy implementation; cost impacts in 2027 and beyond will be dependent on new design approaches and the declining cost of high efficiency building components.

Other questions:

What is the correlation between building code and property value over time?
How do energy efficiency investments in buildings increase/change property values? What is available data on changes in property values that can be attributed to energy efficiency investments? Without affordability protections, landlords can change rent.

How does energy efficiency increase affordability by reducing energy burden?
Will we have access to data on BIPOC residents who will be impacted by step code? (data would be housing type multi-family buildings exceeding size threshold (3 stories) disaggregated by race) Note: commercial building code includes multi-family greater than three stories.

What are co-benefits to health and resilience? While we have access to general information on these benefits that result from energy efficiency improvements, more specifics are needed.

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What data can be a proxy for gentrification or stabilization of neighborhoods? This question was not explored.

Who lives in these buildings? While we can gather data on who lives in the communities, we don't have access to building specific resident information.

Is data available for:

- occupants of multi-family housing
- Who owns the bldgs (BIPOC)
- Who owns the businesses (BIPOC)
- Who can perform EE and solar work? (BIPOC)

Minnesota Housing Partnership, Family Housing Fund, and/or Greater Minnesota Housing Fund are all good potential sources of information on housing data, as well as specific housing providers such as Project for Pride in Living. PPL may be able to speak to specific issues such as cost/affordability, as well, to help push back on opposition narratives.

Section 3: Community Engagement

Using the International Association of Public Participation (IAP2) Public Participation Spectrum Which Participation Strategy was Used When Engaging Those Who Would Be Most Impacted?

INFORM CONSULT INVOLVE COLLABORATE EMPOWER

Describe the Engagement and What Have You Learned

Current engagement is as follows:

- Collaborate and empower in building city to city coalition across the state to date
- Collaborate with additional organizational partners. Community Stabilization Project and New American Development Center, to expand project team for this report
- Consult with focus groups of residents and individual interviews with property managers, owners, developers
- Collaborate and empower MN Renewable Now engagement (overview of engagement ideas)
- Start by consulting with MMAHEN coalition, IX, Project for Pride in Living and explore further collaboration
- Something to explore: BIPOC builder owners or business owners who could occupy commercial business space (identify outreach recommendations for BIPOC business owners)
- Something to explore: engage with BIPOC developers of affordable housing
- workforce development for future building

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Section 4: Analysis

How Does the Outcome for This Ordinance, Amendment, or Policy Help the State Achieve Racial Equity?

This policy can reduce household energy burden that is disproportionately borne by BIPOC. Costs of energy are part of housing affordability.., displacement. TISH work with Ideas42 data on increasing property values did not bear out. People do not pay more because of boiler upgrades.
It depends on the implementation. This is critical to ensure savings is a driver to reducing household energy burden.

Policy helps establish standards that lead to improved opportunities for efficiency investments for renters. Raising building standards reduces building performance discrepancies as a driver of lost income on inefficient buildings for renters and business owners.

Energy efficiency jobs can't be outsourced, but rather will be performed by local firms; these business opportunities can, with intention, benefit BIPOC entrepreneurs and workforce and generate wealth.

A significant concern is that the majority of BIPOC population resides in existing buildings that will not be impacted by the Better Building Code. The Better Building Code's benefits will be limited to new construction and major rehabs for multi-family housing 4 stories or more; solutions are needed to address racial inequities in housing quality for existing single family and multi-family housing.

Section 5: Evaluation

How Will Impacts Be Measured? What are the Success Indicators and Process Benchmarks?

Identifying clear benchmarks, and monitoring those benchmarks, will be important to ensuring the success of this policy.

Ideas:

- Engagement benchmarks
- # of renter/LI/BIPOC households/ % of multifamily properties reached
- Enrollment in 4d and/or other programs
- higher building efficiency in state building portfolio
- monthly energy costs (average monthly energy and cost savings). Note: how will lower monthly energy costs be measured?
- Reduction in energy burden (identify a reduction goal)
- Energy-specific metrics, such as behavioral changes (e.g. reduction in energy usage) as well as utility impacts, such as disconnections, arrearages, etc.

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- Compare housing stability metrics in Better Building Code covered properties vs general housing stability metrics (includes monitoring of evictions, rent debt, and displacement)
- Quantify and measure impacts on health, reductions to energy burden, and improved weather resiliency for Better Building Code covered properties (and compared to other properties).
- Assess education, training, and engagement of the ecosystem including design, maintenance, end users, and community.
- Goals for BIPOC business and workforce participation and business growth are set and monitored.
- Impact community participation/BIPOC participation in decision-making structures for Better Building Code and subsequent policy applied to existing buildings.
- Measure compliance and enforcement activities, and outcomes, relating to housing quality.
- Compare to SB2030 data.

How Will Those Who Are Impacted by Informed of Progress Over Time?

- Pre-policy passage engagement progress updates
- Post-passage state policy driven process, DLI-led for new standards, workforce trainings, will be broad and general outreach
- To ensure BIPOC community influence in state-led decision-making tables and process, need to establish the post-passage checkpoints for generating engagement around the DLI process
- With respect to keeping folks informed of progress, it will be beneficial to develop authentic and innovative strategies to engage BIPOC and under-resourced communities. Minneapolis' recent work with a consultant to engage property owners and renters on energy efficiency upgrades is a good example of this. Working with community partners (housing justice groups, service providers, etc.) will be key, as well.
- Ensuring savings are realized by residents is another goal, including developing a policy proposal for the state legislature.

Can we evaluate reductions in energy efficiency applications as a measure? This will be meaningful only if policy is expanded to existing properties in addition to new construction. Recommendation to work with CAP agencies on how to compare these and other metrics.

- Reduction for people paying their own utilities.
- Reduction in applications for energy assistance.

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