

# **Apartment Economics Primer**

*Policy Action To Address The Twin Cities Housing Crisis*

**Spring 2022**

# Take aways

**Types of housing**

**Metrics in our region**

**Economics of housing**

**Why it matters**

**What we can do to make it better**

## Before we start – some definitions

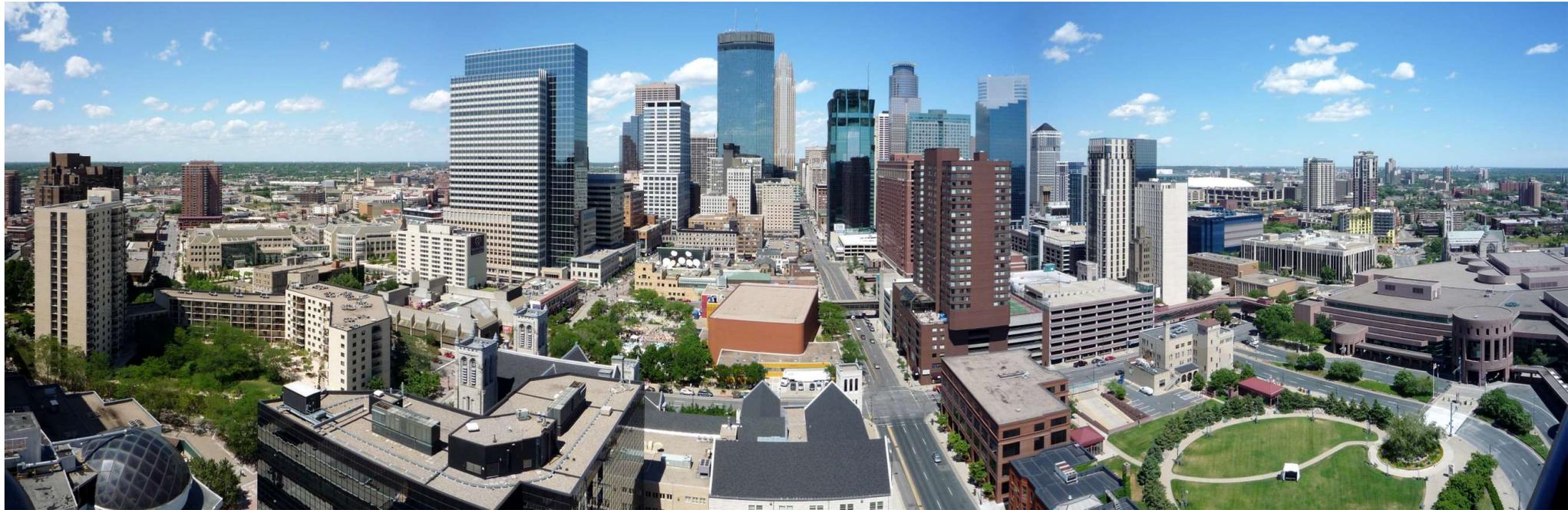
- **AMI** – Area Median Income = for MSP \$118,200 (based on 2019 data...)
- **NOAH** – Naturally Occurring Affordable Housing  $\leq 60\%$  AMI
- **Restricted** affordable housing – Section 8, LIHTC – this is *not* NOAH
- **‘Workforce’** Housing – 80% (\$94,560) – 120% AMI (\$141,840)
- **Affordable Housing** –  $\leq 60\%$  AMI
- **Cost burdened** – 30%+ of income spent on housing (*i.e.*,  $>1/2$  NOAH residents)
- **Upscale Investors** – buy, renovate, and increase rents on NOAH
- **Self-Eviction/Displacement** – cost burdened, can’t afford rent, vacate

## Why are we having this conversation?

Many neighbors are cost burdened and struggling to find affordable places to live.



To have a vibrant, growing, and equitable region, all residents must be able to afford quality housing.



# Housing = Stability

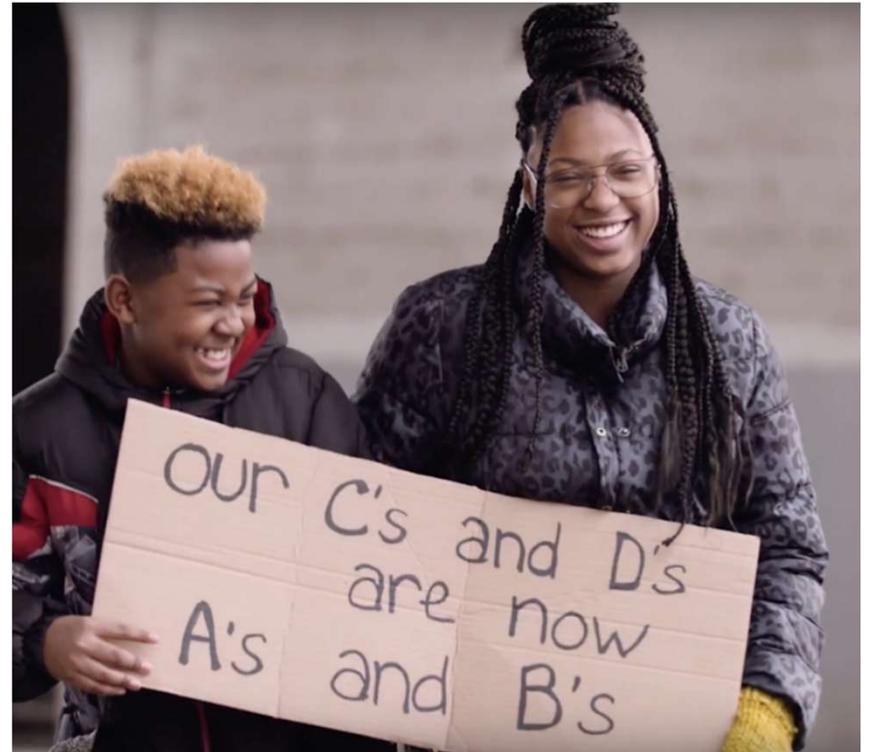
- Emergency room visits reduce by 60%
- Health care costs reduce by 50%
- Highly-nomadic households increase demand on public services and costs
- Homeless people with criminal records were rearrested at double the rate of their counterparts who secured housing
- Since 2008, home prices have increased 3.1x faster than incomes
- For occupations that will add the most jobs in the next ten years (including personal care aides), 70% provide a median wage lower than that which is required to afford housing
- 58% of larger companies that lack nearby affordable housing options report that employees cite long commute times as a reason why they left the company
- Children with housing instability are more likely to repeat a grade

*The costs to our region for health care, employee recruitment, public safety, achievement gaps, and equity are increasing exponentially.*

***Housing is the upstream stabilizer – its efficient, effective, and more just.***

# Housing = Equity

- Pay inequities for women (0.80:1) and BIPOC (0.53:1) result in greater % of income used for housing
- 72% of students facing homelessness are BIPOC
- A disproportionate number of NOAH units were sold in moderate income, racially diverse neighborhoods
- *Minnesota ranks 47th out of 51 (worst) when it comes to leveling the playing field between white and black residents. Between 2004 and 2014, Minnesota had the seventh fastest growth of people of color in the US and by 2040 people of color will be the majority in four counties including Hennepin and Ramsey*



**The Crisis in Metrics**

**The Housing Ecosystem**

**How to Increase Housing?**

**Taking Action**

# The Crisis in Metrics - Overall

---

The Minneapolis-St. Paul (MSP) region is home to many assets and amenities:

 3 million residents

 World-class universities and colleges

 Renowned parks systems

 Vibrant art and music scene

 16 Fortune 500 businesses



# The Crisis in Metrics - Overall

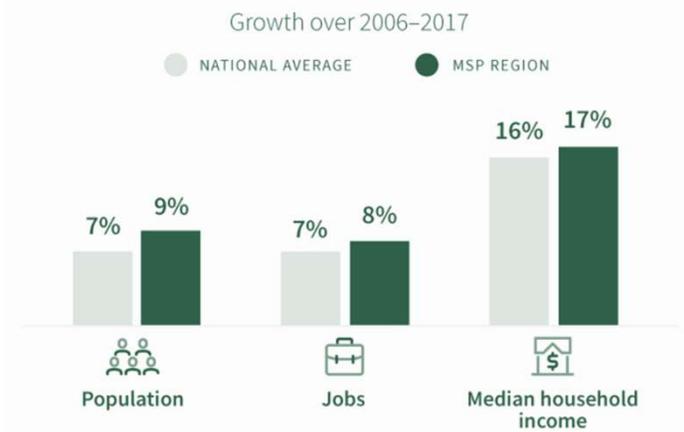
The Minneapolis-St. Paul (MSP) region is home to many assets and amenities:

-  3 million residents
-  Renowned parks systems
-  16 Fortune 500 businesses

-  World-class universities and colleges
-  Vibrant art and music scene



Over the past decades, partly due to these amenities, **the MSP region has grown faster than the national average.**



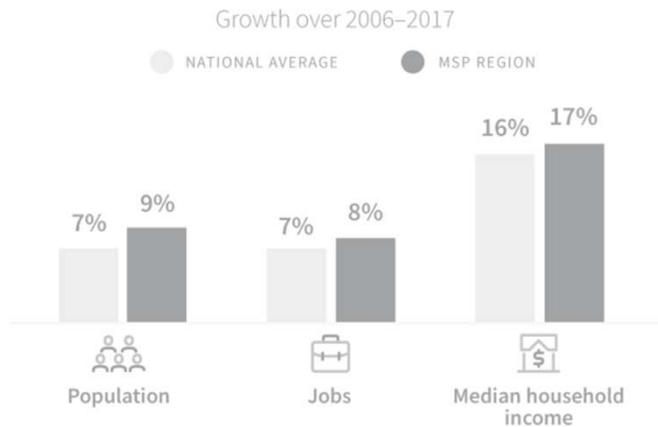
# The Crisis in Metrics - Overall

The Minneapolis-St. Paul (MSP) region is home to many assets and amenities:

- 3 million residents
- World-class universities and colleges
- Renowned parks systems
- Vibrant art and music scene
- 16 Fortune 500 businesses



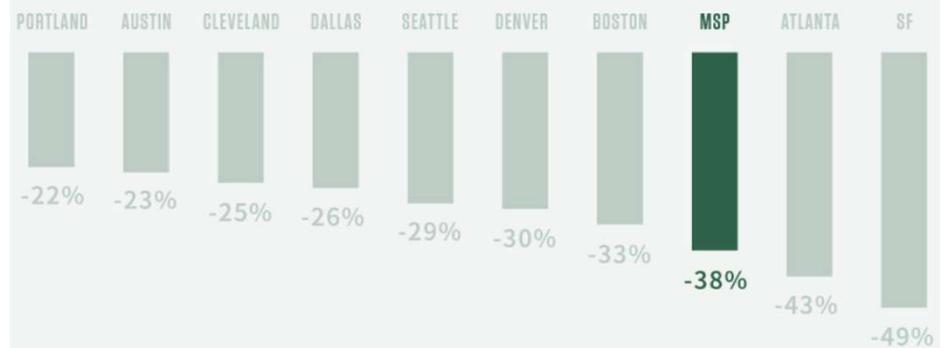
Over the past decades, partly due to these amenities, the MSP region has grown faster than the national average.



However, that key driver is now at risk.

Relative to population growth, most peer regions are building more homes than MSP.

## population growth v. housing growth 2010-2018



## The Crisis in Metrics – We are severely under supplied

### Great Recession

- Money for new development dried up
- Investors stopped investing in housing projects, making it difficult for developers to build new housing
- In 4 years the metro only delivered ~1,500 units/year vs. 5,000 units/year demand
- Supply shortage exacerbated affordable housing crisis – feeling effects still



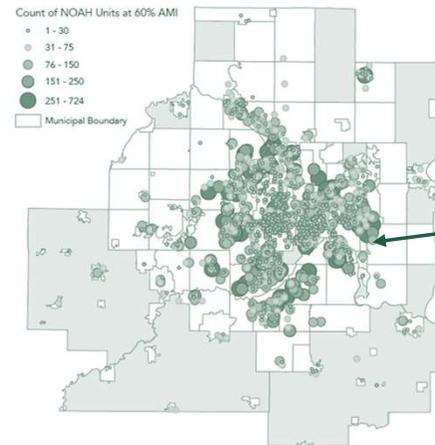
\*Information comes from Dougherty Mortgage Twin Cities 2017-2018 Multifamily market viewpoint & CBRE 2018 Q1 Market Snapshot.

# The Crisis in Metrics – Affordable Housing

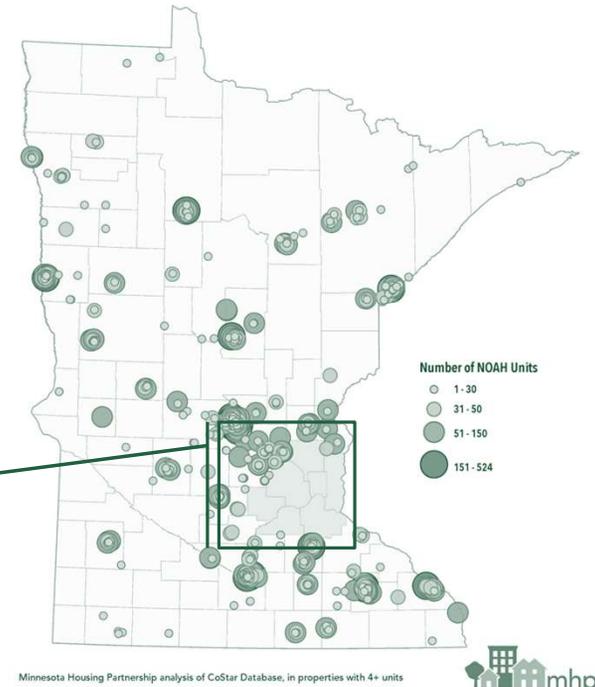
Approximately 150,000 families' homes at risk across Minnesota. 108,700 in the Metro.

2013 – 2020	
NOAH Lost	52,000
New Affordable Built	7,762
Net Loss	44,000
<b>Annual Net Loss (avg)</b>	<b>6,300</b>

**NOAH in the 7-County Metro, 2021:**  
Market Rate Units with Rents Affordable at or under 60% AMI



**NOAH: Market Rate Properties with Units Renting at or Below 60% of AMI in Greater Minnesota, 2021**



Minnesota Housing Partnership analysis of CoStar Database, in properties with 4+ units



## The Crisis in Metrics – Vacancy Rates

---

***Increased demand and constrained supply have led to:***

- **Historically Low Vacancy Rates**

- Lowest rental vacancy rate of major metro markets in the US
  - 0% vacancy for 30% AMI
  - Less than 2% Class C\* apartment vacancy rate (effectively full)
  - *Demand + barriers to new supply make NOAH more susceptible to upscale conversions*
- 
- With healthy housing supply, rents should grow in-line with inflation
  - For a healthy rental growth rate, market vacancy needs to be in the range of 5% or more

\* Class C denotes older vintage apartment buildings which would generally be naturally occurring affordable housing.

# The Crisis in Metrics - MN Housing partnership – 2021 report

---

## 30% AMI Rental Units

Needed	169,585
Supply	64,238
<b>Gap</b>	<b>105,347</b>

# The Crisis in Metrics - MN Housing partnership – 2021 report

---

## 30% AMI Rental Units

Needed	169,585
Supply	64,238
<b>Gap</b>	<b>105,347</b>

## Increase 2000 – 2019

Renter Income	1%
Gross Rent	14%

## The Crisis in Metrics - MN Housing partnership – 2021 report

---

### 30% AMI Rental Units

Needed	169,585
Supply	64,238
<b>Gap</b>	<b>105,347</b>

### Increase 2000 – 2019

Renter Income	1%
Gross Rent	14%

### Cost Burdened Renters

White	44%
Black	58%

## The Crisis in Metrics - MN Housing partnership – 2021 report

### 30% AMI Rental Units

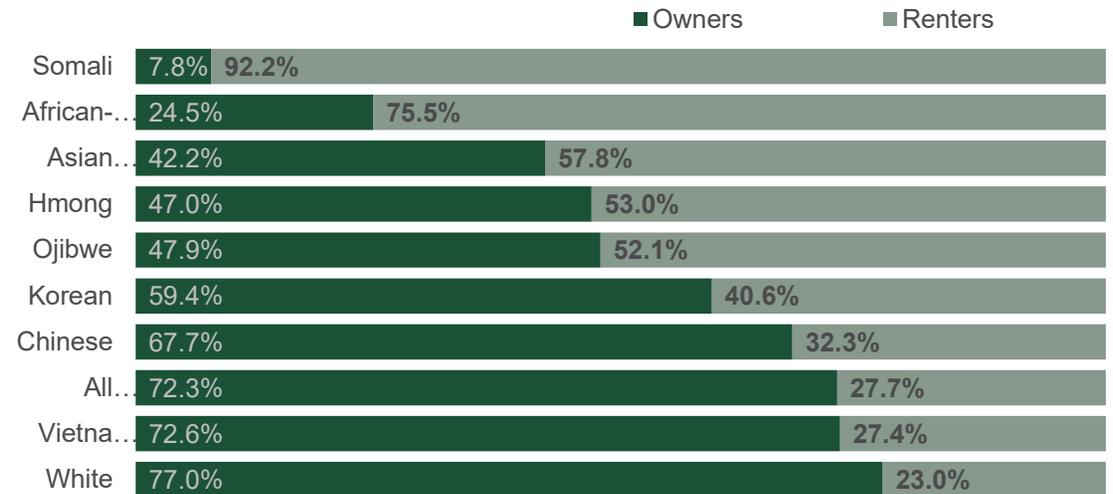
Needed	169,585
Supply	64,238
<b>Gap</b>	<b>105,347</b>

### Increase 2000 – 2019

Renter Income	1%
Gross Rent	14%

### Cost Burdened Renters

White	44%
Black	58%



# The Crisis in Metrics - MN Housing partnership – 2021 report

## 30% AMI Rental Units

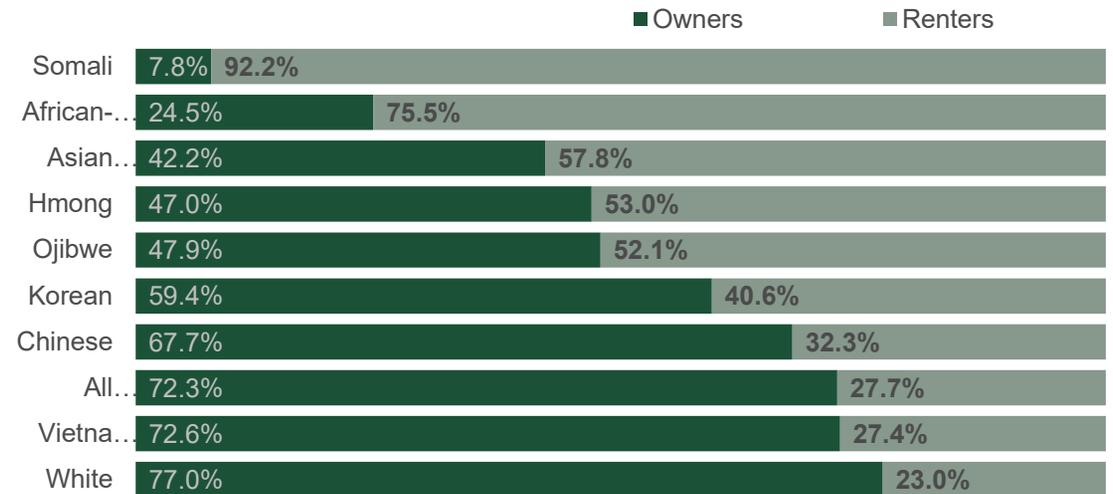
Needed	169,585
Supply	64,238
<b>Gap</b>	<b>105,347</b>

## Increase 2000 – 2019

Renter Income	1%
Gross Rent	14%

## Cost Burdened Renters

White	44%
Black	58%



## Regional Growth – 10 years

For occupations that will add the most jobs in the next ten years (including personal care aides), 70% provide a median wage lower than that which is required to afford housing

# The Crisis in Metrics – December 2021 Ramsey County Affordable Housing

	New Market	New Affordable	NOAH
Cost/unit	~\$300,000+	~\$300,000+	~\$150,000+
Time	24 - 48 mos	36 - 60 mos	1 - 3 mos

In Ramsey County, more than 37,000 families live at or below 30% AMI, said County Board Chair Toni Carter. The County Estimates that it needs 15,000 new affordable units.

- 15,000 X \$300,000 = **\$4.5 BILLION**
- County recently announced **\$74M** funding
- And need to keep up with new demand!

Below is the St. Paul population by year:

Year	Population	Change %
2010	285,465	
2011	288,812	1.17
2012	291,244	0.84
2013	295,045	1.31
2014	297,674	0.89
2015	300,010	0.78
2016	303,155	1.05
2017	305,255	0.69
2018	307,695	0.80
2019	308,096	0.13
2020	311,527	1.11
2021 *	315,047	1.13
2022 *	317,664	0.84

## How to Increase Housing – *This is a money problem!*

---

Estimated TCMA **shortage of 45,000 affordable homes** today!

- 45,000 x \$300k = **\$13.5 BILLION NOW!!**

MSA needs to **add 5,000 homes ever year** for population growth.

- 5,000 x \$300k/unit = **\$1.5 BILLION / YEAR!!**

There is not political will to publicly fund our way out of this housing shortage.  
**We need private capital.**

	<b>New</b>	<b>NOAH</b>	<b>New Restricted</b>
Cost/unit	~\$300,000+ build	~\$150,000+ buy and rehab	~\$300,000+ build
Capital Pressure	Regulatory impact/yield	Higher costs/lower rents Limited gap funding	1:10 applications (constrained sources)
Timing	<b>24-36 mos</b>	<b>60-90 days</b> Public process disconnected	<b>36 – 60 mos</b> Construction price volatility
Resident	80%+	<ul style="list-style-type: none"> <li>• Typical at 40-60% AMI</li> <li>• <b>&gt;1/2 cost burdened</b></li> </ul>	<ul style="list-style-type: none"> <li>• &lt;30-60% AMI</li> <li>• <b>Special needs</b></li> </ul>
Bottom line	Need private capital <b>Investors have options</b>	1/2 cost, more volume <b>urgent</b>	<b>Highly competitive funds</b> ; long-lead

# The impact of NOAH loss

## Crossroads at Penn

- 2015
- Richfield
- 698 Families
- Economic evictions - 30 - 45 days
- Schools and workforce displaced



# The impact of NOAH loss

## Crossroads at Penn

- 2015
- Richfield
- 698 Families
- Economic evictions - 30 - 45 days
- Schools and workforce displaced

*lost*



# The impact of NOAH loss

## Crossroads at Penn

- 2015
- Richfield
- 698 Families
- Economic evictions - 30 - 45 days
- Schools and workforce displaced

*lost*

## Call to Action

- Seasons 422 (\$8M gap)
- Minneapolis 220 (\$3M gap)
- Blooming Meadows 306+ (\$6M gap)
- Huntington Place 834 (\$50M+ gap)
- Cobblestone 74 (\$500K gap)

**1,856 families** (~5,000 residents) remained in homes



# The impact of NOAH loss

## Crossroads at Penn

- 2015
- Richfield
- 698 Families
- Economic evictions - 30 - 45 days
- Schools and workforce displaced

## Call to Action

- Seasons 422 (\$8M gap)
- Minneapolis 220 (\$3M gap)
- Blooming Meadows 306+ (\$6M gap)
- Huntington Place 834 (\$50M+ gap)
- Cobblestone 74 (\$500K gap)

**1,856 families** (~5,000 residents) remained in homes



# The impact of NOAH loss

## Crossroads at Penn

- 2015
- Richfield
- 698 Families
- Economic evictions - 30 - 45 days
- Schools and workforce displaced

*lost*

## Call to Action

- Seasons 422 (\$8M gap)
- Minneapolis 220 (\$3M gap)
- Blooming Meadows 306+ (\$6M gap)
- Huntington Place 834 (\$50M+ gap)
- Cobblestone 74 (\$500K gap)

*1,856 families (~5,000 residents) remained in homes*

**~\$100M Gap!!!** ....partially sourced....



**The Crisis in Metrics**

**The Housing Ecosystem**

**How to Increase Housing?**

**Taking Action**

# Lifecycle of Housing



	New	Workforce	NOAH 75% of TCMA Affordable	Restricted 25% of TCMA Affordable
Age	New	10-25 years old	25+ years old	New – 15 yrs old
Resident Income	>80% AMI	60 -120% AMI	30 - 60% AMI	30 - 60% AMI
Funding	Private	Private	Private ++	Publicly Funded
Rents	Market	Market	Market ++	Income restricted
	90%+ of housing market			

- Today's new is tomorrow's NOAH - shortage of one type drives need for another
- Managing market affordability is *the critical factor* in reducing the # of cost-burdened households
- Eroding market rate affordability drives the need for more subsidized/income restricted units.

**The Crisis in Metrics**

**The Housing Ecosystem**

**How to Increase Housing?**

**Taking Action**

# How to Increase Housing – Cost of Housing

## Funding Uses - What are the Project Costs?



### SOFT

- \$1M SAC/WAC Fees, Park Dedication, Entitlements & Permits
- \$2.5M Legal, Design, Due Diligence, Environmental, RE Taxes, etc.
- \$1.5M Development Fee - typically 3% of project costs

### LAND

- \$5MM Land side acquisition, paid to the landowner

### CONSTRUCTION

- ~\$20MM (50%) Union Labor (Ex: Local 563, Local 49, Local 633, IBEW 110, Carpenters 322, Roofers 96, Teamsters 346, etc.)
- ~\$20MM (50%) Building Materials (Lumber, Concrete, Steel, Glass, Copper, etc.)

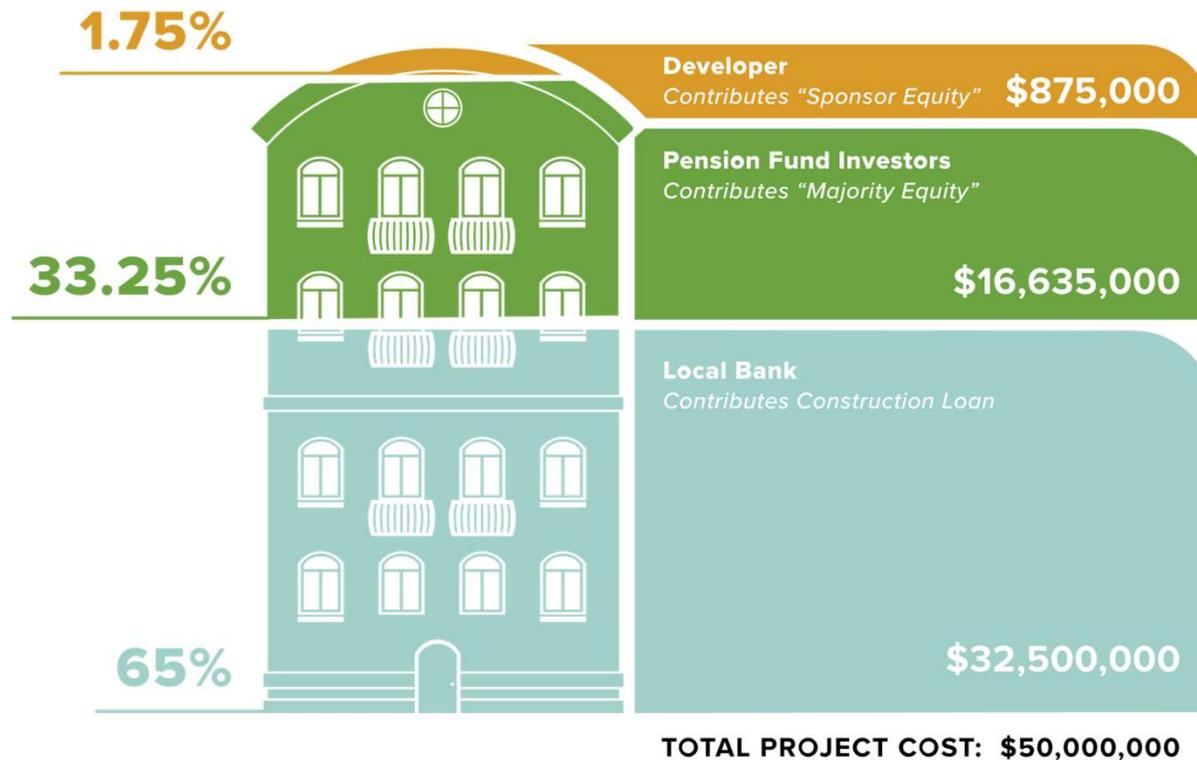
Construction Costs are increasing faster than inflation.

Lever to reduce project costs: soft costs, land, and regulatory barriers.

100 Unit NOAH		Upscale (\$M)		Preserve (\$M)	
Sources	Debt (FNMA/FMAC)	12.1M	82%	7.5M	47%
	Equity	2.8M	20%	2.4M	15%
	Soft	0	0%	2.5M	16%
	Gap	0	0%	3.6M	23%
	<b>Total Sources</b>	<b>\$15.2M</b>		<b>\$16.0M</b>	
Uses	Acquisition	12.0M	79%	12.0M	75%
	Construction/Rehab	2.5M	16%	3.0M	19%
	Transaction / Prof Fees	0.7M	5%	1.0M	6%
	<b>Total Uses</b>	<b>15.2M</b>		<b>\$16.0M</b>	
	Avg Mo Rent (1BR)	\$2,623 (100%)		\$1,164 (60%)	
	Resident Supports	No		Yes	

## How to Increase Housing – “Capital Stack” example

*Funding Sources - How a New Market Rate Project is Funded*



Harper Apartments, Saint Paul – 65% Associated Bank; 33.25% State Retirement System; 1.75% Developer (Ryan)

# How to Increase Housing – Investors

---

## *Investor Profile, Priorities, & Risk Tolerance:*



### Local Bank –

- **Profile:** Very risk adverse. Regulated by Federal Reserve & OCC. Banks require borrower to demonstrate ability to maintain positive cash-flow under multiple scenarios to ensure payback.
- **Project Risk:** Will not close without proof of equity and project fully approved. Will take 60-70% of value of project with rates 2-3% over an index.



### Fund Investors:

- **Profile:** Takes calculated risks to get a good risk adjusted return that will grow the pension on behalf of the pension holders. Open to wide range of investments and geographies.
- **Project Risk:** Closes after entitlements are complete and full Budget is set.



### Local Developer:

- **Profile:** Wants to build more projects locally. Tries to identify local projects that will attract investment from Banks & Investors. Cannot build without funding from outside sources.
- **Project Risk:** Funds all pursuit costs. Takes entitlement & GMP risk pre-closing. Construction risk, loan guarantee risk, and project cash-flow risk post-closing.

## How investors assess opportunities

- **Appraisal** - Income Approach Valuation (Capitalized Value)
- **Debt Service Coverage Ratio (DSCR)**
- **Yield**

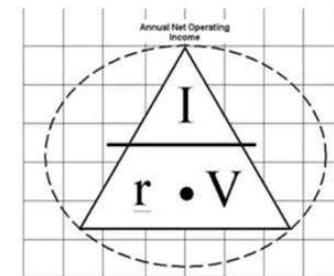
All based on **Net Operating Income (NOI)** - Income less expenses = NOI

More cash flow (higher NOI) is always best

# How investors assess opportunities

## Income Approach Valuation

- Investment properties are typically bought, sold and valued based on the Income Approach which utilizes Capitalization
- Capitalization is the conversion of a single income stream or a series of income streams into a lump-sum value
- A capitalization rate converts NOI into an estimate of value
- The Capitalization Rate is determined by NOI divided by the purchase price, and inversely, a value can be estimated by the NOI divided by the Capitalization Rate
- The greater the risk, the higher the capitalization rate
- The lower the capitalization rate, the higher the value, meaning an investor is willing to accept less income return because of perceived less risk



e.g.

Income = Rate (cap) x Value

Rate = Income ÷ Value

Value = Income ÷ Rate

## How investors assess opportunities

---

### Cash Flow and Debt Service Coverage Ratio

For each dollar of rent (revenue) received, ~35-45% goes to pay expenses:

Insurance, property taxes, utilities, license fees, maintenance (which increases as building ages), reserves for replacement of short- and long-lived items (e.g., appliances, carpeting, roofing).

*These expenses typically increase on pace with inflation, and in certain times can exceed it, but rarely are less.*

The 35-45% expense ratio DOES NOT INCLUDE THE LOAN EXPENSE WHICH REDUCES THE REALIZED INCOME TO AN INVESTOR.

Lenders/Banks typically require a minimum debt service coverage ratio (DSCR) of 1.20x. The DSCR reveals how much money is available to cover current debt, as well as whether there is enough income to cover any additional debt. A DSCR of less than 1 can indicate the need to increase net operating (NOI) or decrease expenses to take on additional debt.

$$\text{Standard debt service coverage ratio} = \frac{\text{net operating income}}{\text{total debt service}}$$

## How investors assess opportunities

---

*What is Yield?*

Investors analyze the '**Yield**' to assess the potential return on their investment

- High Yield = Good Investment & High Investor Interest ↑
- Low Yield = Bad Investment & Low Investor Interest ↓

$$\text{Yield} = \frac{\text{Net Operating Income}}{\text{Total Project Cost}}$$

**Apartment projects require a yield of 6-7% in order to be financed**

# How the Twin Cities compare to top 30 US Cities – YOY Rent Growth

*MSP ranks*

**LAST in rent growth**

(source: Dec 2021 Yardi Matrix report)

**Investors will go where they can find the best yield based on risk.**



Source: Yardi Matrix

## Certainty of rent – affordable housing

Residents with low or no income present rental risk

Bring it Home - \$1B initiative for rental subsidies

- Project based rental vouchers – certainty underwrites new development
- Resident held rental vouchers – moves with the resident - helps affordability in NOAH and new
- Goal: fund 100% of eligible renters (currently funding only 25%)

### ***Status:***

This year!? (Again, in discussion for some time – we hope....)

## Affordable Housing property taxes

### *Currently, affordable housing -*

- pays property taxes
- Is valued at market rate – even when rents are restricted by agreement
- Has seen a greater % increase in valuation than other property types

**'4D' Property Tax Treatment** sought (credit for units that are restricted  $\leq 60\%$  AMI)

### *Status*

- 4D Coalition – legislative fix reducing tax class to 25%
- 2022 session (4 years in discussion and still we hope...)
- Goff Public

## How the Twin Cities compare to other US Cities – Taxes and Expenses

Apartment Expenses:

**MSP ranks 128<sup>th</sup> out of 150**

Taxes/Insurance:

**MSP Ranks 141<sup>st</sup> out of 150**

Ranked by Expenses Per Unit		
Rank	Market Name	Expenses Per Unit
125	Washington-Arlington-Alexandria, DC-VA-MD-WV	\$ 8,611.67
126	Chicago-Naperville-Elgin, IL-IN-WI	\$ 8,730.21
127	Madison, WI	\$ 8,795.70
<b>128</b>	<b>Minneapolis-St. Paul-Bloomington, MN-WI</b>	<b>\$ 8,852.25</b>
129	New Haven-Milford, CT	\$ 8,967.04
130	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	\$ 9,027.14
131	Providence-Warwick, RI-MA	\$ 9,110.64
132	Salinas, CA	\$ 9,128.08
138	San Jose-Sunnyvale-Santa Clara, CA	\$ 3,003.45
139	Lakeland-Winter Haven, FL	\$ 3,005.34
140	Oakland-Hayward-Berkeley, CA	\$ 3,098.50
<b>141</b>	<b>Minneapolis-St. Paul-Bloomington, MN-WI</b>	<b>\$ 3,122.79</b>
142	San Diego-Carlsbad, CA	\$ 3,145.33
143	San Francisco-Redwood City-South San Francisco, CA	\$ 3,260.88

(source: Real Page)

*Lower rent growth. Higher expenses. Worse yield.*

*Investors have many different options – and **MSP is at the bottom!***

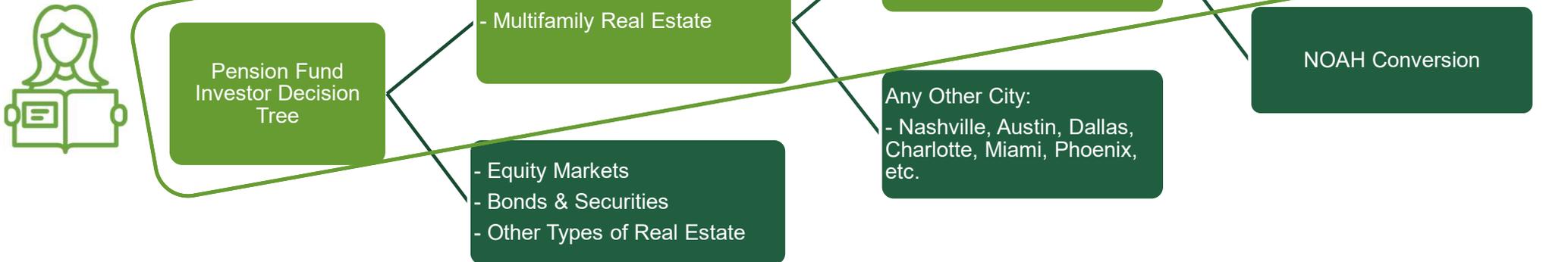
***MSP needs private capital....***

# How to Increase Housing – Investor Decisions

## Owners/Investors/Capital Groups

Investors have many investment options. They will go where they can find the best risk adjusted returns.

What actions are we taking to make this a prudent investment decision?



**The Crisis in Metrics**

**The Housing Ecosystem**

**How to Increase Housing?**

**Taking Action**

# What can we do?

## Issues in summary

- Housing critical to regional success
- Need is massive and growing  
*\$13.5B/now + \$3.4B/yr*
- Public resources insufficient
- Political will insufficient
- Regulatory environment lowers yield
  - Rent Control
  - Inclusionary Zoning
  - Fees (SAC/WAC/Park dedication)
- *Yield matters – must compete for investors*

## Solutions

- Build!!! New is tomorrow's NOAH
- Subsidize all housing construction
- Fund NOAH gaps
- Fix '4D' classification policy
- Fund vouchers 100%
- Ample private capital available – incent it!
- Consider yield impact of all policy