MINNESOTA HOUSING

MEETINGS SCHEDULED FOR JANUARY

Minnesota Housing
400 Wabasha Street N. Suite 400
St. Paul, MN 55102

THURSDAY, JANUARY 25, 2018

Regular Board Meeting
Lake Superior Conference Room- Fourth Floor
1:00 p.m.

NOTE: The information and requests for approval contained in this packet of materials are being presented by Minnesota Housing staff to the Minnesota Housing Board of Directors for its consideration on Thursday, January 25, 2018.

Items requiring approval are neither effective nor final until voted on and approved by the Minnesota Housing Board.

The Agency may conduct a meeting by telephone or other electronic means, provided the conditions of Minn. Stat. §462A.041 are met. In accordance with Minn. Stat. §462A.041, the Agency shall, to the extent practical, allow a person to monitor the meeting electronically and may require the person making a connection to pay for documented marginal costs that the Agency incurs as a result of the additional connection.

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MINNESOTA HOUSING

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AGENDA
Minnesota Housing Board Meeting
Thursday January 25, 2018
1:00 p.m.

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DRAFT MINUTES

MINNESOTA HOUSING FINANCE AGENCY SPECIAL BOARD MEETING
Thursday December 14, 2017
4:00 p.m.
Northwest Conference Room – Fourth Floor
400 Wabasha St N, St. Paul, MN 55102

1. Call to Order.
Vice Chair Joe Johnson called to order the special meeting of the Board of the Minnesota Housing Finance Agency at 4:03 p.m. Kevin Carpenter noted that board members received earlier today the documents that were being considered at today's meeting.

2. Roll Call.
Members present (by phone): Joe Johnson, Stephanie Klinzing, Rebecca Otto, Craig Klausing and Terri Thao
Minnesota Housing staff present: Mary Tingerthal (via phone), Anne Smetak, Matt Dieveney, Kevin Carpenter, Rachel Franco, Ryan Baumtrog and Wes Butler.
Others present (by phone): Dave Amsden, Kutak Rock, LLP; Cory Hoeppner, RBC Capital Markets

3. Resolutions authorizing issuance and sale of Minnesota Housing Finance Agency Residential Finance Housing Bonds, 2017 Series G and Minnesota Housing Finance Agency Rental Housing Bonds, 2017 Series D.
Kevin Carpenter presented to the board the request for approval of the resolutions authorizing issuance and sale of Minnesota Housing Finance Agency Residential Finance Housing Bonds, 2017 Series G and Minnesota Housing Finance Agency Rental Housing Bonds, 2017 Series D.

Dave Amsden, Kutak Rock provided the board with an overview of each resolution. Vice Chair Johnson opened the discussion. Board members asked questions and staff provided answers.

Motion: Auditor Otto moved approval of the Resolution authorizing issuance and sale of Minnesota Housing Finance Agency Residential Finance Housing Bonds, 2017 Series G, and authorizing execution of certain documents related thereto. Terri Thao seconded the motion. Secretary Franco asked for a voice vote. All were in favor of the motion. Motion carried 5-0.
Motion: Stephanie Klinzing moved approval of the Resolution authorizing issuance and sale of Minnesota Housing Finance Agency Rental Housing Bonds, 2017 Series D, and authorizing execution of certain documents related thereto. Craig Klausing seconded the motion. Secretary Franco asked for a voice vote. All were in favor of the motion. Motion carried 5-0.

4. Informational Item
Commissioner Tingerthal shared that staff had worked with the other entitlements issuers (Minneapolis, St. Paul and Dakota County) to negotiate transfers of Private Activity Bond volume cap among those issuers to ensure that any projects ready to close had volume cap made available even if the particular issuer had used all its existing volume cap.. These potential transfers would only be executed if private activity bonds were eliminated in the pending tax reform legislation as an issuer would not have any use for retaining volume cap into 2018.

5. Adjournment.
The meeting was adjourned at 4:47 p.m.

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John DeCramer, Chair

DRAFT MINUTES

Minnesota Housing Finance Agency Board Meeting
Thursday December 21, 2017
1:00 pm
400 Wabasha Street N, St. Paul, MN 55102

1. **Call to Order.**
Chair John DeCramer called to order the regular meeting of the Board of Minnesota Housing Finance Agency at 1:03 p.m.
2. **Roll Call.**
Members Present: John DeCramer, Terri Thao, Joe Johnson, Craig Klausing, Rebecca Otto, Damaris Hollingsworth, and Stephanie Klinzing.
Minnesota Housing staff present: Tal Anderson, Ryan Baumtrog, Sara Bunn, Wes Butler, Kevin Carpenter, Chuck Commerford, Adam Connell, Jessica Deegan, Matthew Dieveney, Ruth DuBose, Rachel Franco, Mary Beth Kehrwald, Kasey Kier, Tresa Larkin, Debbi Larson, Diana Lund, Paul Marzynski, Eric Mattson, Kim McAfee, Tom O'Hern, John Patterson, Devon Pohlman, Caryn Polito, Paula Rindels, Joel Salzer, Megan Sanders, Terry Schwartz, Barb Sporlein, Will Thompson, Mary Tingerthal, and Ted Tulashie.
Others Present: Ramona Advani, Minnesota Office of the State Auditor; Cory Hoeppner, RBC Capital Markets; Jean Lee, APANC; Melanie Lien, Piper Jaffray; Anne Mavity, Minnesota Housing Partnership; Paul Rebholz, Wells Fargo; Carolyn Szczepanski, Minnesota Housing Partnership.
3. **Agenda Review.**
Chair DeCramer indicated that there were no changes to the agenda. The board received an updated board report for Action Item 7F.
4. **Approval of the Minutes.**
A. **Regular Meeting of November 16, 2017**
Motion: Auditor Otto moved the approval of the minutes. Seconded by Joe Johnson. Motion carries 7-0.
5. **Reports.**

A. Chair
None.

B. Commissioner
Commissioner Tingerthal shared the following with the board:

- The board had a special board meeting on December 14. The purpose of the meeting was to consider two resolutions which would have allowed staff to go forward with Convertible Option Bonds, which would have been necessary if Congress in their Tax Reform Bill had discontinued Private Activity Bonds (PAB) for housing. The meeting was a precautionary measure, and the board did approve both of the resolutions but because we now have a bill that has been passed, we do not have to issue the Convertible Option Bonds by the end of this year. We will prepare minutes for the meeting and will include in the January board packet. We were greatly relieved that when the bill came out, the PAB had no changes. We were pleased with the amount of community support that was rallied to contact members of Congress, emphasizing the importance of PAB for housing.

- Governor Dayton held a press conference earlier today to announce the formation of the Governor's Task Force on Housing. Terri Thao is the board's representative on the Task Force. There are three working groups, Rental, Homeownership and Housing Stability and Opportunity. Kasey Kier is staffing the Homeownership Working Group and Cathy tenBroeke is staffing the Housing Stability and Opportunity Working Group. The Task Force meetings will be open to the public. There will be six regional forums that will be held throughout the state, starting in March 2018. Governor Dayton met with the members of the Task Force this morning prior to the press conference. The work of the task force will wrap up around June 30, with a submission of a written report to Governor Dayton by the end of July 2018.
- Will Thompson is leaving Minnesota Housing for the Department of Commerce. His last day is Wednesday January 3, 2018. Staff is reviewing the position and asked that if the board had any thoughts on how we deal with the Agency's risk management to please let Mary know. Members of the board thanked Will for his work and his contributions to the Agency.
- Governor Mark Dayton reappointed Damaris Hollingsworth to the Board starting January, 2018. There are currently no vacancies on the board.

C. Committee.

None

6. Consent Agenda

A. Commitment, Limited Partnership Buy-Out Loan – Cedarview Commons, N. St. Paul (D3589)

Motion: Stephanie Klinzing moved the approval of items on the Consent Agenda. Seconded by Terri Thao. Motion carries 7-0.

7. Action Items

A. **Selection and Commitment, Low and Moderate Income Rental (LMIR) – Murphy's Creek Townhomes, Austin (D2924)**

Ted Tulashie presented to the board the request for approval of a Limited Partnership Buy-Out Loan in the amount of $4,700,000 for Cedarview Commons. The loan has been underwritten in accordance with the parameters previously approved by the Board.

Chair DeCramer opened up the discussion. Stephanie Klinzing inquired about the deferred loan from the City of Austin and if the city imposed other conditions of the deferment. Ted indicated that there are no changes to the conditions of the loan; they are only extending the term. Chair DeCramer inquired about the age of the facility. Mr. Tulashie indicated that the facility is sixteen years old.

Motion: Stephanie Klinzing moved the approval of the Selection and Commitment, Low and Moderate Income Rental (LMIR) – Murphy's Creek Townhomes, Austin (D2924) Seconded by Terri Thao. Motion carries 7-0.

B. **Selection and Commitment, Low and Moderate Income Rental (LMIR) – Fox Pointe Townhomes, Austin (D7888)**

Sara Bunn presented to the board a request for approval of a resolution authorizing the issuance of a Low and Moderate Income Rental (LMIR) program commitment in the amount of up to $5,394,000, subject to the terms and conditions of the Minnesota Housing term letter.

Chair DeCramer opened up the discussion. There were no questions from the board.

Motion: Joe Johnson moved approval of Selection and Commitment, Low and Moderate Income Rental (LMIR) – Fox Pointe Townhomes, Austin (D7888). Seconded by Damaris Hollingsworth. Motion carries 7-0.

C. **Approval, Homework Starts With Home (HSWH) Pilot Program Concept**

Joel Salzer presented to the board the request for approval of the Homework Starts with Home (HSWH) Pilot Program Concept. Mr. Salzer noted that the board report had an error in that the request only requires a motion, not a resolution.

Chair DeCramer opened the discussion. Craig Klausing commented that he is very excited about this program, and inquired about the statement in the report that 90% of students with known housing status were stably housed and if we know the number of students for which we lost of track of their housing status. John Patterson referred the board to the footnote on page 37. The bar graph in Figure 4 shows the breakdown of students. Auditor Otto shared her excitement for the program. **Motion:** Auditor Otto moved the approval of Homework Starts with Home Pilot Program Concept as described. Seconded by Craig Klausing. Motion carries 7-0.

Commissioner Tingerthal shared that Minnesota Housing received news that Minnesota Housing was awarded the $2 million Margaret A. Cargill Grant. The Board took action at the November 2017 meeting to approve the program concept to be covered by the grant. Staff is set to move forward with the concept as it was approved last month.

D. **Loan Modification, Preservation Affordable Rental Investment Fund (PARIF) loan – Jordan Towers II, Red Wing (D1194)**

Paul Marzynski presented to the board the request for approval of a resolution authorizing a modification to increase the loan amount and term of the Preservation Affordable Rental Investment Fund (PARIF) loan, in an amount up to $2,481,000 with a term of 30 years.

Chair DeCramer opened the discussion. Terri Thao inquired if the corrosion was due to repair or was it a result of the age of the building. Paul indicated that the property is forty years old and was constructed by code, but part of the building is below grade and the corrosion was discovered when crews were tearing out the sidewalks. Craig Klausing inquired about the predictive cost model, and if we had we known what the cost was originally, would we still have approved the project. Mr. Marzynski that yes we would have approved the project because we preserved 102 units of Section 8 housing. **Motion:** Auditor Otto moved the approval of Loan Modification, Preservation Affordable Rental Investment Fund (PARIF) loan – Jordan Towers II, Red Wing (D1194). Seconded by Stephanie Klinzing. Motion carries 7-0.

E. **Loan Modification, Economic Development and Housing Challenge (EDHC) loan – New Vision fka Indian Neighborhood Club Expansion, Minneapolis (D7746)**

Caryn Polito presented to the board the request for approval of a resolution authorizing a modification to increase the Economic Development and Housing Challenge program (EDHC) loan commitment by an amount up to $220,000.

Chair DeCramer opened the discussion. Joe Johnson inquired if the 31% increase in construction costs was directly related to the cost of materials. Caryn indicated that the increase is due to materials and labor.

Motion: Terri Thao moved the approval of Loan Modification, Economic Development and Housing Challenge (EDHC) loan – New Vision fka Indian Neighborhood Club Expansion, Minneapolis (D7746). Seconded by Auditor Otto. Motion carries 7-0.

F. **Approval, Selection of firms to serve on the Investment Banking/Underwriting Team for years 2018-2021; Selection of firms for Selling Group for years 2018-2021**

Kevin Carpenter presented to the board the request for approval appointing: 1) RBC Capital Markets as senior manager of the Agency's investment banking team; 2) Wells Fargo, Piper Jaffray, and JP Morgan as co-managers of the Agency's investment banking team, and 3) Morgan Stanley as a member of any selling group for the Agency. Each of these selections will cover the period from 2018 through 2021.

Mr. Carpenter noted that board members received a revised board report earlier today via email and they had a copy at their seat and it is available to the public. The website was also updated to reflect the revised board report. Mr. Carpenter reviewed the process for the selection of firms and thanked Ramona Advani and Craig Klausing for their participation in the interview process.

Chair DeCramer opened the discussion. Damaris Hollingsworth inquired about how much influence, if any does the firm have in approvals of loans and interest rates. Kevin indicated that the investment banking team has no role in the transactions we finance. Their role is to help us structure our financing, and provide a cost effective, risk adjusted financing package.

Craig Klausing commented on the process of the selection and thought it was well done, informative and a productive discussion and thanked Kevin and the rest of the staff for their work in preparing for the day. Chair DeCramer thanked Ramona and Craig for participating in the selection process. Ramona Advani commented that the process was efficient and educational.

8. Discussion Items

A. Quarterly Financial Reporting Package

Kevin Carpenter provided the board with background information on the financial reporting package and Terry Schwartz reviewed the financial documents provided in the board report.

9. Information Items

A. Post-sale Report, Homeownership Finance Bonds (HFB) 2017 Series IJ

B. Semiannual Status Report, Enhanced Financial Capacity Homeownership Initiative (Homeownership Capacity)

Board requested that future reports include the trends in home purchases from the start of the program to current.

C. Reports of Complaints Received by Agency or Chief Risk Officer

The board thanked Will Thompson for his work on behalf of the board and the Agency. He will be greatly missed. Stephanie Klinzing shared her Homework Starts with Home story and their work on homeless initiatives.

10. Other Business

None.

11. Adjournment

The meeting was adjourned at 2:08 p.m.

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John DeCramer
Chair

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MINNESOTA HOUSING

Board Agenda Item: 6.A
Date: 1/25/2018

Item: Community Fix Up Loan Program, Center for Energy and Environment

Staff Contact(s):
Shannon Gerving, 651.296.3724, shannon.gerving@state.mn.us

Request Type:

☒ Approval
  ☒ Motion
  ☐ Resolution

☐ No Action Needed
  ☐ Discussion
  ☐ Information

Summary of Request:
Staff requests board approval for a Center for Energy and Environment (CEE) Community Fix Up Loan (CFUL) Program initiative described in the attached Initiative Detail. The CFUL Program accepts initiative proposals from participating Fix Up Loan Program lenders and their community partners on an ongoing basis for activities that address home improvement needs with a resulting community impact.

Fiscal Impact:
The program uses Pool 2 funds; as such, Agency policy requires that loans carry an interest rate commensurate with the risk. By using "buy-down" funds from the cities to supplement the lower interest rate on the loans, the Agency earns a risk-appropriate return. Action requested in this report is consistent with program terms.

Meeting Agency Priorities:

☒ Address Specific and Critical Local Housing Needs
☐ Finance Housing Responsive to Minnesota's Changing Demographics
☐ Preserve Housing with Federal Project-Based Rent Assistance
☐ Prevent and End Homelessness
☐ Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

Attachment(s):

- Background
- Initiative Detail

Background:
The following recommendation for the CEE CFUL initiative meets the guidelines for participation contained within the Program Concept. Staff applies threshold indicators and considers compensating factors when determining whether to recommend a specific proposal to access funds under the CFUL Program. The threshold indicators include:

- Confirmation that the initiative fits within the Program Concept;
- The strength of partnership;
- Leverage and/or value-added features;
- A focused marketing plan; and
- Budget counseling, if required.

Initiative Detail:
CEE is requesting to renew their CFUL initiative that partners with multiple cities. The cities provide funds to discount the loans. As a value-added service, CEE also offers a Home Energy Squad (HES) visit. The CFUL will be available to households that meet Minnesota Housing home improvement program income limits (currently $104,000). Since 2015, 27 loans totaling $537,921 have been closed under this initiative. Agency recommends approving the CEE CFUL initiative.

Region	Estimated Demand	
	# Loans	**Loan Volume**
Metro	40	$ 800,000

Community Partner	Partner Contribution	Discounted Interest Rate
Housing Authority of the City of St. Louis Park	Discount funds	4%; 5% Varies by income
City of Minneapolis Community Planning and Economic Development for the neighborhoods: • Logan Park • McKinley • Seward • Windom Park	Discount funds	2.0%; 2.5%; 3%; 4% Varies by location
Economic Development Authority in and for the City of Blaine	Discount funds	5%
City of Anoka Housing and Redevelopment Authority	Discount funds	4%
City of New Hope	Discount funds	4%

Item: Selection of Independent Financial Audit Firm FY 2018-2021.

Staff Contact(s):
Terry Schwartz, 651.296.2404, terry.schwartz@state.mn.us
Debbi Larson, 651.296.8183, Debbi.Larson@state.mn.us

Request Type:

☒ Approval	☐ No Action Needed
☒ Motion	☐ Discussion
☐ Resolution	☐ Information

Summary of Request:
Staff requests approval of the selection of RSM US, LLP to perform audit services as detailed in the RFP for FY 2018-2021. Staff will enter into two two-year contracts covering the four year engagement, subject to review of performance.

Fiscal Impact:
The cost of the Annual audit will be paid from Pool 2.

Meeting Agency Priorities:
☐ Address Specific and Critical Local Housing Needs
☐ Finance Housing Responsive to Minnesota's Changing Demographics
☐ Preserve Housing with Federal Project-Based Rent Assistance
☐ Prevent and End Homelessness
☐ Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

Attachment(s):
Background

Per Board Policy #12, every four fiscal years, or sooner if circumstances warrant, the Board will request proposals from qualified firms to audit the agency's financial statements and provide additional services, as needed, to the Board.

In November, the Agency, per Board policy #12, released an RFP soliciting proposals from qualified independent audit firms interested in providing audit services for FY2018-2021. Two firms responded to the RFP;

- Clifton Larson Allen, CLA
- RSM US LLP

Based upon a review of the responses to this RFP both firms were invited to interview. Those interviews were held on January 5, 2018. The interview panel included Board members Rebecca Otto and Stephanie Klinzing. Agency representatives on the interview panel included Commissioner Tingerthal, CFO Kevin Carpenter, CIO Tony Peleska, Terry Schwartz and Debbi Larson.

As a result of this RFP and the interview process, the members of the interview panel are recommending that the board select RSM US, LLP to perform the audit services detailed in the RFP for FY 2018-2021.

Board Agenda Item: 7.B
Date: 1/25/2018

MINNESOTA HOUSING

Item: Approval of Participants for the Minnesota City Participation Program

Staff Contact(s):
Nicola Viana, 651.297.9510, nicola.viana@state.mn.us
Laura Bolstad, 651.296.6346, laura.bolstad@state.mn.us

Request Type:

☒ Approval	☐ No Action Needed
☒ Motion	☐ Discussion
☒ Resolution	☐ Information

Summary of Request:
Staff requests approval of cities for participation in the Minnesota City Participation Program (MCPP). The program allows Minnesota Housing to apply for the portion of the annual private activity bond volume cap allocated by Minnesota Statutes Section 474A.03, subdivision 1 to the Housing pool, $60,050,215 of which is available in 2018 for single family housing programs authorized by Minnesota Statutes Section 474A.061, subdivision 2a to enable cities and counties to provide first-time homebuyer loans in their communities.

Fiscal Impact:
Minnesota Housing is able to issue more than $60 million in additional tax-exempt private activity bonds to provide loans to first-time homebuyers with lower incomes as a result of administering the Minnesota City Participation Program.

Meeting Agency Priorities:
☒ Address Specific and Critical Local Housing Needs
☐ Finance Housing Responsive to Minnesota's Changing Demographics
☐ Preserve Housing with Federal Project-Based Rent Assistance
☐ Prevent and End Homelessness
☐ Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

Attachment(s):
- Background and Recommendation
- Table 1: 2018 MCPP Allocations to Applicants
- Map 1: Greater Minnesota - 2018 MCPP - 2016-2017 Start Up Loans, partly funded with MCPP
- Map 2: Metro - 2018 MCPP - 2016-2017 Start Up Loans, partly funded with MCPP
- Resolution

Background:
Under the Minnesota City Participation Program (MCPP), Minnesota Housing sells tax-exempt private activity bonds on behalf of local governments to assist them to meet local housing goals pursuant to Minnesota Statutes Section 474A.061, subdivision 2a. In accordance with that statute, cities, counties and consortia of local government units applied for participation in MCPP by January 15, 2018.

MCPP is an important statewide tool that local units of government find very valuable in meeting their continuum of housing needs. Self-issuance of bonds is not economically feasible for most communities, given economies of scale necessary for successful self-issuance. Under the MCPP Program, Minnesota Housing can sell bonds on behalf of the participating communities so that residents can access affordable mortgage loans with downpayment and closing cost assistance options. The attached Maps show the location of Start Up loans originated in the jurisdictions of the participating MCPP communities in 2016-2017. It should be noted that Minneapolis, Saint Paul and Dakota County are not eligible to participate in the MCPP program because they each receive an entitlement allocation of tax-exempt bonding authority.

In their application, each local government confirms that MCPP helps the community meet an identified housing need and the program is economically viable in their community. Loans are eligible for MCPP if they meet all requirements below:

- The loan is an eligible first-time homebuyer Start Up loan.
- The property is located in the applicants' jurisdiction as stated on their application.
- The borrower's income must not exceed 80% of the area median income.

The amounts of the allocations set forth in Table 1 are determined based on a pro rata allocation of the total amount available $60,050,215 according to the population of each community that has applied and meets the above requirements.

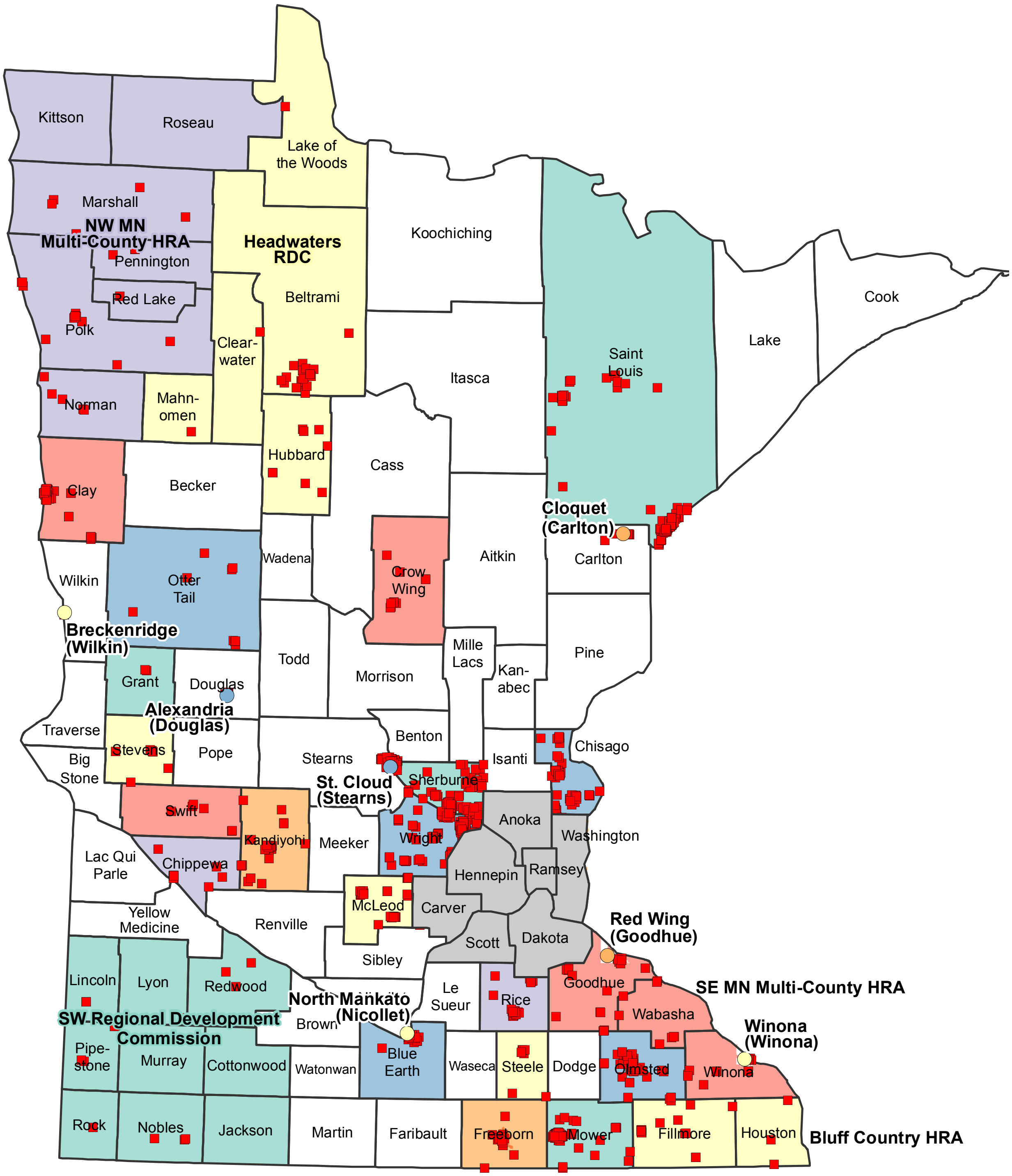
Recommendation:
Staff requests that the Board approve the attached resolution which:

- Approves applying local governments for participation in MCPP for the allocation amounts shown in the resolution; and
- Authorizes Minnesota Housing to take necessary actions to apply to Minnesota Management and Budget for amounts available for tax-exempt private activity bonding authority on behalf of the same eligible local governments under Minnesota Statutes, Chapter 474A .

Table 1: 2018 MCPP Allocations to Applicants

Community	Allocation
Alexandria, City of	$ 232,290
Anoka County	$ 5,965,985
Blue Earth County	$ 1,147,964
Bluff Country HRA	$ 679,655
Breckenridge, City of	$ 100,000
Carver County	$ 1,721,784
Chippewa County	$ 100,000
Chisago County	$ 937,132
Clay County	$ 1,076,078
Cloquet, City of	$ 210,489
Crow Wing County	$ 1,095,141
Freeborn County (Albert Lea administrates)	$ 523,204
Grant County	$ 100,000
Headwaters Regional Dev. Commission	$ 1,453,611
Hennepin County	$ 13,991,313
Kandiyohi County	$ 726,917
McLeod County	$ 613,501
Mower County	$ 670,637
North Mankato, City of	$ 236,362
NW MN Multi-Co. HRA	$ 1,468,070
Oakdale, City of	$ 478,046
Olmsted County	$ 2,618,738
Otter Tail County	$ 267,642
Ramsey County	$ 4,041,942
Red Wing, City of	$ 283,111
Rice County	$ 1,122,639
Scott County	$ 2,437,304
SE MN Multi-Co. HRA	$ 1,280,921
Sherburne County	$ 1,481,007
St. Cloud, City of	$ 1,152,362
St. Louis County	$ 3,417,934
Steele County (Owatonna administrates)	$ 629,107
Stevens County	$ 166,701
SW Regional Development Commission	$ 869,527
Swift County	$ 160,575
Washington County	$ 3,853,373
Winona, City of	$ 470,192
Wright County	$ 2,268,961
Total	**$ 60,050,215**

2018 Minnesota City Participation Program - 2016-2017 Start Up Loans, partly funded with MCPP

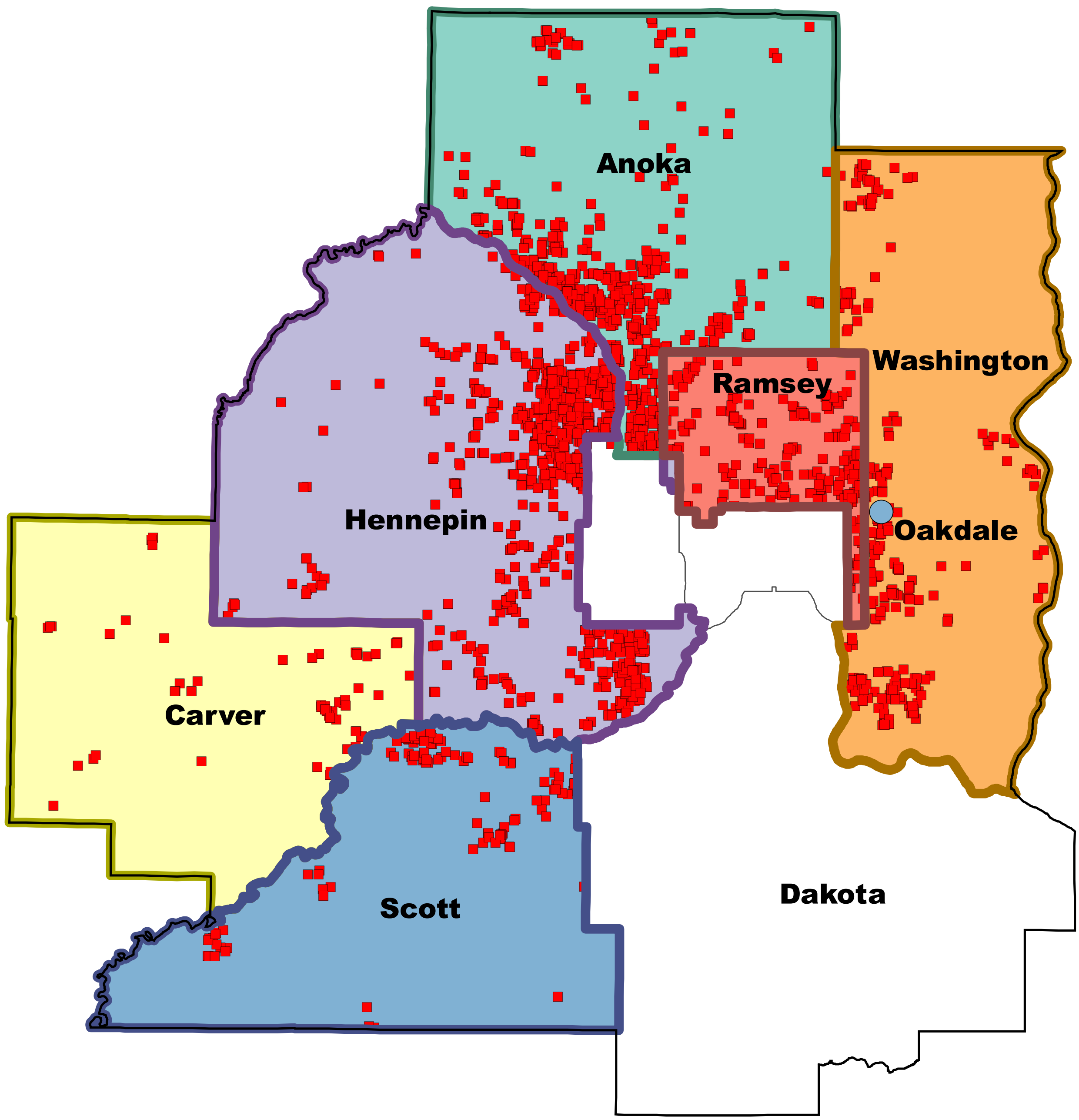


MINNESOTA HOUSING

2016-2017 Start Up Loans, partly funded with MCPP

Created: 01.11.2018 by: K. Thurnau

2018 Minnesota City Participation Program -
2016-2017 Start Up Loans, partly funded with MCPP



MINNESOTA HOUSING

Created: 01.11.2018 by: K. Thurnau

2016-2017 Start Up Loans, partly funded with MCPP

Agenda Item: 7.B
Resolution

MINNESOTA HOUSING FINANCE AGENCY
400 Wabasha Street North, Suite 400
St. Paul, MN 55101

RESOLUTION NO. MHFA
RESOLUTION AUTHORIZING APPLICATION FOR BONDING AUTHORITY ON BEHALF OF THE 2018 MINNESOTA CITY PARTICIPATION PROGRAM PARTICIPANTS

WHEREAS, Minnesota Statutes, Section 474A.061 subdivision 2a, paragraph (e) authorizes the Minnesota Housing Finance Agency to request an allocation of private activity bonding authority for the applicants who applied in January of 2018 and choose to have the Minnesota Housing Finance Agency issue bonds on their behalf, and the participating applicants are eligible for bonding authority in a total amount of not less than $60,050,215; and

WHEREAS, the Minnesota Housing Finance Agency would like to take those actions necessary to make the private activity bonding authority available under Minnesota Statutes, Chapter 474A, available to the Minnesota City Participation Program participants.

NOW THEREFORE, BE IT RESOLVED:

THAT the Commissioner of the Minnesota Housing Finance Agency is hereby granted the authority to take all actions necessary to apply to the Commissioner of Management and Budget for amounts available for tax-exempt private activity bonding authority during the times set forth in Minnesota Statutes, Chapter 474A, on behalf of the 2018 Minnesota City Participation Program participants as listed below.

Community	**Allocation**	
Alexandria, City of	$	232,290
Anoka County	$	5,965,985
Blue Earth County	$	1,147,964
Bluff Country HRA	$	679,655
Breckenridge, City of	$	100,000
Carver County	$	1,721,784
Chippewa County	$	100,000
Chisago County	$	937,132
Clay County	$	1,076,078
Cloquet, City of	$	210,489
Crow Wing County	$	1,095,141
Freeborn County (Albert Lea administers)	$	523,204
Grant County	$	100,000
Headwaters Regional Dev. Commission	$	1,453,611
Hennepin County	$	13,991,313
Kandiyohi County	$	726,917
McLeod County	$	613,501
Mower County	$	670,637
North Mankato, City of	$	236,362
NW MN Multi-Co. HRA	$	1,468,070

Oakdale, City of	$	478,046
Olmsted County	$	2,618,738
Otter Tail County	$	267,642
Ramsey County	$	4,041,942
Red Wing, City of	$	283,111
Rice County	$	1,122,639
Scott County	$	2,437,304
SE MN Multi-Co. HRA	$	1,280,921
Sherburne County	$	1,481,007
St. Cloud, City of	$	1,152,362
St. Louis County	$	3,417,934
Steele County (Owatonna administrates)	$	629,107
Stevens County	$	166,701
SW Regional Development Commission	$	869,527
Swift County	$	160,575
Washington County	$	3,853,373
Winona, City of	$	470,192
Wright County	$	2,268,961
Total	**$**	**60,050,215**

Adopted this 25th day of January, 2018

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Chairman

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Board Agenda Item: 8.A
Date: 1/25/2018

Item: Discussion Regarding 2020 Housing Tax Credit Program Qualified Allocation Plan

Staff Contact(s):
Devon Pohlman, 651.296.8255, devon.pohlman@state.mn.us
Summer Jefferson, 651.296.9790, summer.jefferson@state.mn.us

Request Type:

☐ Approval	☒ No Action Needed
☐ Motion	☒ Discussion
☐ Resolution	☐ Information

Summary of Request:
Review the potential changes being considered for the 2020 Housing Tax Credit Program Qualified Allocation Plan (QAP).

Fiscal Impact:
None

Meeting Agency Priorities:
☒ Address Specific and Critical Local Housing Needs
☒ Finance Housing Responsive to Minnesota's Changing Demographics
☒ Preserve Housing with Federal Project-Based Rent Assistance
☒ Prevent and End Homelessness
☐ Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

Attachment(s):
- 2020 QAP Summary of Proposed Content Changes

2020 Qualified Allocation Plan (QAP) Summary of Proposed Content Changes

Key Changes

In the 2019 QAP, Minnesota Housing proposed and adopted significant streamlining changes. With these changes now in place, the proposed changes for the 2020 QAP are recommended only for critical policy or clarification purposes. Key changes are identified below in three categories based on their impact on: projects with 9% tax credits allocated through the competitive RFP process; tax-exempt bond/4% projects selected through the competitive RFP process; and projects receiving tax exempt bonds through the Minnesota Department of Management and Budget (MMB) and seeking an allocation of tax credits through the 4% Only (42M) process. While these are the proposed changes identified at this point, there may be additional modifications to the 2020 QAP, including addressing concerns and suggestions that arise from public comments.

9% Housing Tax Credits (HTC) Allocated Through the Competitive RFP

- **Clarify the tie breaker criteria** by making long-term affordability a preference priority, which is given weight in the first round of a tie breaker. This change is in line with Internal Revenue Code preferences. Cost containment is removed as a preference priority and will become a selection priority.
- **Increase the per-developer or general partner tax credit limit** to the greater of: the amount representing 10 percent of the state's per capita volume limit in tax credits, or the amount needed to support two developments in the case that two developments selected are being developed by the same developer or general partner. Such projects are subject to the per development limit shown below.
- **Increase the per-development tax credit limit** from $1.2 million to $1.25 million, based on an annual inflation factor.
- **Increase the rural development/small project set-aside** from $300,000 to $350,000. This set-aside was last adjusted in the 2013 QAP. Minnesota Housing intends to apply an annual inflation adjustment factor in future QAP rounds.

Competitive RFP (9% and 4% HTC) and 4% Only (42M)

- **Revise the State Designated Basis Boost** to apply to developments that meet one of the following two strategic priority policy thresholds: Supportive Housing or Preservation. Allocating agencies are allowed to award a basis boost of up to 30 percent to HTC buildings, and allocating agencies are authorized to determine their individual policy objectives for projects eligible for the basis boost. Minnesota Housing seeks to ensure that the boost continues to advance critical state housing priorities through targeted and strategic use. Note that many projects qualify under more than one strategic priority; for example, many projects meet the Greater Minnesota Workforce Housing strategic priority policy threshold in addition to the Supportive Housing strategic priority threshold.
- **Reform the Planned Community Development Strategic Priority into the Community Development Initiative Strategic Priority** to streamline this strategic priority and to facilitate use of the priority by communities with active community development initiatives that include affordable housing as a key

strategy. Clarify what additional information is required by federal regulations for developments in a Qualified Census Tract (QCT) for a plan to be considered a concerted community revitalization plan.

- **Clarify and Revise Unacceptable Practices**, as outlined in the *2019 Housing Tax Credit Program Procedural Manual*, which result in negative points on future application submittals or the inability to apply for future HTC rounds in severe cases. Minnesota Housing is recommending clarifications or changes that impact three areas: transfer of ownership, cost containment and compliance.
  - Transfer of Ownership. Clarify that approval for transfer of ownership (more than 50 percent interest in a general partner or member, or a change in a nonprofit partner) is required for the duration of the Land Use Restrictive Agreement (LURA), and that if a transfer of ownership occurs, a fee is required throughout the term of the LURA. Also clarify that a failure to notify Minnesota Housing of a transfer of ownership constitutes an unacceptable practice for which a negative point penalty is assessed.
  - Cost Containment. Clarify how penalties will be assessed for future projects. The penalty will be assessed against a future tax credit request of the same type of funding round for which the points were initially awarded. Specifically:
    - Projects awarded cost containment points in a competitive funding round (HTC Round 1 or Round 2) would receive a penalty on the next competitive HTC funding round application if costs exceed the benchmark.
    - Projects requiring points to reach the minimum score and that are awarded such points under the 4% Only (42M) allocation process would receive a penalty on the next 4% Only (42M) application if costs exceed the benchmark.
  - Compliance. Add an unacceptable practice provision for failure: to comply with critical life, safety and/or compliance and monitoring procedures; or to correct or submit an acceptable timeline for correction of non-compliance after repeated notices.
- Other notable clarifications or changes to selection categories and criteria are outlined below.

Selection Categories and Selection Criteria

Changes to the selection categories and criteria include:

- **Community Development Initiative.** This selection category is being streamlined to better clarify the eligibility criteria. Developments seeking these points must continue to provide evidence of a targeted geographic area for the initiative, a current implementation plan with goals or outcomes specific to the need identified by the initiative, and developments should demonstrate that affordable housing is a key strategy and there is active local stakeholder involvement.
  - In addition, in order for a plan to be considered a concerted community revitalization plan, as defined in federal guidance, for purposes of the statutory preference, plans in a QCT should include **a demonstrated strategy for obtaining a commitment of public or private investment (or both) in non-housing infrastructure, amenities or services.**
- **Greater Minnesota Workforce Housing.** Currently, to meet this strategic priority, projects must demonstrate need based on a low vacancy rate, have employer support and have a cooperatively developed plan. Minnesota Housing proposes to change one of these requirements and clarify a second:

  - Cooperatively Developed Plan. Remove the cooperatively developed plan requirement because it is redundant of the existing strategic priority and scoring criterion focused on community development initiative efforts.
  - Employer Support. Clarify that a letter of employer support is required. An employer with 20 or more Full-time Employees (FTEs) must provide a description of the difficulty employees have had obtaining affordable housing in the jurisdiction of the proposed project. A description of local wage levels and affordable rent levels must be provided. Minnesota Housing will provide a sample letter that applicants can use.
- **Supportive Housing: High Priority Homeless and People with Disabilities.** Both of these scoring criterion are being modified to specify that, for units occupied by households without rental assistance that are seeking these points, the gross rent, including an allowance for tenant-paid utilities, cannot exceed the greater of 30 percent of the household's monthly income or the most current supportive housing standard for the unit size as published by Minnesota Housing. Owners must establish and implement policies and procedures to specify the calculation method used to determine the appropriate rent amount and the periodic income recertification used when adjusting rents.
- **Preservation: Threshold Requirement: Risk of Loss Due to Market Conversion.** We currently require projects that meet this threshold requirement to provide proof of a market for conversion as evidenced by a low physical vacancy rate (4% or lower) for market rate comparable units and one of three of the following: a market study commissioned by Minnesota Housing, an appraisal commissioned by Minnesota Housing or a Rent Comparability Study (for properties with project-based Section 8 contracts).
  - **Clarify that one option for demonstrating a market for conversion is a market study as deemed acceptable to Minnesota Housing** instead of one commissioned by Minnesota Housing.
- **Preservation. Scoring: Critical Affordable Units at Risk of Loss**. Preservation projects are currently eligible for points under this scoring criterion only if the development also satisfies the Serves Lowest Income Tenants/Rent Reduction criteria, which requires that rents be restricted to 50 percent Multifamily Tax Subsidy Projects (MTSP) limits. Properties that convert through RAD 1 may not satisfy the 50 percent MTSP rent restriction as the project-based Section 8 contract on the converted property may be above that limit.
  - Minnesota Housing proposes to modify this scoring criterion to provide that **a RAD 1 development is eligible for these points if 50 percent or more of the units in the development are covered by a project-based Section 8 rental assistance contract.**

Next Steps, Feedback and Public Comments

Minnesota Housing staff will present proposed changes, including a redline version of changes, at Minnesota Housing's February 22, 2018 board meeting. Opportunities to provide feedback are currently open and include several different options listed below. While the formal comment period begins if and after the board approves the proposed 2020 QAP changes at its February 22, 2018 meeting and culminates on March 14, 2018 at 5:00 p.m., Minnesota Housing invites earlier comments and will consider all comments received through the March 14, 2018 deadline.

- Formal public comment period: **February 22 – March 14, 2018**

- In-person session at Minnesota Housing: **March 5, 2018**
- Public hearing at Minnesota Housing: **March 14, 2018**
- Email: tamara.wilson@state.mn.us
- Telephone: Tamara Wilson, 651.296.4451
- In writing: Attn: Tamara Wilson, Minnesota Housing,
  400 Wabasha Street North, Suite 400
  St. Paul, MN 55102

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Item: Agency Risk Profile

Staff Contact(s):
Tom O’Hern, 651.296.9796, tom.o’hern@state.mn.us

Request Type:

☐ Approval
- ☐ Motion
- ☐ Resolution

☒ No Action Needed
- ☒ Discussion
- ☐ Information

Summary of Request:
The Agency faces a number of risks to achieving its objectives. The Agency Risk Profile is a component of the Enterprise Risk Management (ERM) framework and is produced annually to demonstrate and communicate critical risk information to the board.

Fiscal Impact:
None.

Meeting Agency Priorities:
- ☐ Address Specific and Critical Local Housing Needs
- ☐ Finance Housing Responsive to Minnesota’s Changing Demographics
- ☐ Preserve Housing with Federal Project-Based Rent Assistance
- ☐ Prevent and End Homelessness
- ☐ Reduce Minnesota’s Racial and Ethnicity Homeownership Disparity

Attachment(s):
- Agency Risk Profile

Evaluating Affordable Housing Efforts

Agency Risk Profile

2017

MINNESOTA HOUSING

Table of Contents

Introduction

A risk profile is defined as a periodic documentation of the critical risks to an organization to achieving its stated objectives over a specified future time period. Critical risk is defined as the chance of something happening that would have a clear and direct impact on the achievement of Agency objectives.

The primary purpose for an Agency Risk Profile is to assist the Commissioner, Chief Risk Officer and management team in communicating risk-related issues with the Board.

This risk profile was developed with input from eight members of the Risk Management Committee and their selected staff members. Staff was directed to complete individualized components of an online Agency Risk Profile which contained previously identified critical sources of risks to the Agency. For selected risk sources staff was asked to assess and provide:

- The impact to the Agency should these identified risks occur
- The likelihood of these risks occurring
- The strength of controls in place to prevent, or lessen the impact and/or likelihood of the identified risks
- Additional comments regarding the identified risks.

Risk source assessments are intended to focus on critical risks confronting the Agency that may impact the Agency's ability to achieve the goals of its 2016 – 2019 Strategic Plan and/or 2018 Affordable Housing Plan.

Risk sources were assessed using risk impact, likelihood, and assurance; definitions of these terms are contained in Appendix A.

A Risk Level for each critical risk source was determined according to a Risk Assessment Matrix, which is contained in Appendix B.

Agency Risk Profile

The Agency Risk Profile is comprised of an Executive Summary, Aggregate Results Heat Map Current and Previous Years, Risk Profile Matrix and Risk Source Narratives.

Executive Summary

The economy and housing markets continue to improve nationally and in Minnesota. As the Agency embarks on a $1.12 billion annual program plan, the Agency is well positioned to address the growing need for more affordable housing for low- and moderate-income Minnesotans. The Agency's work environment consists of volatile and complex housing and finance markets and numerous legal and regulatory rules, and involves many counterparties. There is widespread recognition that the Agency has continued to evolve as an organization to better meet the growing demand for affordable housing. Past changes to programs, financing strategies, and supporting technology were considered during the development of this Risk Profile, as well as initiatives and tasks that have been identified in the 2016 – 2019 Strategic Plan and the 2018 Affordable Housing Plan. Eleven risk sources were assessed, and none received a Very High risk level ranking. Six risk sources received a High risk level ranking, which is an increase from five for the previous year. Overall, the Agency is well aware of these critical sources of risk and has executed, or is contemplating, mitigation strategies to address them.

Aggregate Results Heat Map

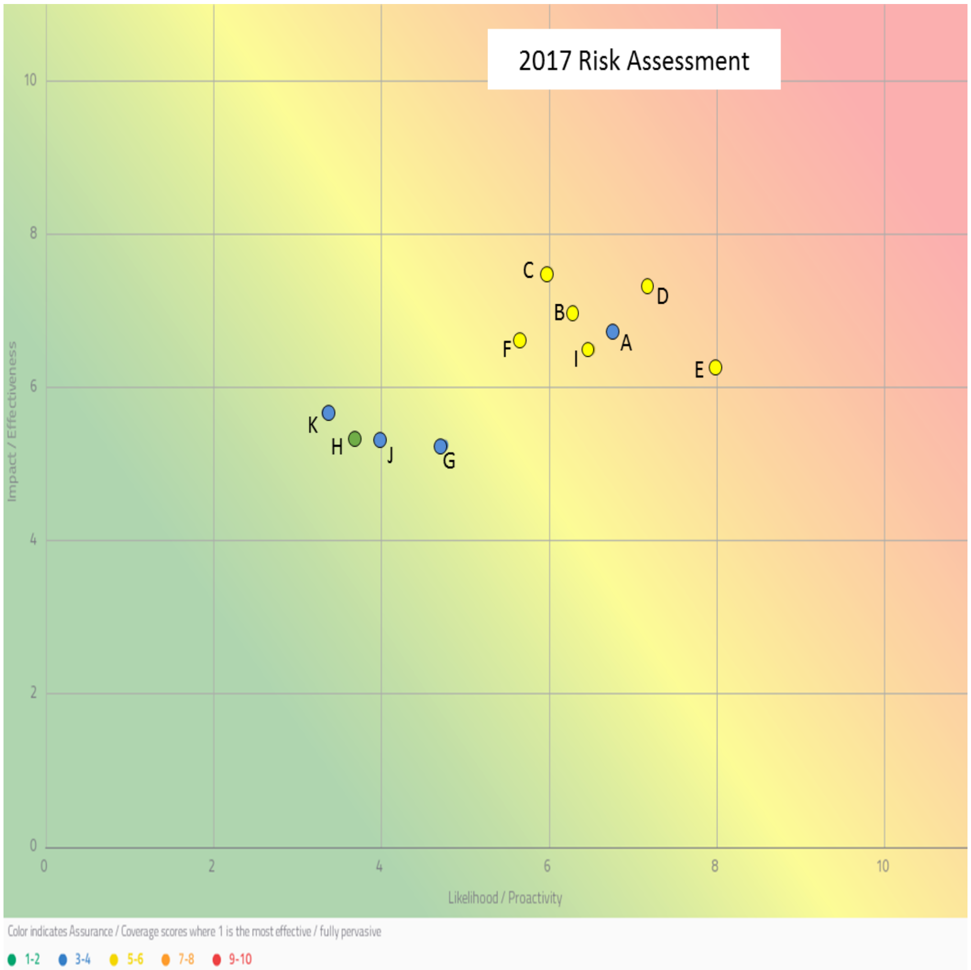
The aggregate results of critical risk source assessments for the current year have been plotted to a heat map graph, shown on the next page.

Heat maps are a graphical representation of data where the individual values contained in a matrix are represented as colors. The heat map is intended to visually convey which risk sources pose the greatest challenges to the achievement of Agency objectives. Generally, assessed sources of risk that are plotted in the upper right quadrant of the grid have a greater impact and a higher likelihood of occurrence. The color of the plotted data point for each risk source indicates the level of assurance staff has in existing controls and mitigation strategies.

An Inherent Index score is calculated by multiplying the assessed impact by the likelihood. The Inherent Index is designed to measure the risk that an activity would pose if no controls or other mitigating factors were in place.

The Residual Index measures the risk that remains after controls and mitigation activities are taken into account. A Residual Index score is calculated by multiplying the assessed impact by likelihood by level of Assurance. Residual Index tiering has been incorporated into the Risk Assessment Matrix (Appendix B) to better delineate risk levels.

Additional information regarding heat maps and the calculation of Inherent and Residual Indexes is contained in Appendix C.



A	Interest Rates
B	Information Technology
C	Bond Markets
D	Counterparties
E	Federal Resources
F	Operational Capacity
G	Compliance
H	Loan Performance
I	State Appropriations
J	Business Continuity
K	Planning and Execution

Risk Profile Matrix

Updates to the Risk Profile Matrix include risks that have been added or removed, trends and previous ratings for comparison.

The Risk Profile has been arranged into a "Top Eleven" format and lists first the higher level critical risk sources as determined by scoring on the Risk Assessment Matrix (Appendix B).

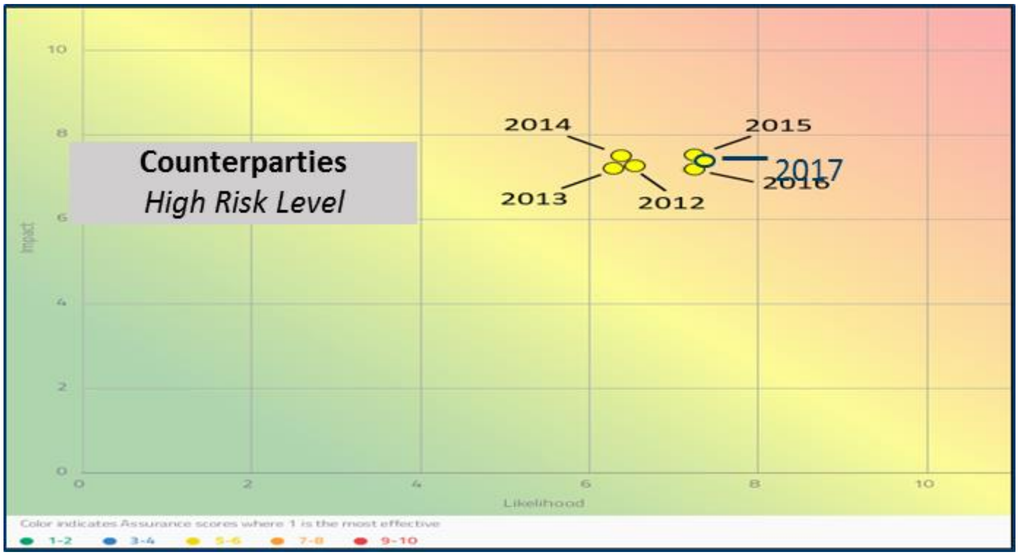
The Risk Profile Matrix lists the 11 previously identified critical sources of risk. The matrix lists the risk sources, from the highest to lowest risk level, as determined by the Residual Index score.

Three critical sources of risk, Counterparties, Bond Markets, and State Appropriations have moderate to slightly higher levels of assessed residual risk in 2017 than in 2016. Additional detail on these and other risk sources is available in the Risk Source Narratives.

		2017 Risk Level		2016 Risk Level		2015 Risk Level		2014 Risk Level		2013 Risk Level		2012 Risk Level		2016-17
		Rank	Residual Index	Rank	Residual Index	Rank	Residual Index	Rank	Residual Index	Rank	Residual Index	Rank	Residual Index	Change
D	Counterparties	1	328	1	314	2	315	3	262	4	237	3	267	Worsened
B	Information Technology	2	264	2	262	3	311	2	294	2	331	1	344	Worsened
A	Interest Rates	3	256	3	256	1	332	1	327	1	337	2	298	No Change
E	Federal Resources	4	253	4	253	6	192	4	239	5	236	5	192	No Change
C	Bond Markets	5	234	6	191	5	215	6	210	3	238	4	238	Worsened
I	State Appropriations	6	219	8	132	8	108	8	117	9	105	7	120	Worsened
F	Operational Capacity	7	179	5	206	4	220	5	227	6	175	6	191	Improved
G	Compliance	8	132	7	151	7	154	7	130	7	118	8	102	Improved
J	Business Continuity	9	88	9	113	9	74	9	77	10	76	10	87	Improved
K	Planning and Execution	10	69	11	53	11	60	11	64	11	68	11	49	Worsened
H	Loan Performance	11	51	10	71	10	72	10	72	8	109	9	96	Improved

Risk Source Narratives

The Risk Source Narratives describe the source of each risk, the objectives impacted by that risk and any mitigating actions that are in place or planned.



	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Serious (7.5)	About as Likely as Not (6.33)	Could Be Improved (5.33)	High (48)	High (262)
2015	Serious (7.5)	Likely (7.17)	Could Be Improved (5.5)	High (55)	High (315)
2016	Serious (7.17)	Likely (7.17)	Could Be Improved (5.5)	High (53)	High (314)
2017	Serious (7.33)	Likely (7.17)	Could Be Improved (5.7)	High (54)	High (328)

Counterparties are assessed as a high risk source, which is unchanged from the previous assessment.
A slight increase in the assessed impact drove the residual index up from 314 to 328, which is the highest residual risk score for 2017. The relatively unchanged residual index is primarily a result of continued lack of competition for master servicing, greater competition for Single Family loan originations, a limited number of loan and grant administrators in select areas of Minnesota, weak operational capacity for some loan and grant administrators, and areas of poor vendor performance. Counterparties are vital to the Agency accomplishing its strategic and affordable housing plans. Counterparties include Government-Sponsored Enterprises (GSEs) including Fannie Mae and Freddie Mac, other Minnesota state agencies, Tribal Governments, credit rating agencies, capital markets participants, lenders, guaranteed investment contract (GIC) providers, brokers, realtors, grantees, sub-grantees, vendors and borrowers. The likelihood of disruptions to Agency activities because of counterparty actions is recognized as a concern. There is continuing uncertainty around the future role and structure of GSEs. Agency relationships with lenders impact its ability to conduct and attract new businesses. Complex policies, processes and deadlines in working with state contracted vendors increase costs. Nonprofit and government program administrators continue to find it difficult to raise capital to fund operations and services.

Effectiveness of Control / Mitigation Activities:

Know your customer/counterparty remains a critical aspect of overall Minnesota Housing's risk management. Counterparty risk is addressed on an ongoing basis through strengthening relationships with sole source providers and developing alternative processes when necessary. The Agency can comment on the future role and structure of GSEs through its membership in the National Council of State Housing Agencies (NCSHA); however, it cannot control the outcome. The Agency continues to work with lenders and other key counterparties to better understand process, program and technological needs. The Agency provides technical assistance to develop operational capacity for identified loan and grant administrators. Minnesota Housing has hired a Consultant who has produced a study which identifies possible paths for master servicing if US Bank were to exit that business. Attention to managing overall Agency counterparty exposures is evolving but more embedded in standard business practices and protocols.

	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Serious (7.43)	Likely (7.14)	Could Be Improved (5.29)	High (53)	High (294)
2015	Serious (7.43)	Likely (7.43)	Could Be Improved (5.43)	High (55)	High (311)
2016	Serious (7.14)	Likely (6.43)	Could Be Improved (5.14)	High (47)	High (262)
2017	Serious (7)	Likely (6.29)	Could Be Improved (5.29)	High (46)	High (264)

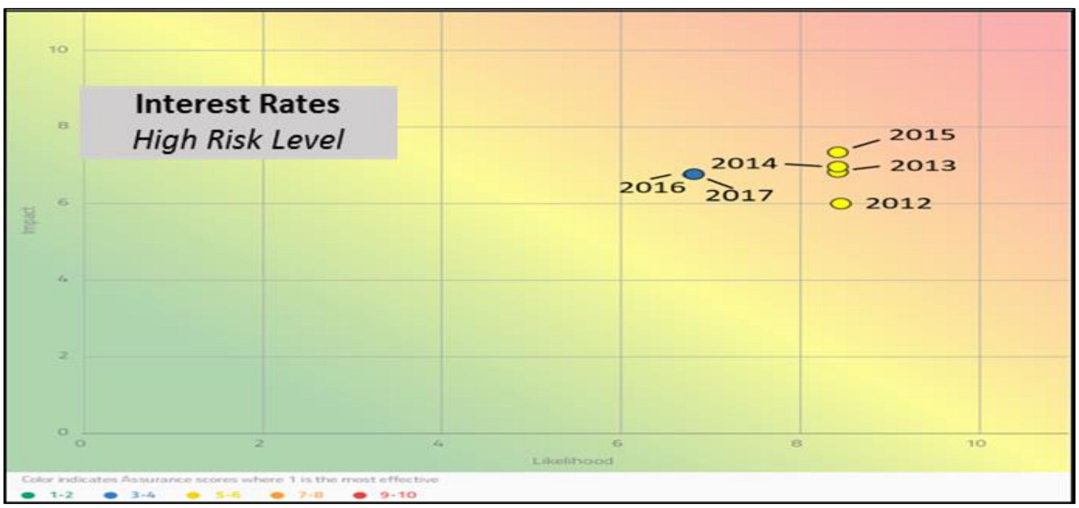
Information Technology (IT) is assessed as a high risk source, which is unchanged from the previous assessment. A slight decrease in assessed impact and decrease in the assessed likelihood with a slight deterioration in the assessed level of assurance drove the residual index up from 262 to 264 which is the second highest residual risk rating for 2017. Information Technology has always been ranked as the first or second highest residual risk since the inception of the Agency Risk Profile; however this year's residual index remains in the lowest for IT since the inception of the Agency Risk Profile. The Agency's work environment consists of volatile and complex housing and finance markets and numerous legal and regulatory rules, and involves many counterparties. Each aspect of this environment requires information technology systems to make them work effectively. Systems in place today have been effective and have passed risk, audit and compliance standards tested in the annual financial audit. The need to adapt quickly, increasing compliance requirements, and sophistication in the type of funding sources used to fund Agency programs underscore the need for adequate technology to access potential new sources of capital while lessening the likelihood of compliance failures. Multifamily Remodel, Multifamily Loan Servicing Software, Single Family Loan Origination System, Business Intelligence tools, Customer Relationship Management, Enterprise Content Management are major projects with significant technological components currently underway. There is increasing confidence in the process to identify, request, explore, approve and track new technology projects; however, high levels of risk to implementing efficient and effective IT systems remain. Identified risks include:

- Business line and Business Technology Support (BTS) personnel must develop deeper understanding of the business requirements to determine the most effective technology solutions.
- Communications between business line and BTS personnel must be enhanced to implement the most effective technology solutions.

- Strong project management practices and realistic timelines are needed to successfully implement technology solutions.
- Adequate staff resources both in BTS and the business lines are needed to support Agency information technology systems projects.
- Current State of Minnesota contracting procedures make it difficult to procure needed software or services on a timely basis.
- Agency-wide initiatives compete for IT resources which impacts project delivery and results in continued unmet technology needs.

There is a visible senior leadership for technology and business process improvements and increased staff communication regarding information technology systems projects.

Effectiveness of Control / Mitigation Activities:
In recent years, the Agency has increased both its BTS staffing and operations budget and has adopted a process to identify, request, explore, approve and track new technology projects. The Agency has a Continuity of Operations Plan and an off-site "hot" site for its technology operations. The Agency has a Business Technology Investment Committee (BTIC) comprised of the Commissioner, Deputy Commissioner, Chief Financial Officer (CFO) and Chief Information Officer (CIO) to prioritize and coordinate technology investments. In addition, the Operations Committee, which is comprised of the Deputy Commissioner, CIO and Director of Operations, is tasked to resolve administrative and operational issues.



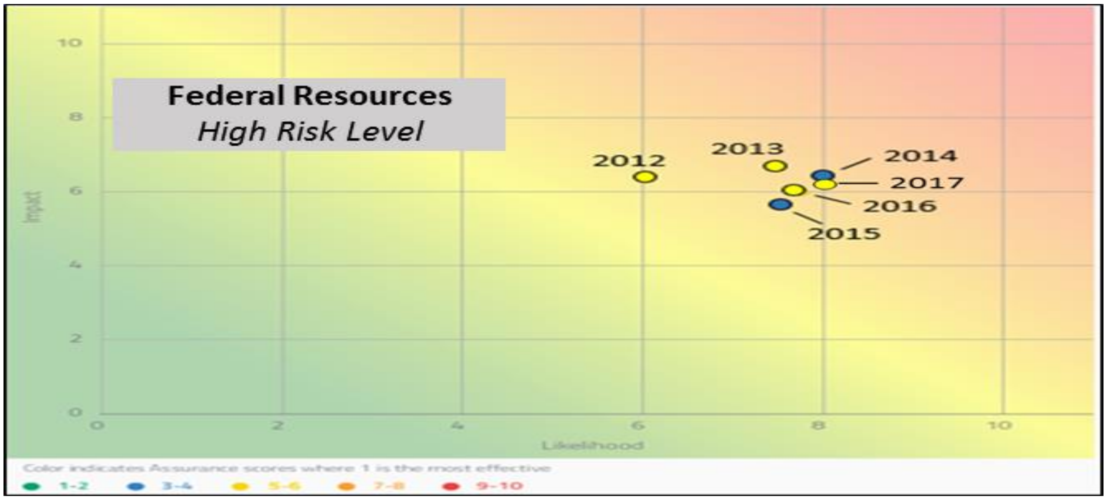
	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Serious (6.67)	Likely (8.33)	Could Be Improved (4.67)	High (58)	High (327)
2015	Serious (7.00)	Likely (8.33)	Could Be Improved (4.67)	High (60)	High (332)
2016	Serious (6.75)	Likely (6.75)	Good (4.25)	High (47)	High (256)
2017	Serious (6.75)	Likely (6.75)	Good (4.25)	High (47)	High (256)

Overall, interest rates were assessed as a high risk source, which is unchanged from the previous assessment. Fluctuations in the interest rate can affect an individual project, the rate has not seen any significant change but pressure to raise rates in 2018 will be present. Interest rate risk management is a key activity at Minnesota Housing because the Agency's large portfolio of assets is the primary revenue-generation tool. Continued volatility of interest rates is likely in the current political and economic environment. Interest rate volatility is out of the Agency's control; however, depending on the interest rate environment, the Agency encounters both challenges and opportunities. Interest rates in the general economy can at any time rise (high rate environment) or fall (low rate environment). Each scenario presents unique challenges to the Agency's business model. The Agency is currently in a low rate environment. A low interest rate environment, which benefits borrowers, is stressful to the Agency's financial results. Low rate environments generally cause high rates of mortgage loan prepayments, challenging the Agency to produce enough new lending to repopulate the balance sheet with assets at acceptable yield levels. In this environment, Agency interest rates are often very similar to rates in the conventional market, so loan production is maintained partially with use of scarce mortgage enhancements (i.e., deferred loans and grants). Assets held as cash in low rate environments produce diminished investment income, including periods of negative arbitrage when prepayments received are temporarily invested below bond yield until bonds can be repaid with the prepayments. Low rates also diminish earnings on committed but undisbursed state appropriations, resulting in less potential for overhead recovery payments to cover actual costs. Short term volatility in interest rates is also a risk because there is a time differential between when the Agency commits to purchase a loan and when the loan is delivered to and financed by the Agency. If interest rates rise dramatically in that time period, the Agency's anticipated profitability can be greatly reduced, eliminated or turned into a loss. While interest rate risks are currently monitored in an effective manner, the increase in packaging loans for sale in the securitization market has increased the volume of loans that are subject to interest rate movements.

Effectiveness of Control / Mitigation Activities:
Several aspects of interest rate management require careful management to affect the desired long-term impacts. These aspects include:

- Maximizing interest rate spread on bonds
- Effective loan pipeline management
  - Strategy to have mortgage pipeline 100% hedged at all times
  - Continue pursuing a best-execution policy that weighs the costs of selling fixed rate or variable rate tax-exempt mortgage revenue bonds compared with selling mortgage-backed securities
  - Setting program interest rates in a market-sensitive manner
  - Loan warehousing
- Effectively place loan production in alternative funding vehicles besides the bond markets: (e.g.,)
  - To Be Announced (TBA) sales of single family loan
  - HUD's Multifamily Accelerated Processing (MAP) program
  - HUD and Treasury Department Federal Financing Bank (FFB) Risk Sharing Initiative

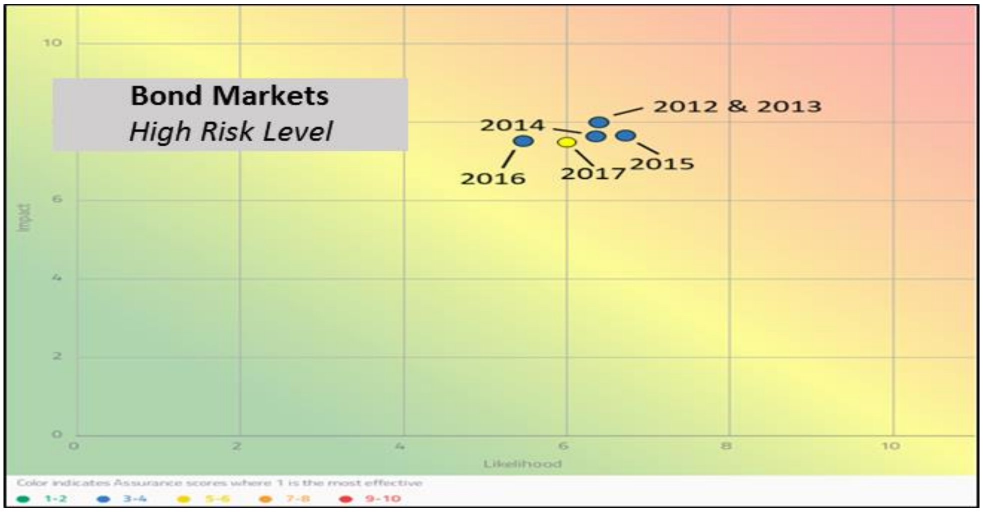
Additionally, technically competent and experienced Agency staff has the ability to take advantage of short-term opportunities in a low or high rate environment while ensuring long-term financial viability due to continuous discipline and sound ethical decision-making skills at all levels of the Agency.



	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2013	Serious (6.50)	Likely (7.5)	Could Be Improved (4.5)	High (49)	High (236)
2014	Serious (6.25)	Likely (8)	Could Be Improved (4.5)	High (50)	High (239)
2015	Moderate (5.5)	Likely (7.75)	Good (4)	High (43)	Moderate (192)
2016	Moderate (6)	Likely (7.75)	Could Be Improved (4.75)	High (46)	High (253)
2017	Moderate (6.25)	Likely (8)	Could Be Improved (4.5)	High (50)	High (253)

Federal Resources are assessed as a high risk source, which is unchanged from the 2016's assessment. The residual index reflects pressures on the availability of tax exempt bonds for housing uses, upcoming changes to the selection approach for Performance Based Contract Administration (PBCA) contracts, and recent tax reform efforts. Because federal funds are a critical source of funding for a number of Agency programs; diminishing federal resources are an Agency-wide concern.

Effectiveness of Control / Mitigation Activities:
The Agency actively participates in federal policy initiatives through its national organization, the National Council of State Housing Agencies (NCSHA), and regularly meets with its congressional delegation to demonstrate the positive impact of programs funded with federal resources, but the complexity of federal policymaking makes it a difficult risk source to mitigate. The Agency focuses compliance efforts on programs with federal funding to ensure that funds are not lost due to non-compliance.



	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Serious (7.33)	About as Likely as Not (6.33)	Good (4)	High (47)	High (210)
2015	Serious (7.33)	About as Likely as Not (6.67)	Good (4)	High (49)	High (215)
2016	Serious (7.5)	About as Likely as Not (5.5)	Good (4)	High (43)	Moderate (191)
2017	Serious (7.5)	About as Likely as Not (6)	Could Be Improved (4.5)	High (46)	High (234)

Bond Markets are assessed as a high risk source, which is an increase from the previous assessment. Assessed likelihood increased, driving the residual index up from 191 to 234. The Agency relies on the capital markets to fund its largest revenue producing programs. As loan originations continue to be very strong, Minnesota Housing continues to access the bond market on a regular basis. Increasing pressures on the availability of tax exempt bond volume cap for single family and multifamily financing is a serious threat to addressing the priorities in the strategic plan. Limited capacity in tax exempt bonding would constrain the number of future developments the Agency would be able to fund.

Effectiveness of Control / Mitigation Activities:
While there is nothing that the Agency can do to mitigate the volatility of the market, there is a technically competent and experienced finance team in place. The Agency can use a tax-exempt mortgage-backed securities monthly-pass through structure or shift to selling off loan production in the To Be Announced (TBA) market without having to sell bonds if that proves to be a more attractive financing alternative. Additionally, the Agency employs a loan financing strategy that utilizes the tax-exempt sales of single mortgage-backed securities to enhance a flexible and nimble response to changing market conditions. The Finance Team has scheduled its annual finance team planning meetings to be held in February.

	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Moderate (6)	About as Likely as Not (5.5)	Good (3.5)	High (33)	Moderate (117)
2015	Serious (7)	Unlikely (4.5)	Good (3.5)	Moderate (30)	Moderate (108)
2016	Serious (7)	About as Likely as Not (5.5)	Good (3.5)	Moderate (38)	Moderate (132)
2017	Serious (6.5)	About as Likely as Not (6.5)	Could Be Improved (5)	High (43)	High (219)

State Appropriations are assessed as a high risk source, which is an increase from the previous assessment. An increase in the assessed likelihood and a deterioration in assurance drove the residual index up from 132 to 219. State resources are critically important for funding certain homelessness programs including the Housing Trust Fund (HTF) which provides on-going rental assistance and Family Homelessness Prevention and Assistance. State appropriations, including the Challenge program, are also are a critical source of gap financing for the agency. The state is projected to have a budget surplus in the 2018-2019 budget cycle and currently has a reasonable budget reserve. Current state appropriations are just over $100 million for the current biennium.

Effectiveness of Control / Mitigation Activities:
The Agency has an Assistant Commissioner for Policy and Community Development and Legislative Director, who lead efforts at the state legislature. Agency programs are broadly supported by external advocacy groups, which may be helpful in mitigating potential cuts, but competing priorities from other parts of the state budget are always a threat.

	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Serious (6.88)	About as Likely as Not (6)	Could Be Improved (5)	High (41)	High (227)
2015	Serious (6.63)	About as Likely as Not (6)	Could Be Improved (4.88)	High (41)	High (220)
2016	Serious (6.75)	About as Likely as Not (5.63)	Could Be Improved (4.63)	High (39)	High (206)
2017	Serious (6.63)	About as Likely as Not (5.63)	Could Be Improved (4.5)	Moderate (37)	Moderate (179)

Operational Capacity is assessed as a moderate risk source, which is a decrease from the previous assessment. A slight decrease in the assessed impact, combined with a slight improvement in assurance, drove the residual index down from 206 to 179. Having a strong organizational capacity is fundamental to the Agency's ability to implement effective strategies and fulfill its mission. Up to twenty-five percent of Agency employees will be eligible to retire in the next five years. The business is becoming more and more complex, leading to the possibility that positions will need to be upgraded to attract qualified replacements. State salaries for some managerial and professional positions are considered lower than the market and recruiting a pool of qualified replacements is important. In many areas of the Agency, staffing levels remain a concern due to high volume of work and significant process and systems changes. Certain key positions are reported to be overworked and sometimes struggle to keep up with all of the demands and priorities.

Effectiveness of Control / Mitigation Activities:

Strengthening organizational capacity is a core activity of the 2016 – 2019 Strategic Plan, and these efforts will focus on attracting, developing, and retaining a diverse workforce and improving business processes and supporting technology. The Agency assessed the training and development needs of all staff, selected training programs, and executed contracts for their delivery. The Agency rolled out the fourth year of the mentor program; introducing job shadowing and individual development plans. An organizational assessment of cultural competency was completed. All employees have individual work plans and all required performance reviews are completed annually. The Annual Employee Engagement Survey will be conducted again in 2017 with results used to identify and secure professional development opportunities and other Agency improvements.

	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Moderate (5.29)	Unlikely (4.71)	Good (4.43)	Moderate (26)	Moderate (130)
2015	Moderate (5.57)	About as Likely as Not (5)	Good (4.43)	Moderate (31)	Moderate (154)
2016	Moderate (5.5)	About as Likely as Not (5)	Good (4.25)	Moderate (30)	Moderate (151)
2017	Moderate (5.25)	Unlikely (4.75)	Good (4.25)	Moderate (27)	Moderate (132)

Compliance is assessed as a moderate risk source, which is unchanged from the previous assessment. A slight decrease in the assessed impact drove the residual index down from 151 to 132. There is an Agency-wide focus on increased compliance requirements related to the Consumer Financial Protection Bureau implementing TILA (Truth in Lending Act) – RESPA (Real Estate Settlement Procedures Act) Integrated Disclosure Rule, also known as TRID, and the complexity of the published Final Rule amending the HOME Investment Partnerships (HOME) Program regulations, as well as new programs such as Section 811 Demonstration and National Housing Trust Fund. Each funding source and program (old, existing, new) involves compliance requirements; some can be very complex and cumbersome. The Agency has staff that understands the compliance requirements, but there is some turnover and new and changing requirements are a reality. The business systems to help track and report on compliance are varied, some are not well integrated and are outdated, but recent audit results have shown strong performance on compliance. In 2015,a complaint was filed with the U.S. Department of Housing and Urban Development (HUD) claiming that the State, Minnesota Housing and the Metropolitan Council have violated the Fair Housing Act. The complaint was signed by the cities of Brooklyn Park, Brooklyn Center, and Richfield, and the Metropolitan Interfaith Council on Affordable Housing (MICAH). The complaint contends that the State, Minnesota Housing and the Metropolitan Council have failed to affirmatively further fair housing across the Twin Cities region. Minnesota Housing has responded to the complaint and is awaiting a determination from HUD.

Effectiveness of Control / Mitigation Activities:
The Agency has identified several compliance related projects as part of its Vision for Technology Support. The Property Online Reporting Tool (PORT) phase one is complete and phase two is underway. The Agency completed updating all required record retention schedules. Related to Data Practices, the Agency designated a Responsible Authority, Data Practices Compliance Officer, and Division designees, updated the Data Practices Manual, and provided training to staff. Because there is a consistent negative financial risk to the Agency for federal non-compliance, staff has been allocated to provide the appropriate level of compliance. The Agency is engaged in a comprehensive grants management policy compliance effort. McGladrey issued an Unqualified Opinion regarding the Agency's 2017 financial statements.

	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Serious (6.33)	Unlikely (4)	Good (3)	Moderate (26)	Low (77)
2015	Serious (6.33)	Unlikely (4)	Good (2.67)	Moderate (26)	Low (74)
2016	Serious (6.33)	Unlikely (4.33)	Good (3.67)	Moderate (29)	Moderate (113)
2017	Moderate (5.33)	Unlikely (4)	Good (3.67)	Moderate (23)	Low (88)

Business Continuity is assessed as a low risk source, which is a decrease from the previous assessment. Business Continuity is defined in this context as the activities performed by the Agency to ensure that critical business functions will be available to customers, suppliers, regulators, and other entities that must have access to those functions. The Agency has a Continuity of Operations Plan and a designated Continuity of Operations Plan (COOP) Manager.

Effectiveness of Control / Mitigation Activities:
The Agency tests the Disaster Recovery plan every year and business continuity is a component of that event. As part of new office space design, a new data center was developed and backup systems tested. The Agency updates its Employee Policies and Procedures Manual as needed. The Agency information technology and application system(s) audit for the fiscal year ending June 30, 2017 were tested as part of the financial statement audit and were determined to be effective. Record retention schedules for the entire agency are current.

	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Moderate (5.2)	Unlikely (3.6)	Good (3.00)	Moderate (21)	Low (64)
2015	Moderate (5)	Unlikely (3.4)	Good (3.00)	Moderate (19)	Low (60)
2016	Moderate (4.83)	Unlikely (3.17)	Good (3.17)	Moderate (17)	Low (53)
2017	Moderate (5.67)	Unlikely (3.33)	Good (3.5)	Moderate (20)	Low (69)

Planning and Execution is assessed as a low risk source, which is unchanged from the previous assessment. Effective planning is vital to any organization, especially one that makes significant financial investments in various programmatic areas. The Agency has a Strategy Management Framework that includes a "family" of planning and reporting documents and processes. The "head of the family" is used in the 2016-2019 Strategic Plan, which was adopted by the Board in July 2015. The plan was developed based on robust research and analysis of housing and finance market data, and an extensive external community and internal staff engagement. It includes the Agency's vision, mission, priorities and strategies. Every year, Agency staff develops an Affordable Housing Plan, the one-year business plan that implements the Strategic Plan. The 2018 Affordable Housing Plan was adopted by the board on September 2017. The Affordable Housing Plan includes funding by program area and estimated number of households assisted and units produced, as well as other work plan highlights. Divisional work plans are based on the Affordable Housing Plan and then individual work plans are developed to support divisional work plans. All plans are aligned with the Strategic Plan. Each plan has one or more corresponding reporting documents containing a variety of performance measures - Results Management Report, Super Report, Annual Assessment and Report, Quarterly Division Reports, Individual Performance Appraisals.

Effectiveness of Control / Mitigation Activities:
For the past six years, 100% of the employees' appraisals were completed. Appraisals measure the degree to which individual work plan goals have been accomplished. The Agency has a skilled team responsible for overseeing all of the Agency's planning, research and evaluation. Planning is well supported by the Senior Leadership Team and is a highly visible part of the organization. The Deputy Commissioner continues to represent the Agency on the State's Continuous Improvement Steering Committee, which should provide access to new ideas and resources. No additional mitigation is necessary at this time.

	Impact	Likelihood	Assurance	Inherent Index	Residual Index
2014	Moderate (5.33)	Unlikely (4.33)	Good (3)	Moderate (23)	Low (72)
2015	Moderate (5.33)	Unlikely (4.33)	Good (3)	Moderate (23)	Low (72)
2016	Moderate (5.67)	Unlikely (4)	Good (3)	Moderate (23)	Low (71)
2017	Moderate (5.33)	Unlikely (3.67)	Effective (2.67)	Moderate (20)	Low (51)

Loan Performance is assessed as a low risk source, which is unchanged from the previously assessed low risk level. The Agency is at risk of financial loss in the event of a severe downturn in the real estate markets. Losses slowed down as home values stabilized and are increasing; the whole loan portfolio continues to pay off and is being replaced with Mortgage Backed Securities, reducing the risk of losses from foreclosures. Also, new multifamily loan production is partially insured under the HUD Risk Sharing program, and the older uninsured loans are gradually paying off. The Agency is now an approved Multifamily Accelerated Processing (MAP) lender which provides an additional outlet to securitize and sell multifamily loans.

Effectiveness of Control / Mitigation Activities:
Effective asset monitoring policies and procedures and competent staff are considered effective control activities. Agency staff has worked closely with loan servicers and has supported a variety of efforts to reduce both loan delinquency losses and loss severities.

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Appendix A

Risk Impact
Assess each risk factor according to the criteria below. Do not grant credit for existing controls or mitigating strategies. Do not consider how often the impact may occur. Instead, rate as if the factor manifests itself without controls one or more times. Only one criterion for an impact level need apply to assess at that level.

9 – 10 Major
- Negative impact on Net Assets – over $250 million
- Catastrophic impact on financial statements (e.g., critical contractual ratios are no longer met)
- Liability threats challenge the going concern status of the Agency
- Long-term impairment of critical functions makes the Agency vulnerable to mission failure
- Non-compliance with Federal / State law, statue, or rule
- Agency's Strategic Plan cannot be achieved
- Agency's Affordable Housing Plan cannot be achieved
- Identified issues are serious variations from the organization's values (e.g., Fraud, Conflict of Interest)
- Process owner has not completed an evaluation of segregation of duties for employees' assigned tasks
- Process generates unusual transactions
- Activities are very complex. Employee training to perform activities is lengthy. Judgment is critical in performance of activities and is mostly principles based.

7 – 8 Serious
- Negative impact on Net Assets – $100 million to $250 million
- Regulatory penalties are required
- Serious liability or lawsuit potential
- Financial ratings drastically revised
- Serious Long-term Agency brand (reputation) impairment
- Significant negative impact on ability to achieve strategic plan
- Significant negative impact on ability to achieve Affordable Housing Plan
- Issues significantly contrary to organizational values
- Process owner has evaluated employees' assigned duties within the process and determined that there are existing concerns related to incompatible duties.
- Process generates estimation transactions.
- Activities are very complex. Employee training to perform activities is lengthy. Judgment required in decision-making is mostly rules based.

5 – 6 Moderate
- Negative impact on Net Assets – $50 to $100 million
- Impaired business functions cause customer service to significantly deteriorate
- Moderate Agency brand (reputation) issues

- Moderate liability (e.g., lawsuits) potential
- Business practices significantly inconsistent with industry standards
- Moderate negative impact on the Agency's strategic plan
- Moderate negative impact on the Agency's Affordable Housing Plan
- Identified issues are inconsistent with the organization's values
- An evaluation of segregation of duties for employees' assigned tasks has not be completed
- Process generates non-routine transactions.
- Moderate activity complexities; Moderate individual judgment; few aspects of operation covered by established practices. Employee training to perform activities is lengthy.

3 – 4 Minor

- Negative impact on Net Assets – $10 to $50 million
- Inconvenient impact on critical business functions
- Compliance issues should be easily resolved with only minor financial consequences
- Small and temporary impact to Agency brand (reputation)
- Strategic plan will not be impaired or impact will not require altering the plan
- Affordable Housing Plan will not be impaired or impact will not require altering the plan
- An evaluation of segregation of duties shows no issues and is sufficiently documented and verifiable
- Process generates routine transactions that do not relate to the company's primary business activities
- Activities are low complexity. Some individual judgment required.

1 – 2 Insignificant

- Negative impact on net income – less than $10 million
- Critical functions will not be impaired
- No liability or threats to Agency brand (reputation)
- A segregation of duties evaluation has determined that there are no existing concerns within the past 12 months. The evaluation is sufficiently documented and verifiable.
- Process generates routine transactions related to the company's primary business activities.
- Activities are relatively straight forward. Employee training for activity performance is very minimal.

Likelihood

Assess the likelihood that the impact of the risk factor occurs. Do not consider the mitigation effect of existing controls.

9 – 10 Major Highly Likely

At least 90% probability - Expected to occur in most circumstances
Within the past 12 months, the following conditions have existed within the process:

- Task errors not predictable, limits not established
- Major activity bottlenecks, impact on upstream or downstream functions
- Staff has little or no experience, skills, training, and certifications
- Major transactional changes (e.g., major volume spikes, contractual changes)

- Changes in key personnel or staff

7 - 8 Likely
At least 66% but less than 90% probability - Will probably occur in most circumstances
Within the past 12 months, the following conditions or indicators have existed within the process:

- Task errors often in excess of approved limits
- Activity bottlenecks, impact on upstream or downstream functions
- Staff has insufficient skills, training, and certifications
- Significant transactional changes (e.g., major volume spikes, contractual changes)
- Changes in personnel or staff

5 - 6 About as likely as not
At least 33% but less than 66% probability - Might occur at some time
Within the past 12 months, the following conditions or indicators have existed within the process:

- Task errors occasionally in excess of approved limits
- Shortages in staffing levels
- Thinly experienced and skilled staff
- Moderate transactional changes (e.g., volume, nature)
- Some changes in key personnel or staff

3 - 4 Unlikely
At least 10% but less than 33% probability - Could occur at some time
Within the past 12 months, the following conditions or indicators have existed within the process:

- Task errors within approved limits
- Reasonable staffing levels;
- Adequately experienced and skilled staff
- Minimal transactional changes (e.g., volume, nature)
- Minimal changes in key personnel or staff

1 - 2 Rarely if ever
Less than 10% probability - May only occur in exceptional circumstances
Within the past 12 months, the following conditions or indicators have existed within the process:

- Task errors within approved limits
- Appropriate staffing levels
- Highly experienced and skilled staff
- No change in volume and nature of transactions
- No change in key personnel or staff who perform or monitor controls

Assurance (Effectiveness of Mitigation Activities)
Assess the effectiveness of existing procedures, mitigating strategies and overall Agency-wide controls, regardless of which business area performs activities (i.e., activities do not have to be performed by areas or employees reporting to you). Mitigation or controls can be written policies and procedures, fraud risk assessments, control automation, control self-assessments, standard management reporting, etc. Assess controls that mitigate the selected risks based on criteria below.

Tip: You may conclude that you rely on activities performed by other business areas to mitigate risks in your business area. If this is the case, you may assess controls provided by other business areas as you understand them, or you may request other business areas to assess control assurance from their base of knowledge. Regardless of your approach, be sure to document your reasoning.

9 - 10 Ineffective
Control effectiveness is not driven by the organization, but is solely dependent on each individual's background and standards.

Within the past 12 months, the following indicators have existed within the process:
- Ineffective and fragmented controls
- Undocumented procedures, mitigating strategies, entity-wide controls
- Inappropriate or no guidance from "tone at the top" (control environment)
- General inability of key personnel or staff to design and execute effective, cohesive mitigating activities

Within the past 12 months, the following conditions have existed within the process:
- No written guidance for performing tasks
- Key controls that mitigate the risks are mostly manual
- No participation in a control self-assessment program

7 – 8 Poor
Organizational values and behavior expectations are not well defined or consistently understood beyond management.

Within the past 12 months, the following indicators have existed within the process:
- Controls are documented but not performed consistently
- Controls are only partially effective, and the area copes as best they can
- No documented accountability
- Clear evidence of ongoing internal conflicts in the area
- Ineffective or no internal monitoring of controls

Within the past 12 months, the following conditions have existed within the process:
- Some written task guidance in various forms(e.g., personal notes), but may not immediately be available to auditors due to inconsistent format and / or unapproved status
- Key controls that mitigate the risks are mostly manual and hybrid
- Limited participation in a control self-assessment program

5 – 6 Could be improved

Comprehensive policy statements on organizational values and behavior expectations are published to all internal and external stakeholders.

Within the past 12 months, the following indicators have existed within the process:

- Compliance with written policies and procedures at all levels is accepted as the norm
- Controls documented and generally performed, but are not sufficiently responsive to operational changes
- Internal monitoring exists but significant deficiencies in effectiveness were observed
- Some written procedures and standards exist, but may not be sufficiently clear or comprehensive
- Accountability is not enforced

Within the past 12 months, the following conditions have existed within the process:

- Written task guidance for important aspects; immediately available to auditors upon request
- Key controls that mitigate the risks are a combination of automated, hybrid and manual
- Full participation in a control self-assessment program

3 – 4 Good

Cultural norms ensure compliance with organizational values and policies at all levels. Employees believe that 'no one is above the law' because Management's "tone at the top" demonstrates they embrace organizational values in their daily actions.

Within the past 12 months, the following indicators have existed within the process:

- Organizational values and policies require both short- , mid- and long-term benefit
- Formalized processes exist to ensure that organizational values and policies remain the norm
- Controls are effective, documented and followed on most occasions
- Clear ownership of control responsibility and role accountability
- Controls are responsive to operational changes
- Technically competent and experienced staff with some turnover
- No significant deficiencies observed in internal monitoring
- Management participates in control self-assessment activity or controls have been reviewed by groups independent of management (e.g., internal audit) in the past three years

Within the past 12 months, the following conditions have existed within the process:

- External audit has reviewed controls within the past 2 – 3 years with satisfactory results
- Key controls that mitigate the risks are primarily automated and hybrid
- Full participation in a control self-assessment program
- Written task guidance is comprehensive, including (i) how and when to perform tasks; (ii) what tasks are supposed to achieve; (iii) how to handle exceptions; (iv) how tasks affect the process; and (v) how tasks affect upstream and downstream processes

1 – 2 Effective

Board, management and employees alike demonstrate through their actions that behavior outside of organizational values and policies is unacceptable.

In the past 12 months, the following indicators have existed within the process:

- Accountability at all levels is culturally driven
- Embedded ability to take advantage of short-term opportunities while ensuring long-term viability due to continuous discipline and sound ethical decision-making skills at all levels
- Effective, documented controls are in place
- Technically competent and experienced staff with minimal turnover
- Highly effective management review takes place
- No deficiencies observed in control environment (e.g., procedure manual, controls well documented, clear standards and trending for control exceptions)
- Management participates in control self-assessment activity or controls have been reviewed by groups independent of management in the past two years

Within the past 12 months, the following conditions have existed within the process:

- External audit has reviewed controls within the past year with satisfactory results
- Key controls that mitigate the risks are primarily automated and hybrid
- Full participation in a control self-assessment program
- Written task guidance is comprehensive, including (i) how and when to perform tasks; (ii) what tasks are supposed to achieve; (iii) how to handle exceptions; (iv) how tasks affect the process; and (v) how tasks affect upstream and downstream processes

Appendix B

Risk Assessment Matrix

Section A: Inherent Risk Score Table

Risk Source Description: ______		*Likelihood*				
		1 - 2 Rarely if ever May occur only in exceptional circumstances	3 -4 Unlikely Could occur at some time	5 - 6 About as likely as not Might occur at some time	7 - 8 Likely Will probably occur in most circumstances	9 - 10 Major Highly Likely Expected to occur in most circumstances
Impact	9 - 10 Major Would stop achievement of goals and objectives	Moderate	High	High	Very High	Very High
	7 - 8 Serious Would threaten goals and objectives; requires close management	Moderate	Moderate	High	High	Very High
	5 - 6 Moderate Would necessitate adjustment to the overall function and require corrective action. May have a negative impact	Low	Moderate	High	High	High
	3 - 4 Minor Would threaten an element of the function. May cause small delays or have a minor impact on quality	Low	Low	Moderate	Moderate	High
	1 - 2 Insignificant Impact on function, or its objectives is negligible. Routine procedures would be sufficient to deal with the consequences	Low	Low	Moderate	Moderate	High

Section B: Assessed Assurance (Effectiveness of control / mitigation activities)				
1 - 2 Effective	3 - 4 Good	5 -6 Could be improved	7 - 8 Poor	9 - 10 Ineffective

Section C: Residual Risk Score Table		
Risk Level	**Residual Index Score**	**Definition**
Very High	Above 350	Would prevent achievement of objectives, cause unacceptable cost overruns or schedule delays and requires close Executive attention
High	201 to 350	Substantial delays to project schedule, significant impact on technical performance or cost, and requires close management attention
Moderate	101 to 200	Requires identification and control of all contributing factors by monitoring conditions, and reassessment of program / project milestones
Low	100 and below	Normal control and monitoring measures sufficient

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Appendix C

Assessed impact is on the y axis, likelihood is the x axis. Each critical risk has a data point associated with its assessed impact and likelihood. Additionally, each critical risk data point is color coded to reflect the level of assessed assurance *(Figure 1)*.

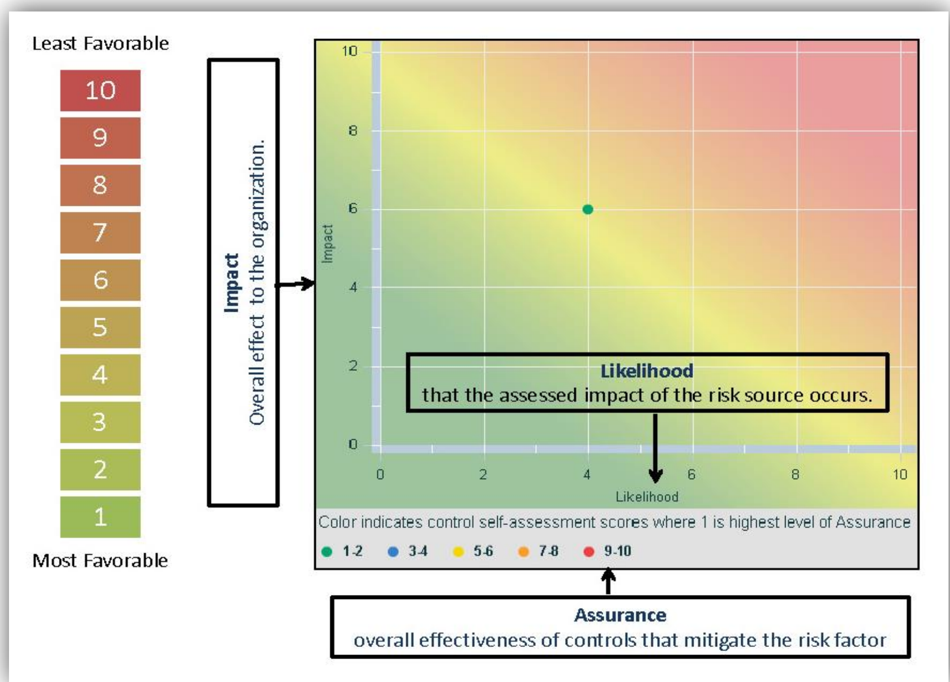

Figure 1

A general heat map overview example, with the risk source Compliance, is provided to demonstrate risk source placement within a grid and formulas for calculating inherent and residual indexes *(Figure 2)*.

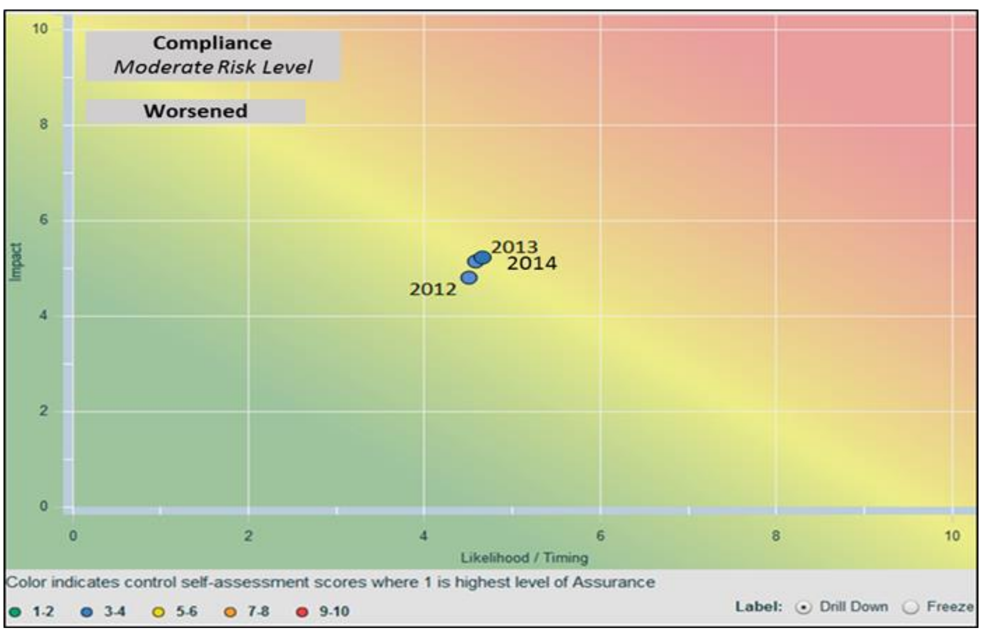

Figure 2

Inherent Index is calculated by multiplying an individual Impact score by an individual Likelihood score to produce an individual Inherent Index score. All individual Inherent Index scores are averaged to produce an Inherent Index score for each Risk Source. Compliance was assessed 7 times and the average of the individual Inherent Index scores is 26, which is listed as the Average in the Inherent Index column of Table 1.

Table 1:

Risk Source - Compliance	Impact	Likelihood	Inherent Index	Assurance	Residual Index
Risk Profile - 1	4	3	12	3	36
Risk Profile - 2	6	5	30	4	120
Risk Profile - 3	7	8	56	6	336
Risk Profile - 4	6	6	36	6	216
Risk Profile - 5	5	3	15	4	60
Risk Profile - 6	5	4	20	4	80
Risk Profile - 7	4	4	16	4	64
Average	**5.29**	**4.71**	**26**	**4.33**	**130**

The Residual Index measures the risk that remains after controls, mitigation activities, are taken into account. Residual index is calculated by multiplying an individual Inherent Index score by an individual Assurance score to produce an individual Residual Index score. All individual Residual Index scores are averaged to produce a Residual Index score for each Risk Source. Compliance was assessed 7 times and the average of the individual Residual Index scores is 130, which is listed as the Average in the Residual Index column of Table 1.

Residual Index tiering has been incorporated into the Risk Assessment Matrix to better delineate risk levels.

MINNESOTA HOUSING

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MINNESOTA HOUSING

Board Agenda Item: 8.C
Date: 1/25/2018

Item: 2018 Key Trends in Housing

Staff Contact(s):
Primary Contact, 651.296.0763, john.patterson@state.mn.us

Request Type:

☐ Approval	☒ No Action Needed
☐ Motion	☒ Discussion
☐ Resolution	☐ Information

Summary of Request:
Attached for your review and discussion is a chart book outlining key trends in housing. We prepare this document each year as part of the process for developing the Affordable Housing Plan. This year, we prepared it early to provide the Governor's Housing Task Force with background material.

Fiscal Impact:
None.

Meeting Agency Priorities:
☒ Address Specific and Critical Local Housing Needs
☒ Finance Housing Responsive to Minnesota's Changing Demographics
☒ Preserve Housing with Federal Project-Based Rent Assistance
☒ Prevent and End Homelessness
☒ Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

Attachment(s):
- Key Trends in Housing

MINNESOTA HOUSING

Key Trends in Housing

January 2018

This document is a chart book that highlights key housing themes and trends in Minnesota and includes some explanatory comments.

As a preview, there are ten key themes and trends.

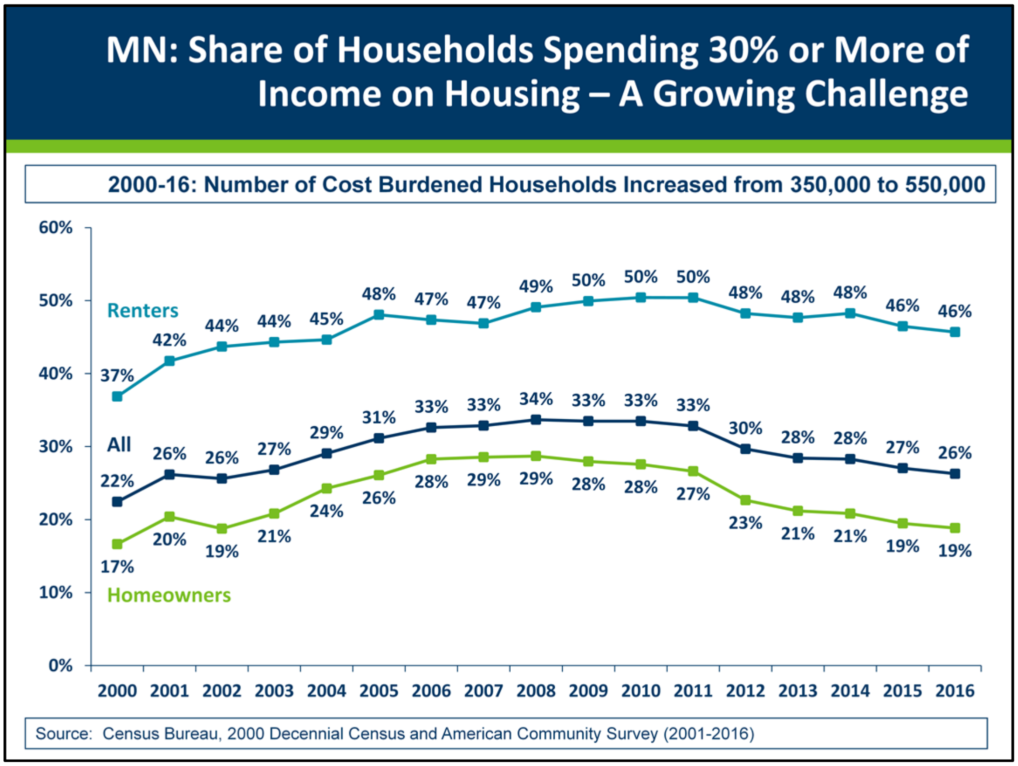
Key Themes and Trends (continued)

6. Minnesota is Becoming More Diverse, and Disparities in Homeownership are Significant
7. The Aging Baby Boom Generation will Create New Housing Needs and Challenges
8. Minnesota Has A Large Stock of Affordable Rental Housing that Needs to be Preserved
9. Many Minnesotans Struggle with Housing Stability, Most Notably People Experiencing Homelessness
10. Housing Location Matters, Providing Access to Jobs, Transit, School, Services, and other Amenities

MINNESOTA HOUSING

Theme/Trend #1

Minnesota Needs More Affordable Housing with a Large Share of Households Cost Burdened by Their Housing



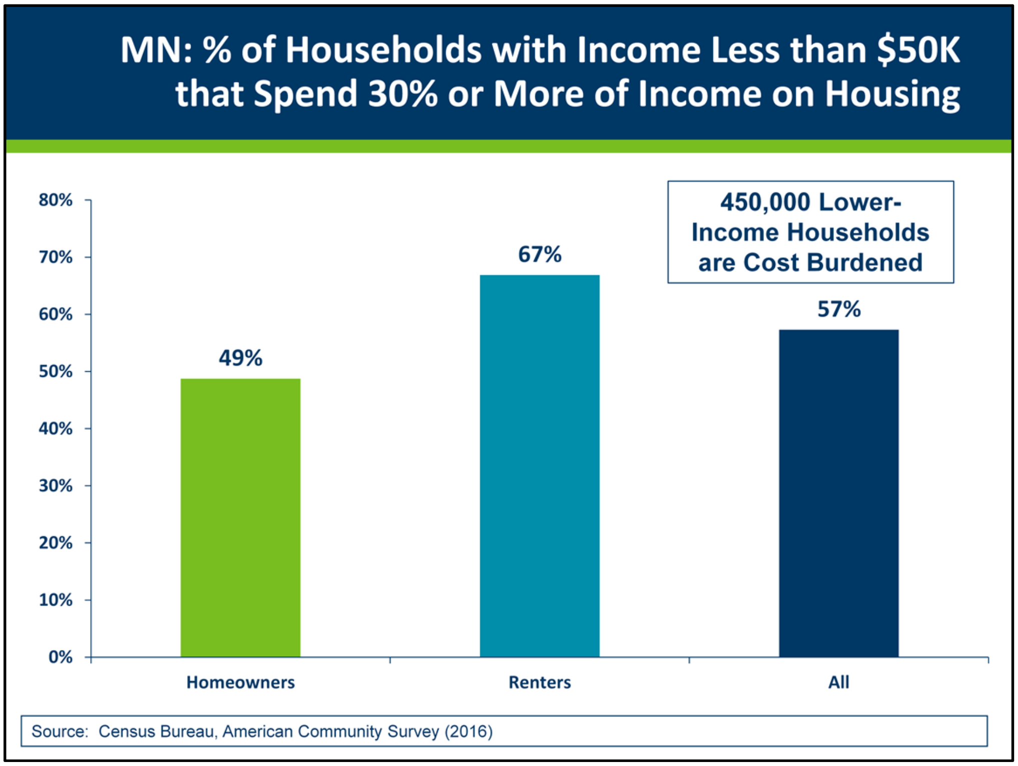
This graph shows the percentage of Minnesota households that were cost burdened over the last 17 years (spending more than 30% of their income on housing). Being cost burdened indicates that a household lacks affordable housing.

Key Points:

- The number of cost burdened households increased from 350,000 in 2000 to over 550,000 in 2016, which is 58% increase. For context, the overall number of households in Minnesota increased by 35% during that period.
- The share of <u>all</u> households that are cost burdened (middle dark blue line) increased from 22% to 26%.
- The share of <u>renters</u> (top light blue line) increased from 37% to 46%.
- The share of <u>homeowners</u> (bottom green line) increased from 17% to 19%.
- After 2011, there was a noticeable improvement. As the following pages will show:
  - Incomes rose in 2012 through 2016.
  - With respect to homeownership, lower home prices and interest rates after the housing crisis helped alleviate the situation significantly. New homeowners benefited from lower home prices, but existing homeowners also had the opportunity to refinance to lower interest rates and reduce their housing payments.

Implications:

- Since 2000, the need for more affordable housing has increased overall.
- The cost-burden situation is more severe for renters.
- Looking forward, there are a few key questions. Will the recent improvement continue? Will incomes for households (particularly lower income) rise with the improving economy? Will incomes keep pace with rising housing costs?



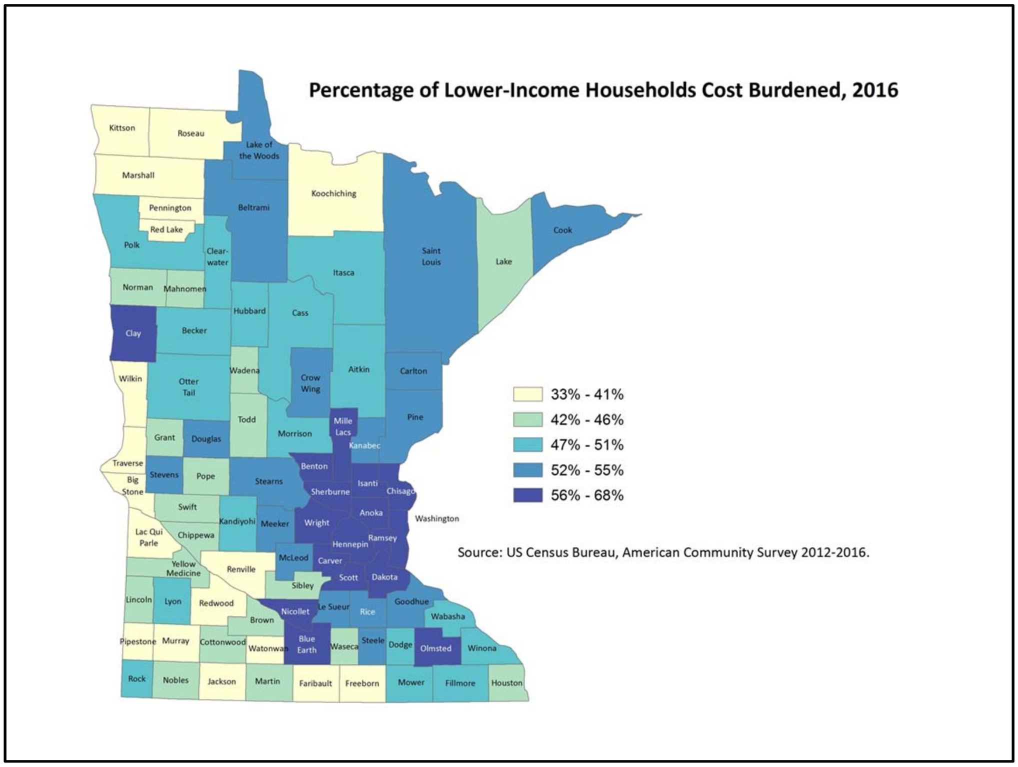
While the previous graph showed the percentage of all households that were cost burdened, this graph shows the percentage of lower-income households that were cost burdened in 2016. For this assessment, we define lower-income as households with an income less than $50,000.

Key Points:

- The need for more affordable housing is very large, especially for lower-income households.
- 49% of lower-income renters are cost burdened
- 67% of lower-income renters are cost burdened
- 57% of all of all lower-income households are cost burdened, which is 450,000 households

Implications:

- Most cost burdened households are lower income. Of the 550,000 cost burdened households (previous slide), 450,000 have an annual income less than $50,000.



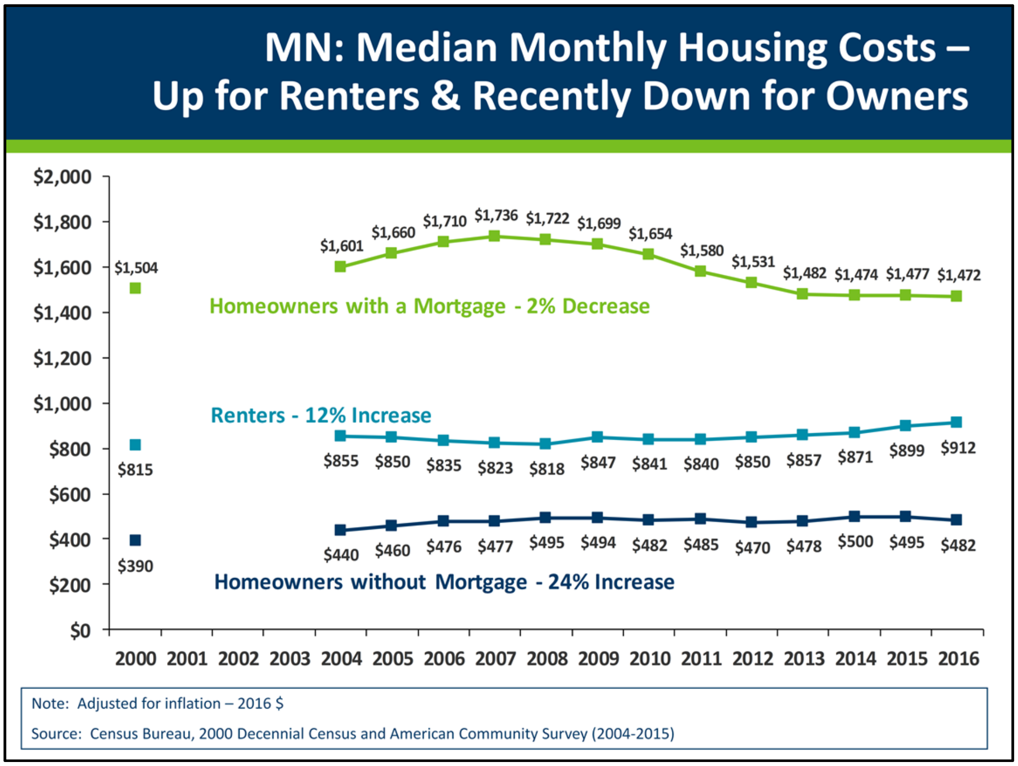
This map shows the percentage of lower-income households (annual income less than $50,000) that are cost burdened by county.

Key Points:

- The percentage varies from 33% to 68%.
- The highest percentages are generally in the metro area and the surrounding communities, as well as Duluth, Rochester, Mankato, and Moorhead. The lowest percentages are generally in the western part of the state.
- Even the county with the lowest percentage has 33% of its lower-income households with housing costs that are unaffordable.

Implications:

- While the need for more affordable housing is substantial across the entire state, the level varies.



Cost burden is a function of housing costs relative to income. To understand trends in the cost-burden percentages, we need to understand the trends in each component. This graph shows the median monthly housing costs for renters and homeowners.

Key Points:

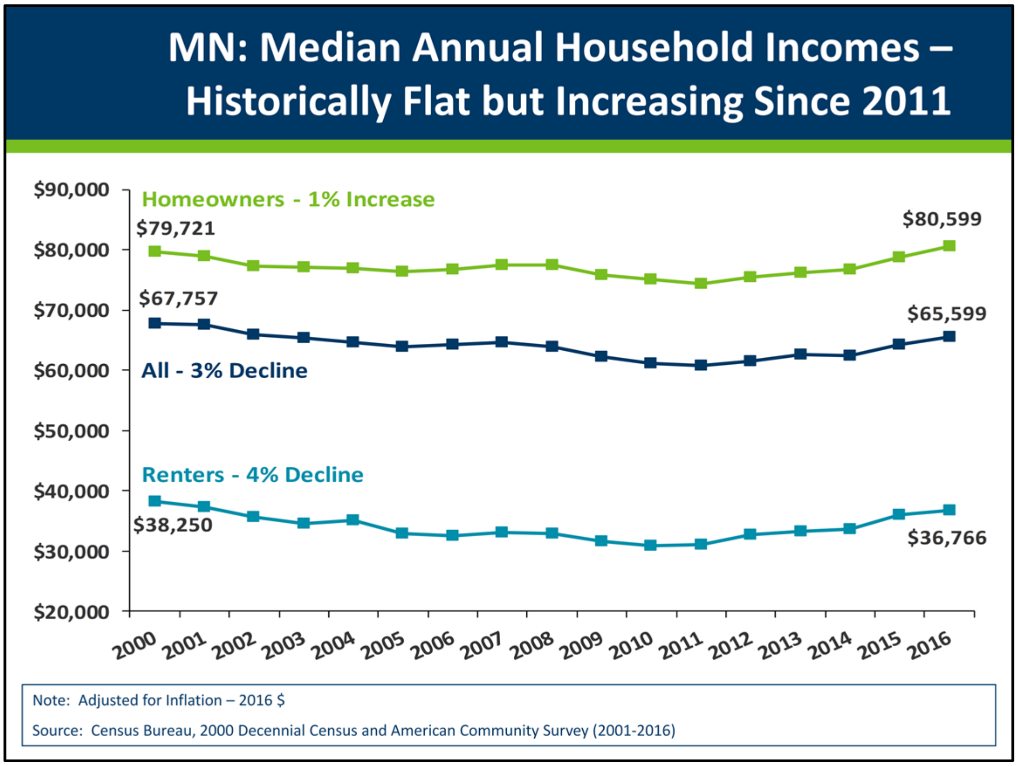
- Renters' costs increased by 12% since 2000 (after controlling for inflation). This masks shorter-term trends during that period. Statewide, the median rent rose from $815 per month in 2000 to $855 in 2004, fell to $818 in 2008, and has since risen to $912. The consistent increase in rents since 2008 is a concern.

- Costs for homeowners with a mortgage decreased by 2%. Again, this masks an even more dramatic shift during that period. The median monthly cost increased from $1,504 in 2000 to $1,736 in 2007 and then fell to $1,472 by 2016. This trend mirrors a decline in home sale prices and interest rates, which we'll examine later. As a preview, home sales prices are now increasing after bottoming out in 2011/12. Interest rates are still near historic lows.

- Costs for homeowners without a mortgage increased the most (24%). These higher costs reflect higher property taxes and insurance premiums. Many of these homeowners are seniors who have paid off their mortgages, which is an important point to keep in mind when examining housing for seniors.

Implications:

- What can Minnesota do to reduce rental and homeownership costs?



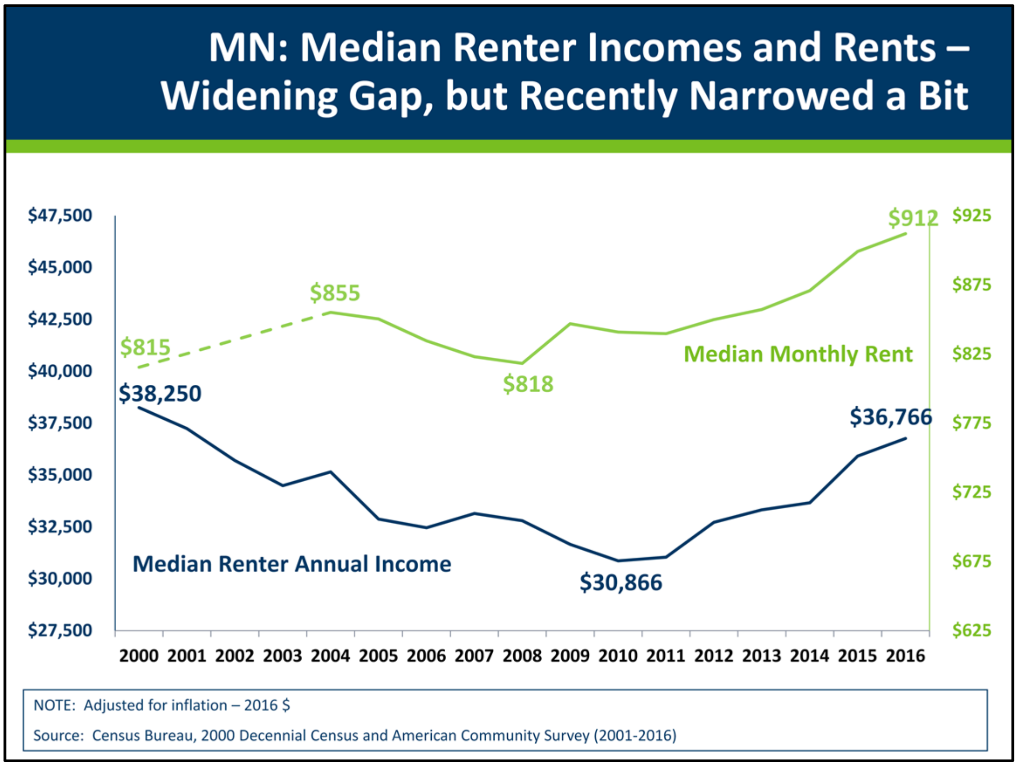
This graph shows the median household incomes over the past 17 years.

Key Points:

- Renter incomes fell 4% after controlling for inflation.
- Homeowner incomes have increased 1%.
- With the strengthening economy, incomes have increased since 2011, which is an encouraging sign.

Implications:

- While the Task Force has not been charged with finding strategies for increasing household incomes, incomes play a key role in determining housing affordability and stability.



This graph brings the cost and income trends together in one picture for renters.

Key Points:

- From 2000 to 2010, rental housing became less affordable relative to income. Since then, increases in the median income have more than kept pace with increases in the median rent.
- Overall, there was a 12% increase for rents and a 4% decrease for incomes (adjusted for inflation).

Implications:

- Housing affordability and stability are determined by many market, economic, and societal factors with complex interactions. The following charts will document some of them.

MN: Supply and Demand for Rental Housing – Greatest Need for Incomes <=30% of AMI

Income Level	Number of Households in Income Range	Supply of Affordable Units in Income Range	Supply Gap (-) Surplus (+)	Allocation Gap: Number of Affordable Units Occupied by Higher Income HH Gap (-)	Total Gap (+) or Surplus (-)
<=30% of AMI	176,300	110,465	-65,835	-47,005	-112,840
>30% to <=50% of AMI	119,940	225,085	+105,145	-99,610	+5,535
>50% to <=80% of AMI	116,905	202,700	+85,795	-85,095	+700
>80% of AMI	176,995	51,890	-125,105	N/A	N/A
Total	590,140	590,140	0	N/A	N/A

Source: Minnesota Housing analysis of HUD's 2010-14 CHAS (Comprehensive Housing Affordability Strategy) data.

This table provides information on the stock of occupied rental housing that is affordable by income level. The housing field categorizes income into four categories

- Moderate to high income: Income that is greater than 80.0% of the median family income in the area (which is referred to as the area median income or AMI)
- Low income: Income that is 50.1% to 80.0% of AMI
- Very low income: Income that is 30.1% to 50.0% of AMI
- Extremely low income: Income that is Less than or equal to 30.0% of AMI (which is relatively close to the poverty level)

Key Points:

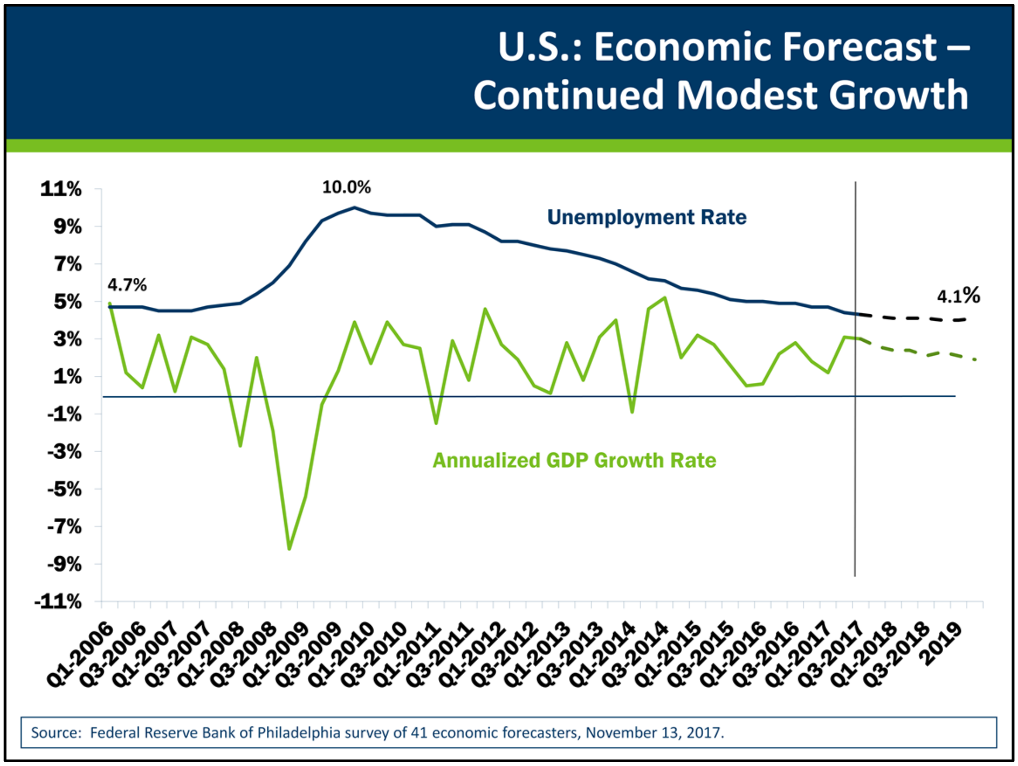
- The largest shortage of affordable rental housing is for extremely low income households (<=30% of AMI). There are 176,300 of these households in Minnesota but only 110,465 rental units that are affordable to them. Furthermore, of the 110,465 affordable units, 47,005 are occupied by households from the higher income groups, leaving only 63,460 units occupied by the extremely-low-income group.
- Even though there are more renter households with an income greater than 80% of AMI (176,995) than there are units with rents aligned with these higher incomes (51,890), creating a 125,105 unit supply gap, all of the units with lower rents are affordable to this group, and many of these moderate to high income households occupy those lower-rent and affordable units.

Implications:

- Because of poor condition, dated design, lack or amenities, or poor location, some existing rental housing is naturally affordable without subsidies or assistance.
- Because the cost of producing rental housing is high, providing additional affordable units to extremely-low-income households requires subsidies and assistance.

Theme/Trend #2

The Economy Should Continue to Grow, which Will Hopefully Support Growth in Household Incomes



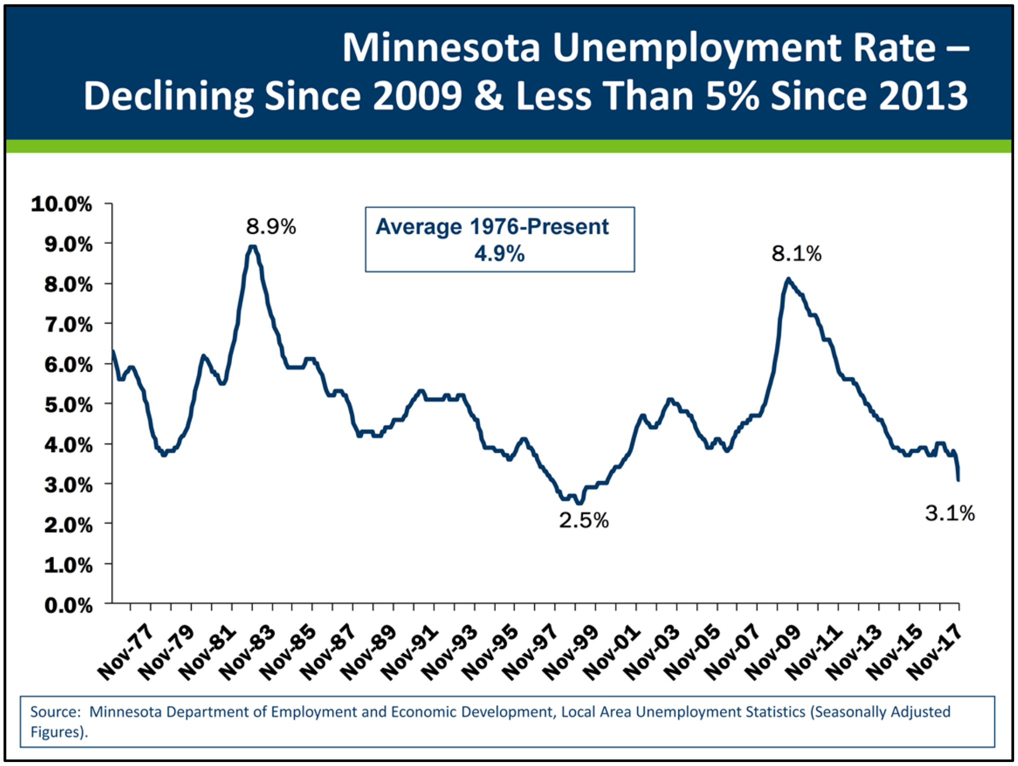
The economy plays a key role in the housing market. This graph shows the growth rate of the U.S. economy (as measured by Gross Domestic Product or GDP) and the unemployment rate. The solid lines on the left side are actual rates through the 3rd quarter of 2017. The dashed lines on the right reflect a forecast based on a survey by the Philadelphia Federal Reserve Bank of 41 economic forecasters. These forecasts are from November 2017, before the passage of tax reform.

Key Points:

- The change in GDP bottomed out during the 4th quarter of 2008 with an annualized decline of 8.2%, which led to an unemployment rate reaching 10% in 2009.
- Moderate to slow growth since then has gradually led to lower unemployment rates.
- The forecast indicates that the national economy will grow at about 2.0% to 3.0% and the national unemployment rate will level off around 4.0%.

Implications:

- The economy should continue to grow modestly.
- A stronger economy typically (1) increases incomes, (2) increases the number of households being formed with less doubling up (two households living in the same unit), and (3) reduces rental vacancy rates and months supply of homes for sale as additional households form, which often leads to higher housing prices.
- A key question is whether economic growth will be strong and widespread enough to significantly benefit lower-income households.



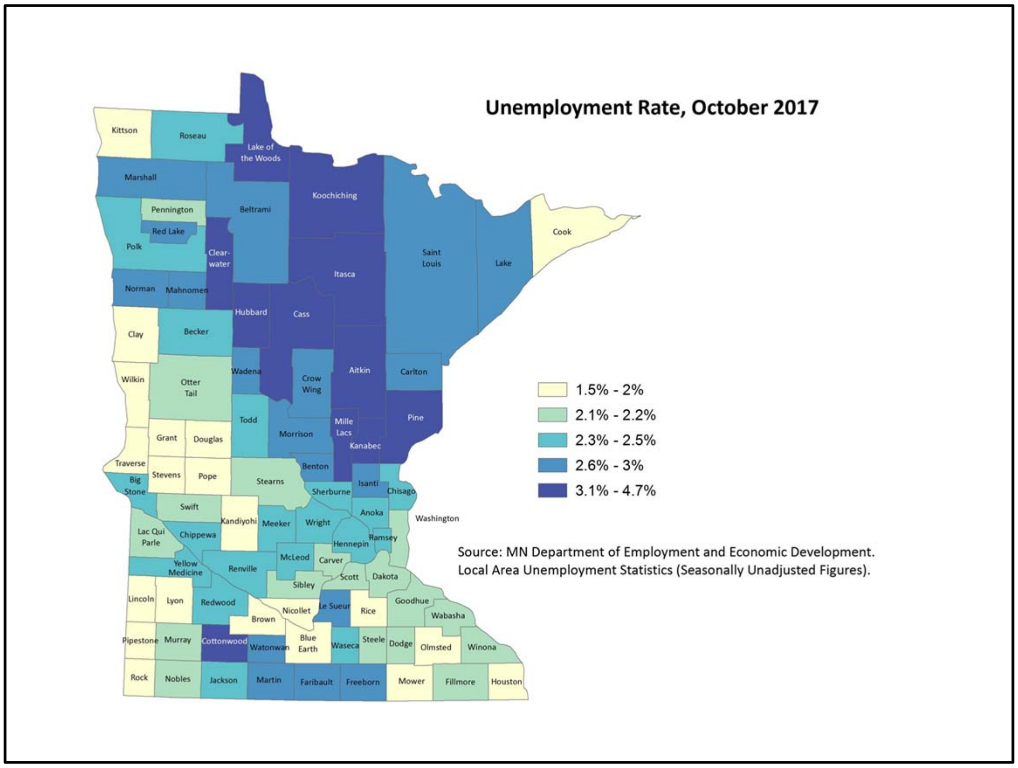
This graph shows the unemployment rate in Minnesota.

Key Points:

- The employment situation is a little better in Minnesota than nationally (3.1% versus 4.1% for November 2017)
- After peaking during the Great Recession at 8.1%, Minnesota's current unemployment rate is down to 3.1%, which is below the historical average.

Implications:

- How will the state's low unemployment rate affect income growth?



This map shows the unemployment rate in each county.

Key Points:

- The unemployment picture varies around the state – ranging from 1.5% to 4.7%, with the highest rates in north central Minnesota and the lowest in southern and western Minnesota.

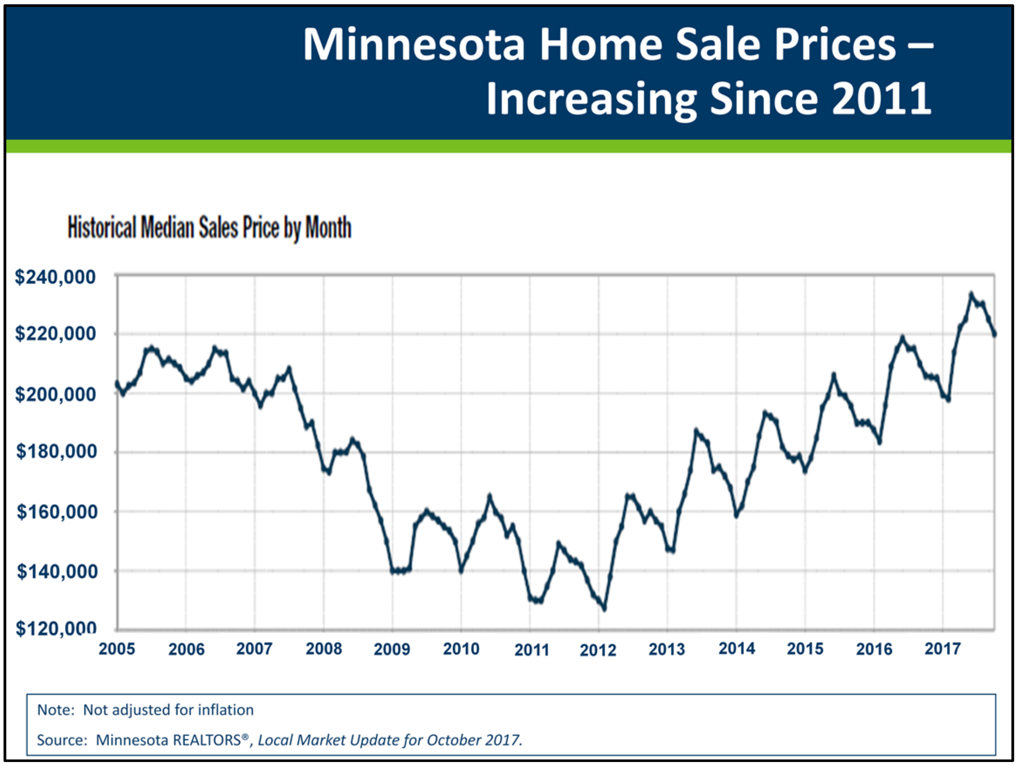
Implications:

- Minnesota is not monolithic. Different parts of the state have different economic conditions and housing needs.

MINNESOTA HOUSING

Theme/Trend #3

Home Prices Will Likely Continue to Increase with a Limited Supply



This graph shows the median sales price for homes in Minnesota, not controlling for inflation.

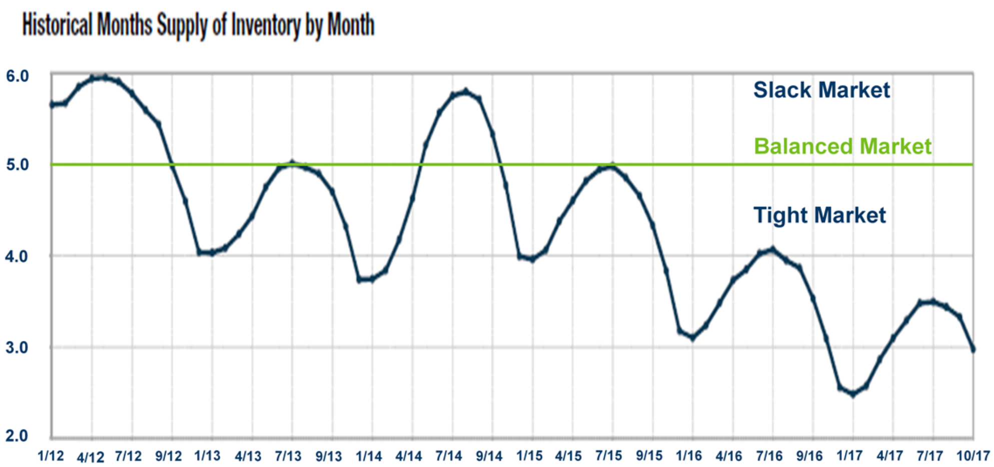
Key Points:

- Statewide, prices dropped significantly from 2006 through 2009 and struggled through 2011, when they bottomed out.
- Prices have been increasing since early 2012.

Implications:

- On the one hand, rising property values help existing homeowners because they add equity and create wealth. This is particularly important for lower-income homeowners because their homes are often their primary asset.
- On the other hand, rising property values makes housing less affordable for people moving into homeownership.

MN: Months Supply of Homes for Sale – Well Below 5 Months in Recent Years



Source: Minnesota REALTORS®, *Local Market Update for October 2017.*

One of the best indicators of home price trends is the months supply of homes for sale, which is a combination of the current inventory and how fast homes are selling. It measures how long it would take to clear the current inventory. Generally, if the inventory is more than five months, it is a slack or buyer's market with prices declining; if the inventory is less than five months, it is a tight or seller's market with prices rising.

Key Points:

- Statewide, the months supply has been at or below five months in recent years, which has resulted in the rising prices.

Implications:

- With the statewide months supply currently at about three months, prices will likely continue to increase.

TC Metro (16 County): Months Supply of Homes for Sale Under $250,000 – Very Tight Market

Year	Inventory - Number of Homes (June)	Months Supply (June)
2013	9,378	3.2
2014	9,413	3.5
2015	8,004	2.9
2016	6,105	2.1
2017	4,314	1.6

Source: Minneapolis Area Association of REALTORS®

This table shows the inventory and months supply of homes selling for less than $250,000 (which is a more affordable price) in the 16 counties around the Twin Cities metro area.

For each year, the data applies to the month of June, which is a prime home buying month.

Key Points:

- Since 2013, the inventory and months supply have both been cut in half.

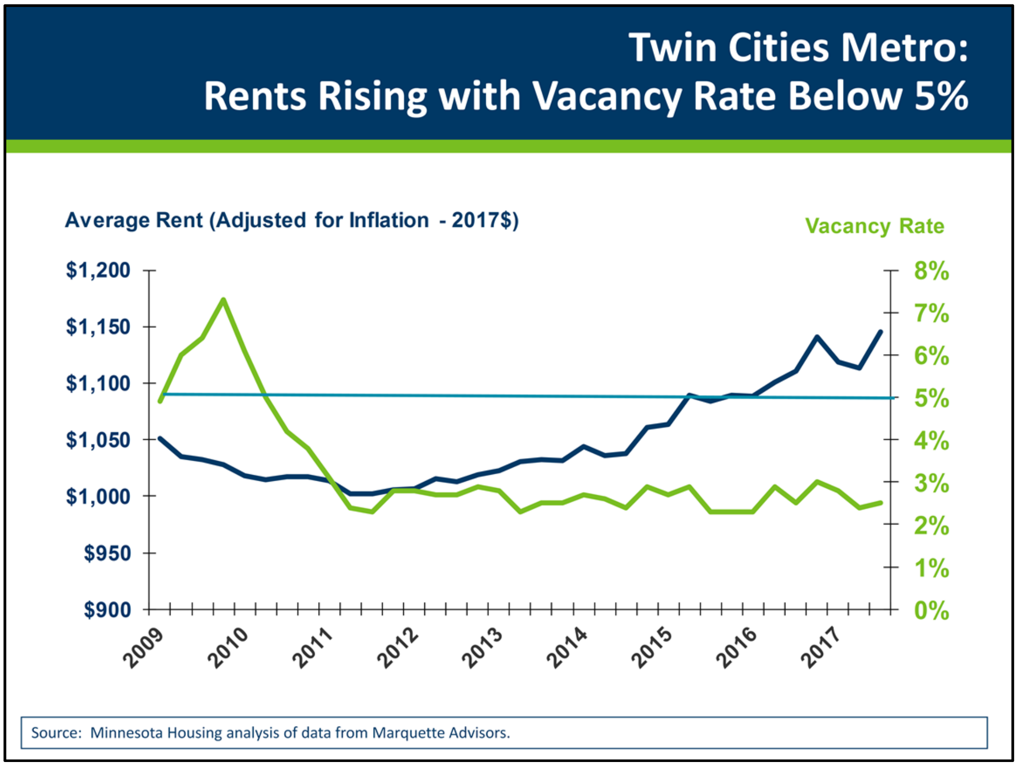
Implications:

- There is a very limited supply of affordable homes.

MINNESOTA HOUSING

Theme/Trend #4

Rents Will Likely Continue to Increase with a Limited Supply



Switching to the rental market, this graph shows the relationship between vacancy rates and rents. Low vacancy rates drive up rents. This data just applies to the Twin Cities metro area.

Key Points:

- When the vacancy rate (green line) is consistently below 5% (light blue horizontal line), rents (dark blue line) generally rise because the supply is limited relative to demand.
- When the vacancy rate is consistently above 5%, rents generally fall because there is extra supply relative to demand.
- Since 2011, vacancies have been consistently below 5%, and rents have increased.

Implications:

- As long as vacancy rates stay consistently below 5%, rents will likely rise.
- As we will discuss in the next few slides, the vacancy rate depends on the strength of the economy spurring job and household growth, households deciding to rent or own (as reflected in the homeownership rate), and new construction adding rental units to meet the demand.

Statewide Vacancy Rates and Rents – Much of the State is Below 5%

Area	Vacancy Rate	2 Bedroom Average Rent
Northwest	5.7%	$760
West Central	7.6%	$765
Southwest	6.4%	$637
Northeast	5.1%	$1,020
Central	4.3%	$841
Metro	4.3%	$1,259
Southeast	6.2%	$931
Statewide	4.6%	$1,162

Source: Minnesota Housing analysis of data from CoStar. Data accessed on December 4, 2017.

But first, we'll look at vacancy rates across the state, not just the metro area.

This data comes from CoStar, which is a relatively new source for Minnesota Housing, and the rates are a little higher than shown on the previous page, which comes from Marquette Advisors. For the metro, Marquette reports a vacancy rate of 2.5%, while CoStar reports 4.3%. The Marquette data captures properties with 10 or more units, while the CoStar data captures properties with 4 or more units, which may explain some of the difference. They also use different methodologies for collecting the information.

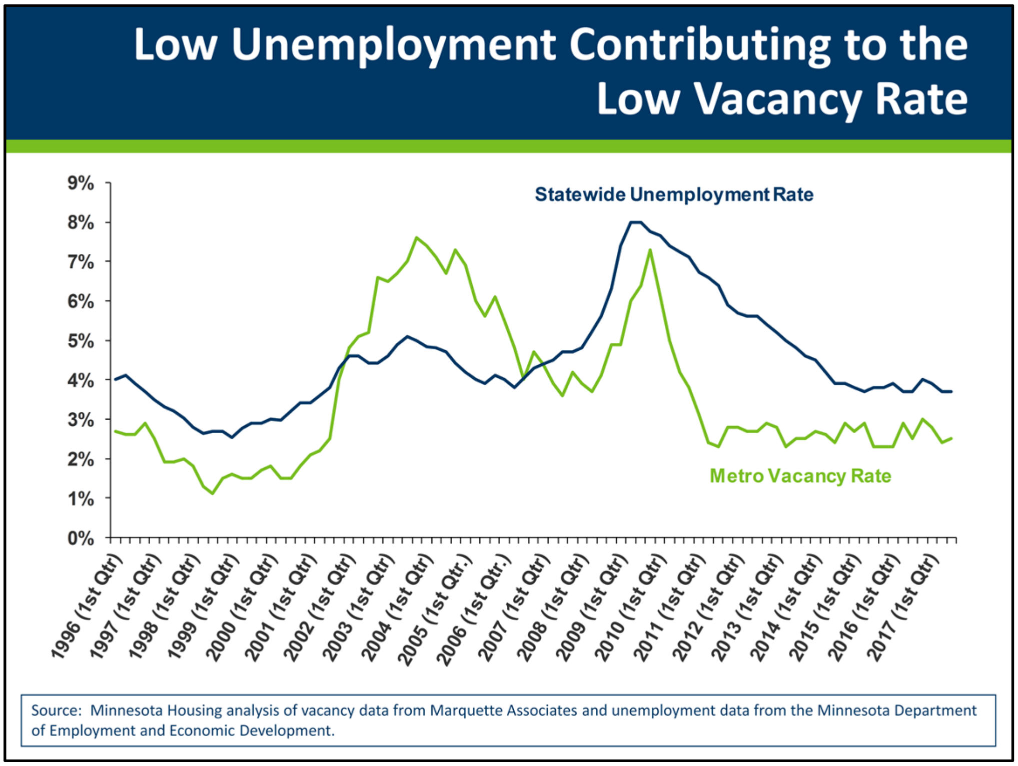
The CoStar data captures information from over 8,450 rental properties and 345,000 units in Minnesota. While this is not a complete inventory of rental housing in Minnesota, it is the most complete database we have seen.

Key Points:

- The statewide vacancy rate is 4.6%.
- The metro area has the lowest rate, along with central Minnesota.
- The highest rate is in west central Minnesota at 7.6%.
- The rates apply to an entire region, and individual markets within these regions may have very different vacancy rates.

Implications:

- Statewide, there appears to be some upward pressure on rents.



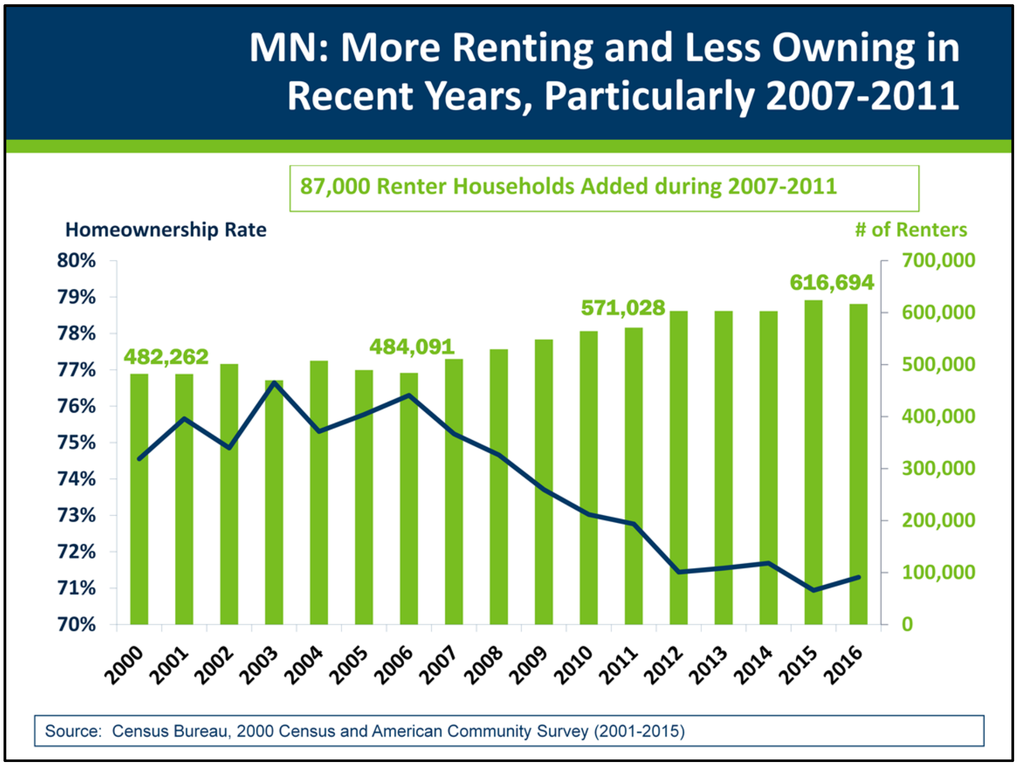
This graph shows the relationship between unemployment and rental vacancy rates.

Key Points:

- When the unemployment rate is low, the vacancy rate tends to be low. When unemployment is high, the vacancy rate tends to be high. With employment struggles, we often see households doubling up and young adults staying home with their parents.
- The recession initially led to high vacancy rates in 2009. However, in 2010 and 2011, the rate rapidly declined when unemployment was still above 6%. Two factors contributed to this divergence.
  - There was very little multifamily construction from 2007 through 2011, which limited the supply and decreased vacancies.
  - The homeownership rate declined between 2006 and 2015, which increased the demand for rentals and decreased vacancies.

Implications:

- Looking into the future, vacancy rates may start to increase.
  - While the homeownership rate had been declining (reflecting more renters), it appears to be leveling off a bit at 71%, putting less downward pressure on the vacancy rate. (See page 24.)
  - With low vacancy rates, developers are now building more units (see page 25), which will increase the supply and vacancies.



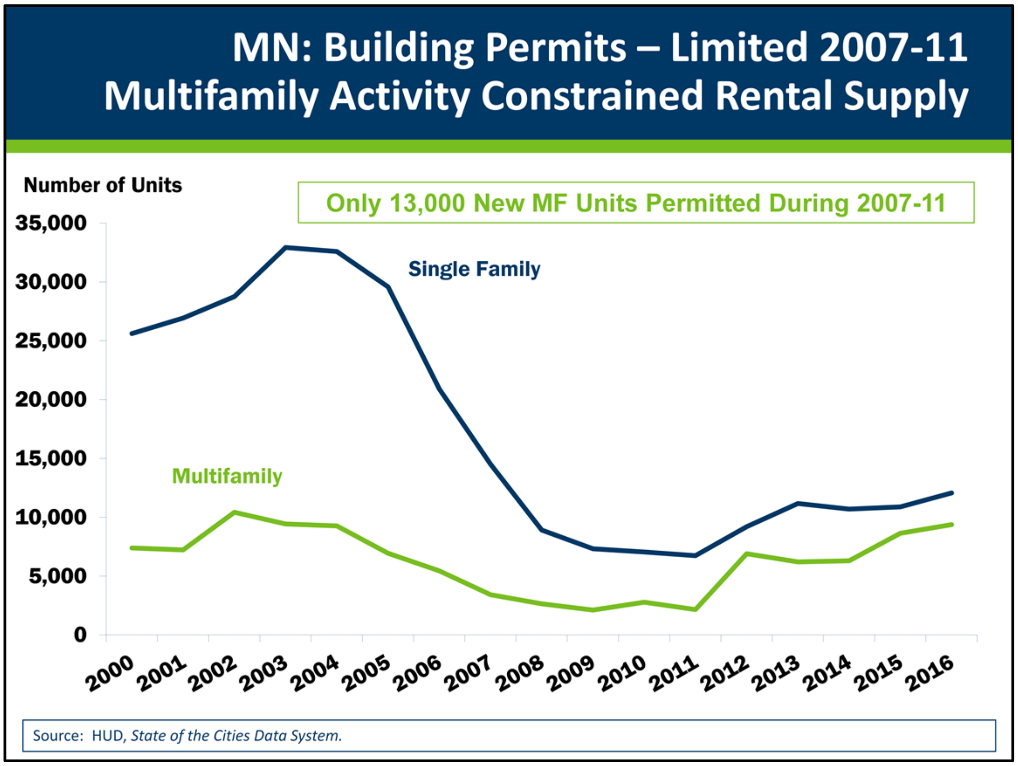
This graph shows the homeownership rate in Minnesota (blue line), and the number of renter households (green bars).

Key Points:

- As the homeownership rate dropped after 2006, the number of renter households increased significantly from 484,091 in 2006 to 616,694 in 2016.
- A large share of the increase occurred after 2006 and through 2011, adding 87,000 renter households. (For context, during that time, the number of homeowner households declined by almost 33,000.) As will be discussed on the next page, only 13,000 multifamily units were added during the period, resulting in a large mismatch between new demand and supply.
- The number of renters and the homeownership rate seemed to have leveled off in 2012 through 2016

Implications:

- The decision to own versus rents is a key driver of the housing market.



With the Great Recession and financial and housing crises, there was very little housing construction in multifamily and single family housing between 2007 and 2011.

Key Points:

- The annual number of multifamily permits dropped from 9,000-10,000 to 2,000-3,000 units. It has since increased to about 9,400 units in 2016.
- The decline in single-family permits was even larger, with a more modest recovery. This has contributed to the lack of homes for sale.
- The Star Tribune recently reported data from Housing First Minnesota and the Builders Association of the Twin Cities. In 2017, there was a 36% increase in total units from building permits, with strong growth in both multifamily and single family.

Implications:

- The low level of multifamily construction between 2007 and 2011 limited the number of units that are currently available, which decreased the rental vacancy rate.
  - In the 2007-11 period, permits for 13,000 multifamily units were issued. In contrast, as shown on the previous page, 87,000 new renter households were added. The mismatch resulted in a significant decline in the vacancy rate. Some of the increase in demand was met through single-family homes that had previously been owner-occupied and became rentals during the foreclosure and housing crisis. As the following table will show, single-family homes play a key role in the rental market.
- With the low vacancy rates and increased demand for new units, multifamily construction has picked up and is back to 2002-04 levels. Thus, vacancy rates may increase, relieving some of the upward pressure on rents.

Minnesota Rental Units by Building Type – Almost Half Are in 1 to 4 Unit Buildings

Building Type	Number of Rental Units	Share of Rental Units
Single-Family Homes	171,345	29.0%
2 to 4 Unit Structures	74,405	12.6%
5+ Unit Structures	334,635	56.7%
Other (mobile homes, etc.)	9,732	1.6%
Total	590,117	100.0%

Source: Minnesota Housing analysis of HUD's 2010-14 CHAS (Comprehensive Housing Affordability Strategy) data.

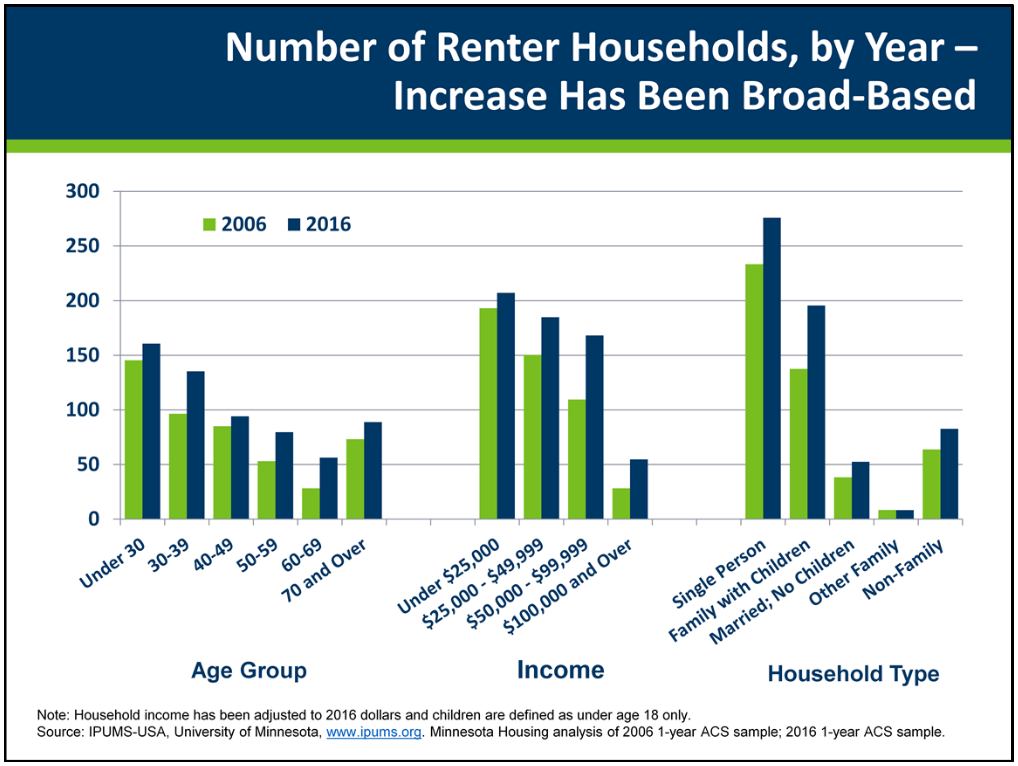
This table shows the stock of occupied rental housing in Minnesota by property size.

Key Points:

- Almost half of the state's rental stock is properties with 1 to 4 units, with many in single-family homes or mobile homes.

Implications:

- Smaller properties, including single-family homes, play a critical role in the rental market.



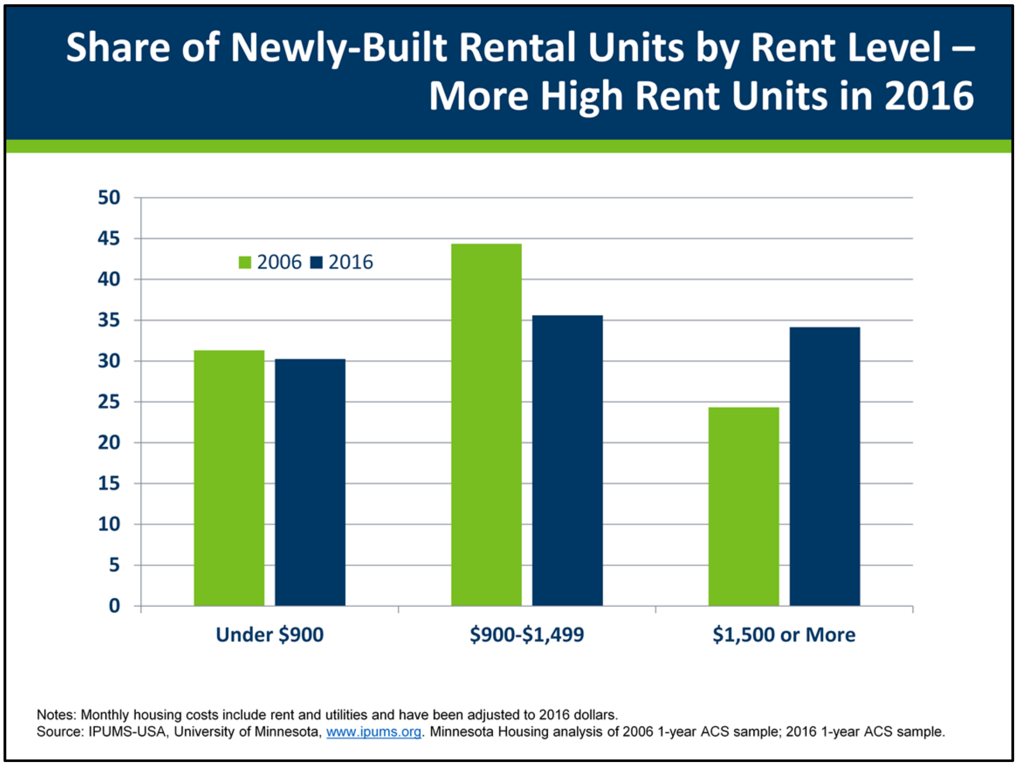
This graph shows the number of renters in 2006 and 2016, broken out by age, income, and household type.

Key Points:

- The increase in renting has been broad-based.
- There were large increases for 30 to 39 and 60 to 69 year olds, households with incomes between $50,000 and $99,000, and families with children.

Implications:

- The increase was not just concentrated in younger, lower-income households without children, which historically has been the stereotypical renter.



This graph shows the share of rental units built in the previous six years, broken out by rent level. The graph compares 2016 with 2006, and the rent levels are adjusted for inflation.

Key Points:

- The share of new units renting for $1,500 or more increased from 24% to 34%.
- A household needs a $60,000 income to afford a $1,500 monthly rent.
- As shown in previous graphs, the median income for Minnesota renter households was $36,766 in 2016, and the median rent was $912.
- While the number of newly-built rental units in 2006 was about 38,000, it was down to just 33,000 in 2016. Not only was there a decline in the share of new affordable units, there were fewer new affordable units in absolute number.

Implications:

- Minnesota needs to build more affordable rental housing .

MINNESOTA HOUSING

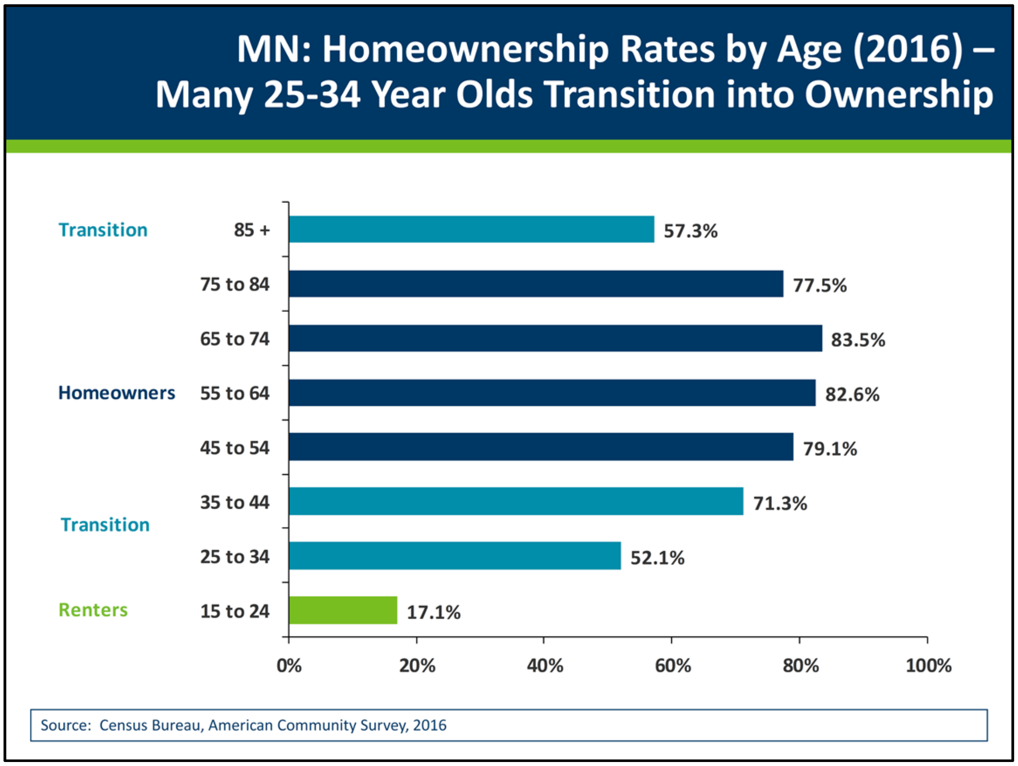
Theme/Trend #5

Millennials' Decision to Own or Rent Will be a Key Driver of the Housing Market

Millennials: Owning vs. Renting

- More Owning:
  - Generation Y (Millennials) is larger than Generation X and moving into the home buying phase of life and express an interest in eventually owning
  - Homeownership is more affordable than in 2006 (home prices are increasing but interest rates are near historic lows)
- More Renting:
  - People may be more cautious about homeownership after the housing crisis
  - Generation Y is likely to change jobs and locations – and not be tied down by homeownership (for now)
  - Tighter credit standards
  - Increasing levels of student debt

We will look at several of these factors in more detail in the following charts.

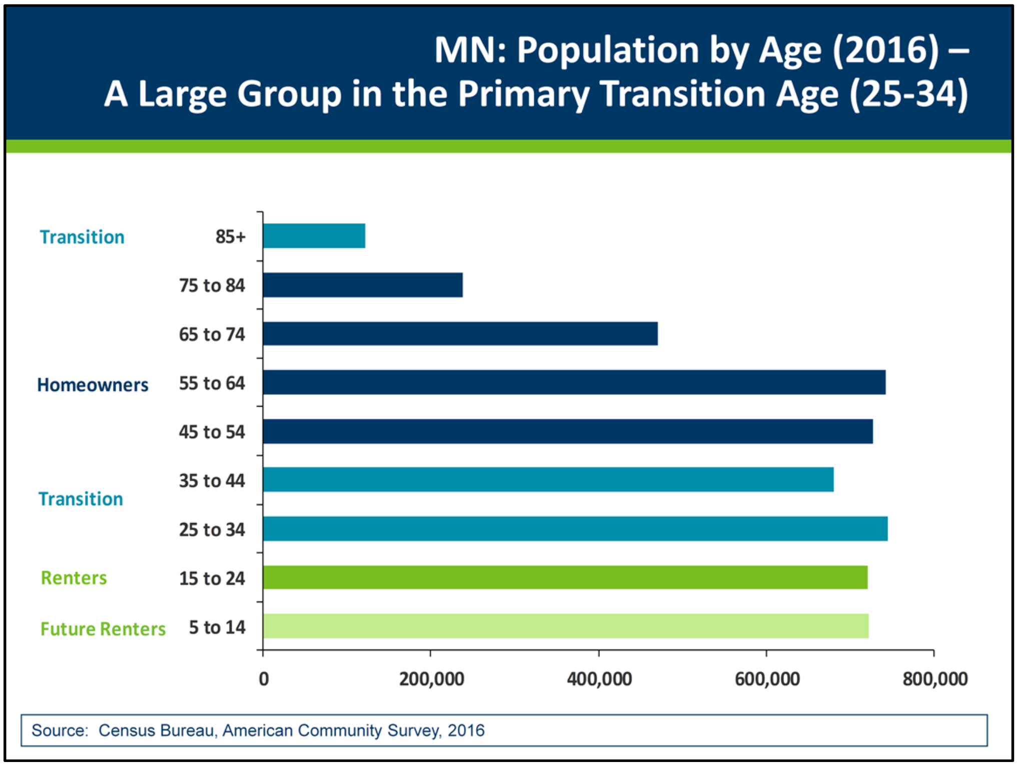


A person's stage in life (often reflected by his or her age) plays a key role in the decision to buy a home.

This graph shows the homeownership rate by age.

Key Points:

- Young single people, who are in the less-stable and early stages of their careers and lives, typically rent for affordability and flexibility reasons. (See ages 15-24 in this graph.)
- As families form and careers are established, households look for stability and often transition to homeownership. (See ages 25 to 44 in this graph.) The transition primarily occurs for 25 to 34 year olds, when the homeownership rate jumps from 17.1% to 52.1%. A smaller transition occurs for 35 to 44 year olds, with the rate increasing to 71.3%. Millennials may be delaying the transition. The median age of Minnesota Housing's first-time homebuyers increased from 27 in 2005 to 31 in 2016.
- From ages 45 to 84, the vast majority of Minnesota households are in the homeownership stage of life.
- After households go through the initial phase of retirement, age and start to face the struggles of independent living, they start to transition back to renting.



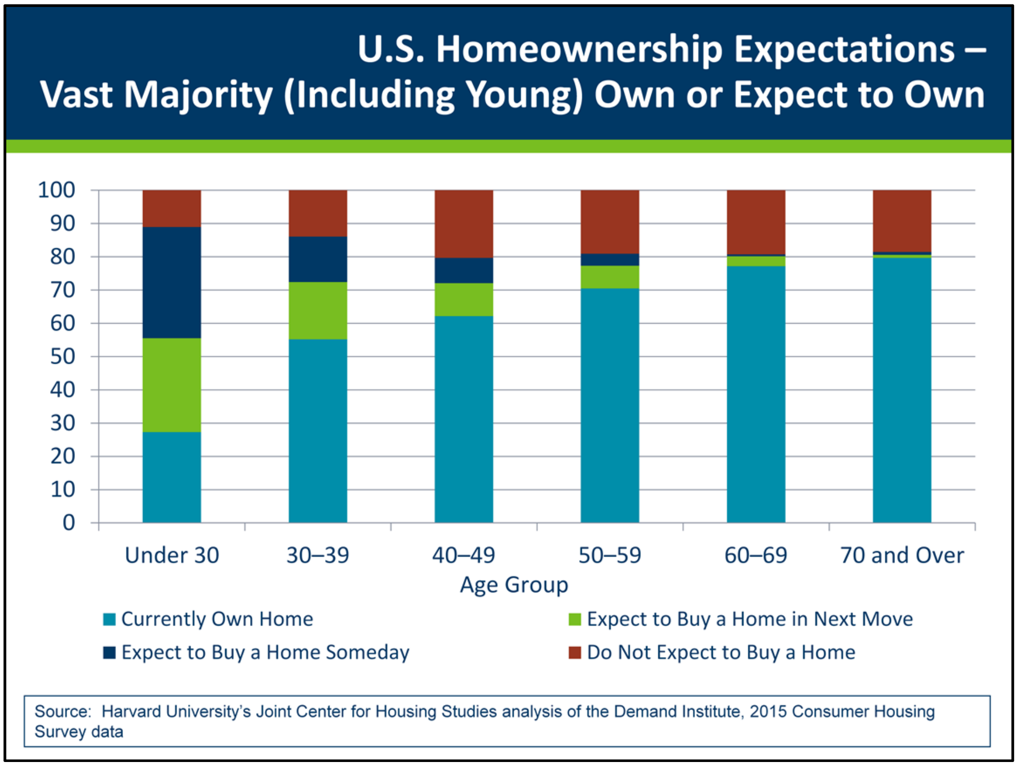
This graph breaks out of Minnesota's 2016 population by age and the renter/owner phases.

Key Points:

- Demographics plays a role in the homeownership rate.
  - The smallest working-age group is 35-44 year olds (largely representing Generation X). Over the last 10 years, this group moved through the initial and primary home-buying phase of life, and its small size limited the growth in homeownership.
  - The largest age group is 25 to 34 year olds (largely representing Generation Y or Millennials). This large group is in the prime age for first-time homebuyers, which should help increase homeownership in the coming years.

Implications:

- Understanding the home-buying needs of the Millennial generation will be a critical strategy going forward.
- The rental needs of Baby Boomers will be described in a later section.



This graph shows homeownership status and expectations by age.

Key Points:

- 80% to 90% of Americans across all adult age groups own or expect to own their home.

Implications:

- Nearly 90% of Millennials expect to eventually own their home.

Twin Cities Metro
Owning More Affordable than in 2006

- **June, 2006:**
  - Median sale price — $236,850
  - Market interest rate — 6.68%
  - Monthly housing payments (PITI) — $2,006
  - Average monthly rent — $860
- **June 2011:**
  - Median sale price — $162,217
  - Market interest rate — 4.51%
  - Monthly housing payments (PITI) — $1,160
  - Average monthly rent — $921
- **June 2017:**
  - Median sale price — $257,250
  - Market Interest rate — 3.90%
  - Monthly housing payments (PITI) — $1,751
  - Average monthly rent — $1,111

Source: Minnesota Housing based on data from the Minnesota Association of REALTORS®, Freddie Mac, Minnesota Taxpayers Association, and U.S. Census Bureau. Figures are not adjusted for inflations

The affordability of owning a home is a key factor that influences the homeownership rate.

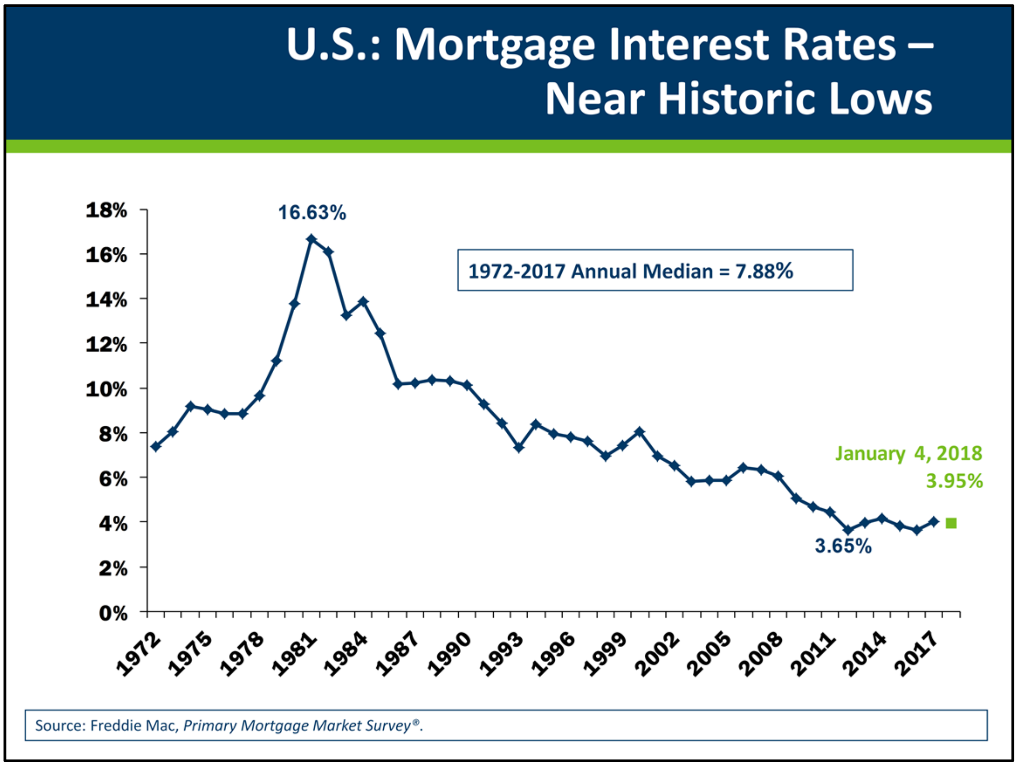
This slide shows the housing payment (which includes principal, interest, taxes & insurance or PITI) for the median priced home in June of 2006, 2011 and 2017 in the Twin Cities metro area. (The analysis examines the same month in each year because home sale prices fluctuate with the time of year, and we wanted consistency in the comparison. In addition, June is a prime home-buying month.)

Key Points:

- In 2006, the housing payment on a median priced home was $2,006 – more than $1,000 above the average rent for an apartment ($860). The cost differential probably contributed to the decline in the homeownership rate.
- By 2011 (with much lower prices and interest rates), the housing payment on a median priced home was down to $1,160 – just a couple hundred dollars more than the average rent ($921). The smaller differential probably contributed to the leveling off of the homeownership rate.
- By 2017 (with higher prices but lower interest rates), the housing payment was up to $1,751 – about $640 more than the average rent ($1,111).

Implications:

- While buying a home is still more affordable than it was in 2006, the rising costs may limit home buying.



Interest rates also play a key role in housing costs and affordability. The very low interest rates over the last several years have increased affordability and helped the housing market recover by encouraging home buying.

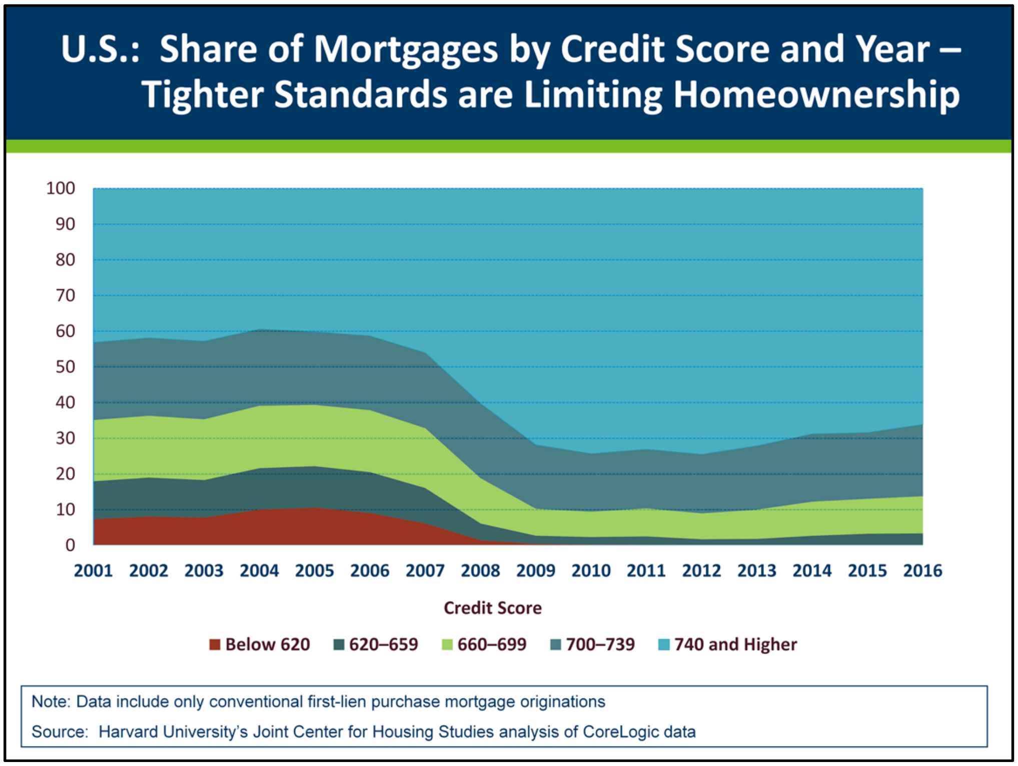
This graph shows mortgage interest rates since 1972.

Key Points:

- During this period, the median rate was 7.88%.
- The peak rate occurred in 1981 (16.63%).
- In recent years, the rates have reached their lowest levels, near or below 4%.

Implications:

- The current rates, which are very low in historical terms, have made homeownership more affordable than it would have otherwise been.
- A key question is whether rates will remain low?
- The Federal Reserve Bank is starting to pursue strategies to increase interest rates. Mostly notably, it may shrink its balance sheet. Between 2008 and 2014, the Fed expanded its balance sheet from $0.9 trillion to $4.5 trillion by buying Treasury securities, mortgage backed securities, and other assets to keep interest rates low and stimulate the economy. Since then, they have kept the size of the balance sheet relatively constant, but there is now discussion that they may start to shrink it. This may seem to be an esoteric Federal Reserve policy, but it can have a significant impact on the affordability of homeownership, as shown in the last two slides.



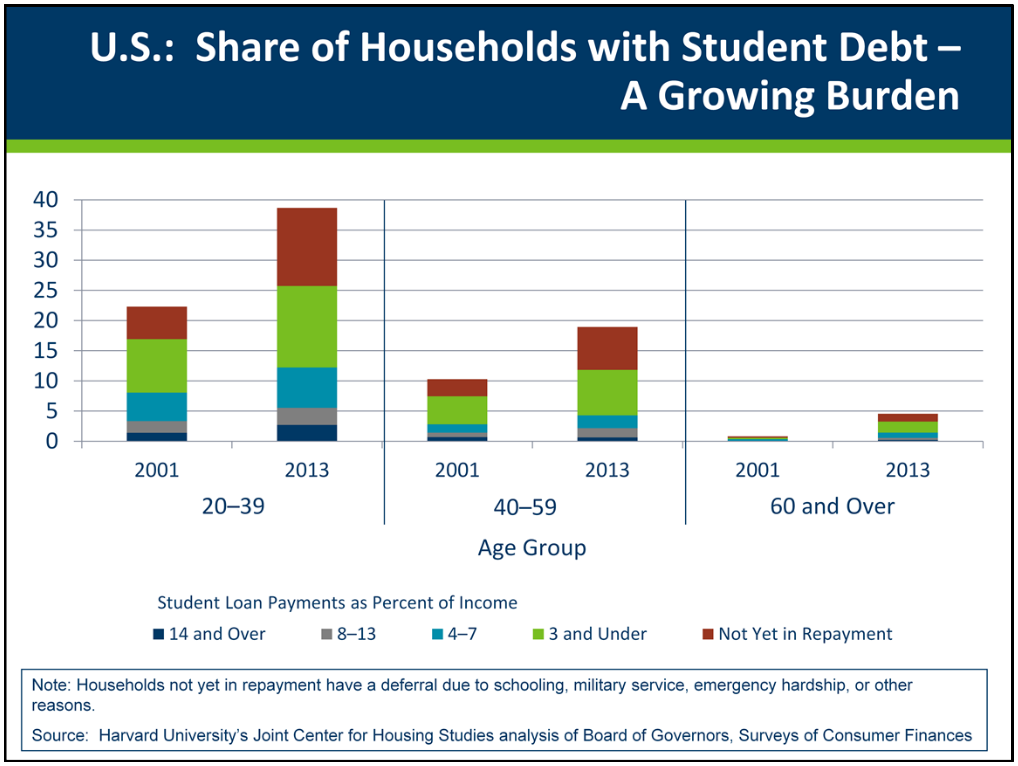
This graph shows conventional, first-lien mortgage originations by credit score and year.

Key Points:

- Since the early 2000s, the share of originations with a credit score of 740 or higher has increased significantly from about 40% to 70%.
- The share of originations with a credit score below 700 dropped from 40% to about 10%.
- Mortgages with a credit score below 620 went away.

Implications:

- Credit standards have become much tighter since the foreclosure crisis, which was needed. However, did the pendulum swing too far the other way? The standards have loosened a bit since 2012, with the share of originations with a credit score below 740 increasing from just under 30% to just over 30%.



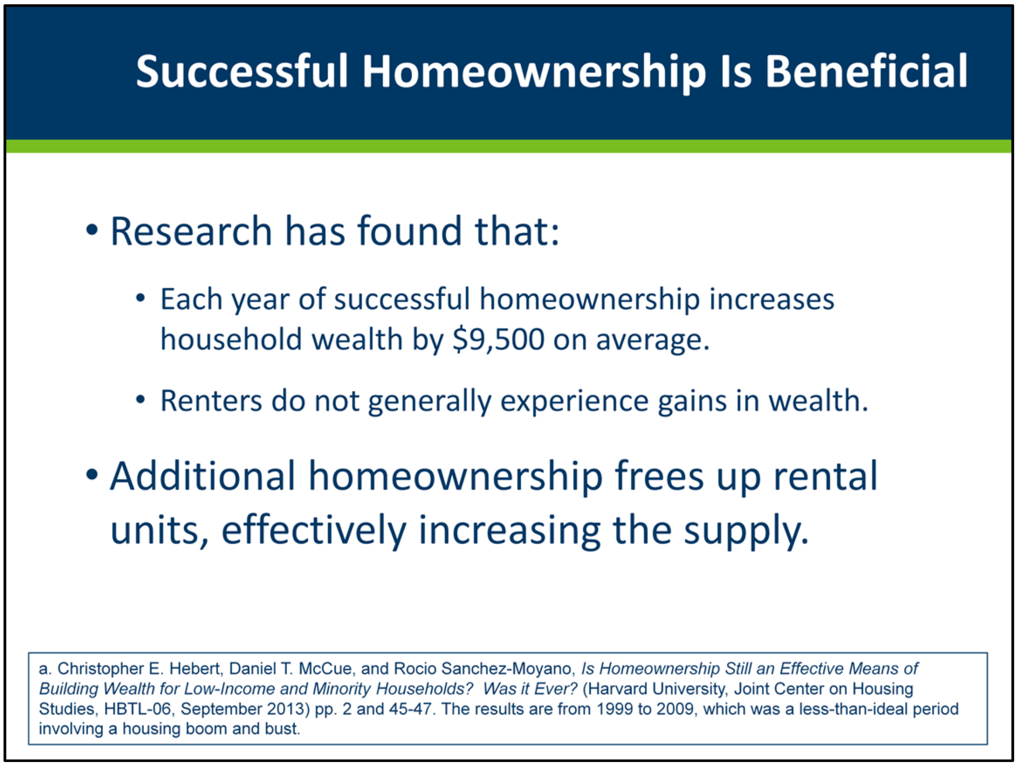
This graph shows student debt status by age in 2001 and 2013.

Key Points:

- The share of people with student debt has increased significantly across all age groups, nearly doubling from just over 20% in 2001 for 20-39 year olds to almost 40% in 2013.

Implications:

- Student debt levels are limiting homeownership. Underwriting standards include stricter debt-to-income requirements to qualify for a mortgage. For example, debt payments (including mortgage, student loans, car loans etc.) typically cannot exceed 43% of income.
- If a mortgage payment would account for 30% of a potential homebuyers income, student debt payments along with a car loan can put someone over 43%.



Homeownership is a powerful tool.

- While research has found that renters generally have very limited gains in wealth, successful homeowners have seen large increases in their wealth, even in the less-than-ideal time of 1999 to 2009, which included a housing boom and bust.
- For many lower-income homeowners, their home is their primary source of wealth.
- Transitioning low- and moderate-income households to successful homeownership also frees up affordable rental units. As discussed on pages 21 to 25, the decline in Minnesota's homeownership rate contributed to our low rental vacancy rates and increasing rents.

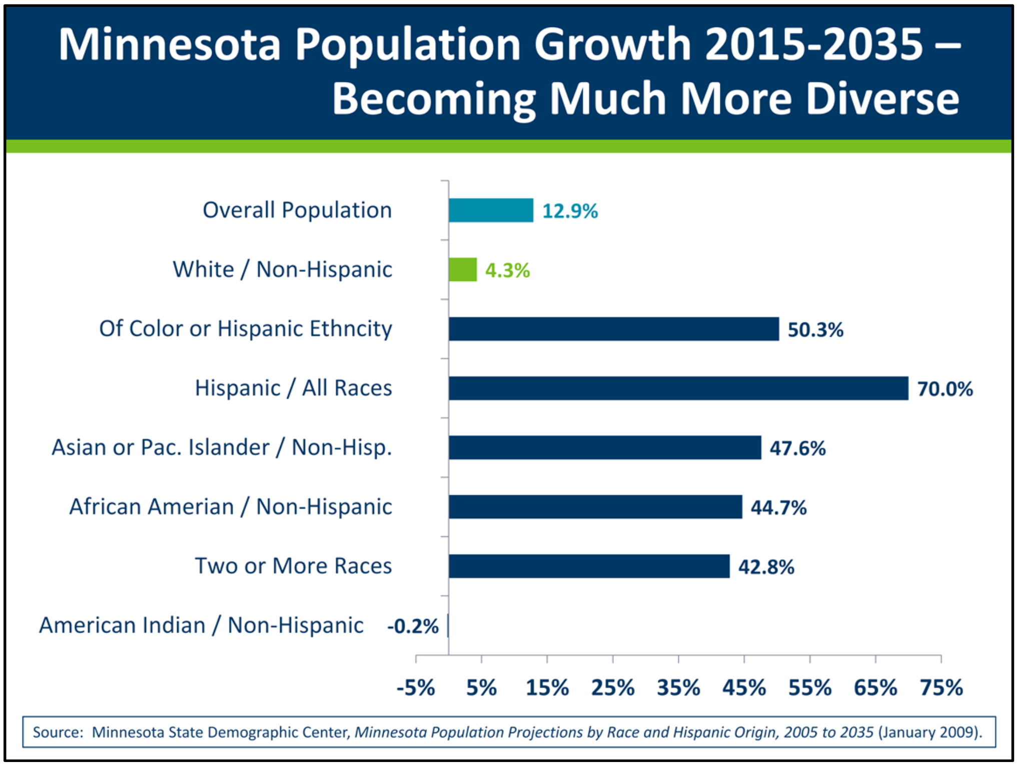
Implications

- Promoting and supporting successful homeownership supports not only homeowners, but also renters.

MINNESOTA HOUSING

Theme/Trend #6

Minnesota is Becoming More Diverse, and Disparities in Homeownership are Significant



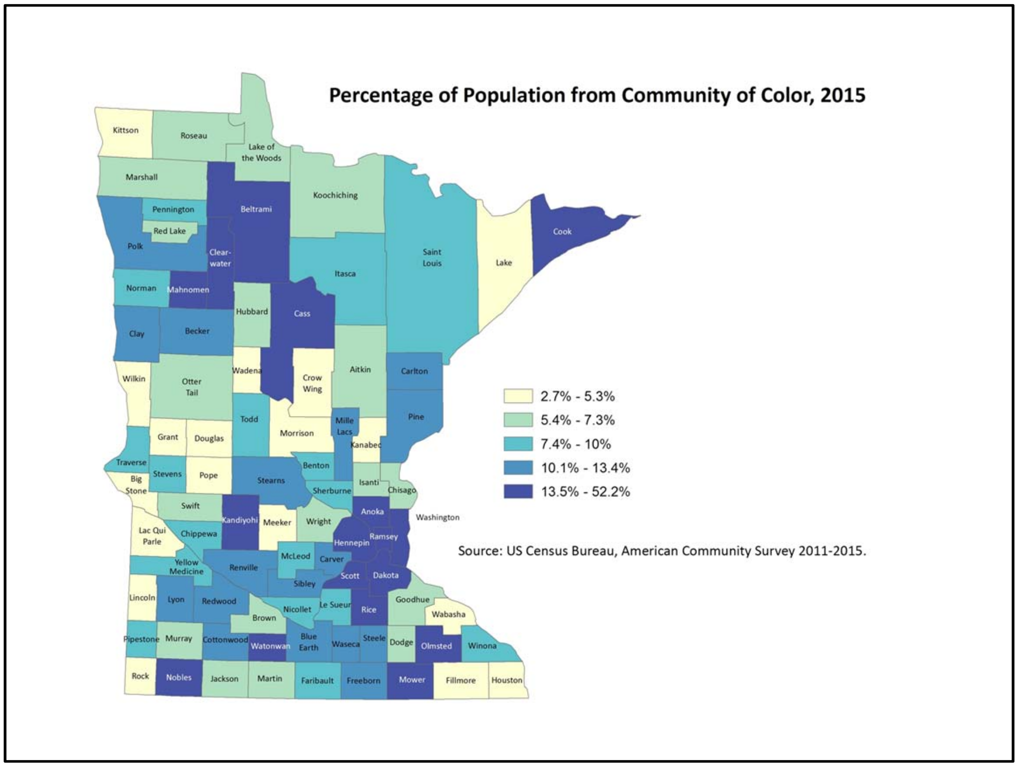
Minnesota's forecasted population growth will vary dramatically by race and ethnicity between 2015 and 2035

Key Points:

- Minnesota's overall population is expected to grow by 12.9% by the year 2035.
- While the white / non-Hispanic population will grow by just 4.3%, the population of color or Hispanic ethnicity is expected to grow by 50.3%.

Implications:

- The diversity of Minnesota's residents is increasing.



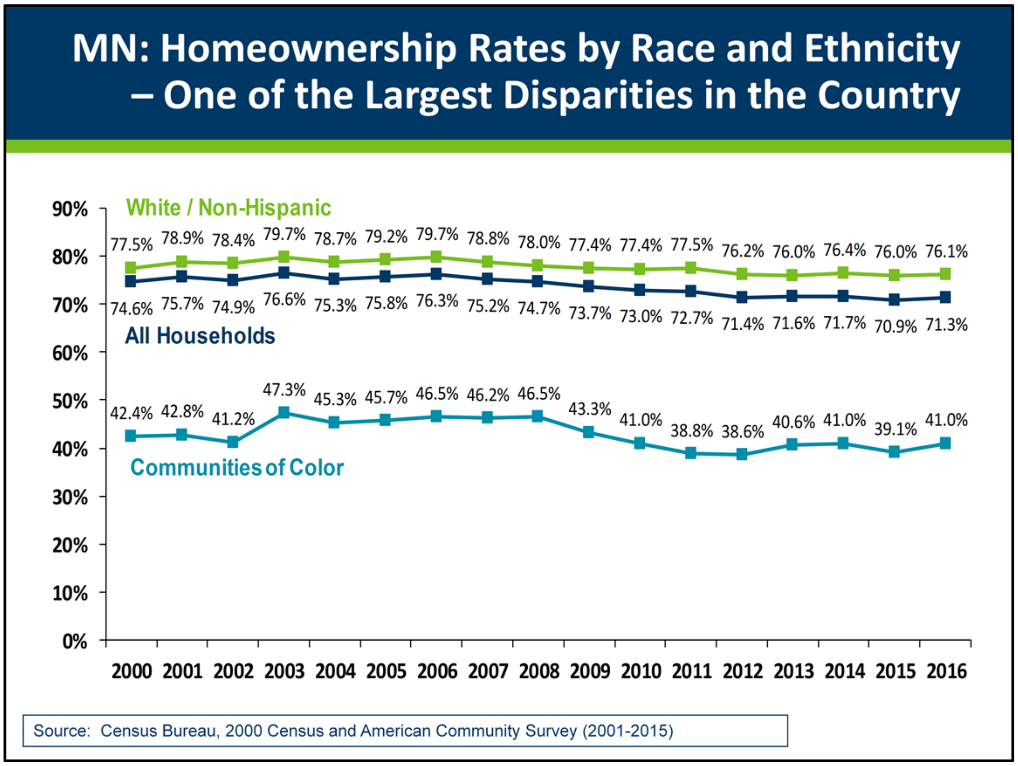
As shown in the map, people of color or Hispanic ethnicity are not evenly distributed across the state.

Key Points:

- The percentage in each county varies from 2.7% to 52.2% of the population.

Implications:

- The housing needs of people from communities of color play a critical role in some counties and will play an increasing role across the state.



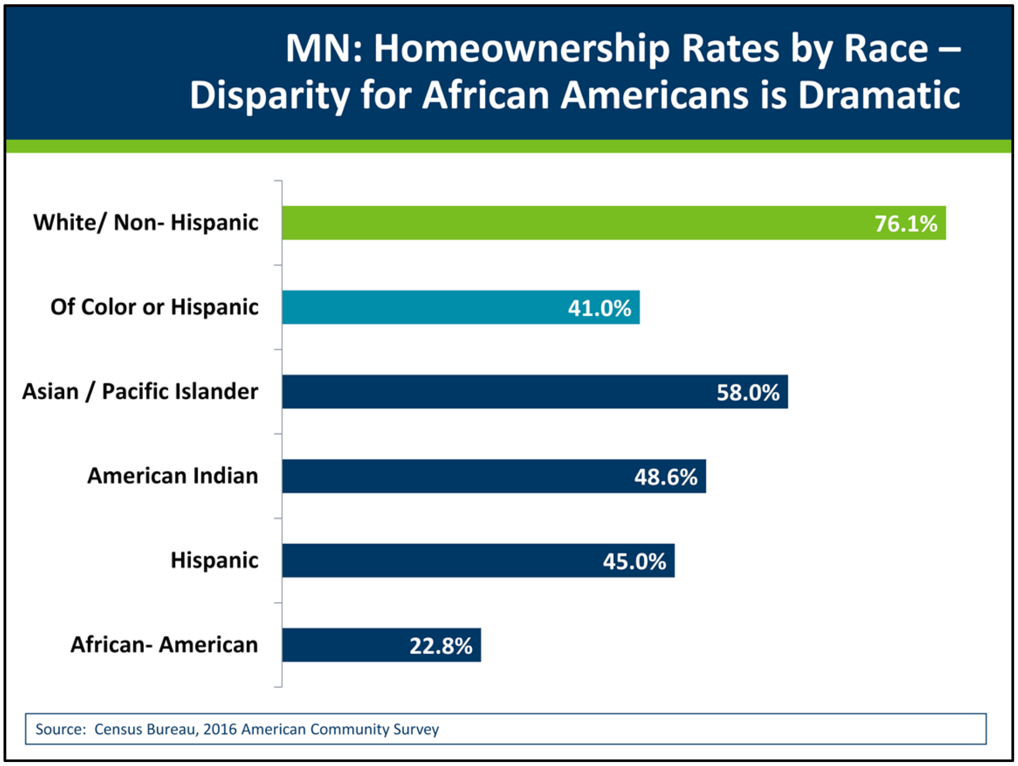
This graph compares the homeownership rates of households of color or Hispanic ethnicity with white/non-Hispanic households.

Key Points:

- Minnesota's 35.1 percentage point disparity in homeownership rates between white/non-Hispanic households and households of color is the 5th largest in the country.
- The disparity has not changed a lot over the last 17 years.

Implications:

- Successful homeownership provides one of the highest levels of housing stability. If we are to achieve housing stability for all Minnesotans, tackling the homeownership disparity will need to be a priority.



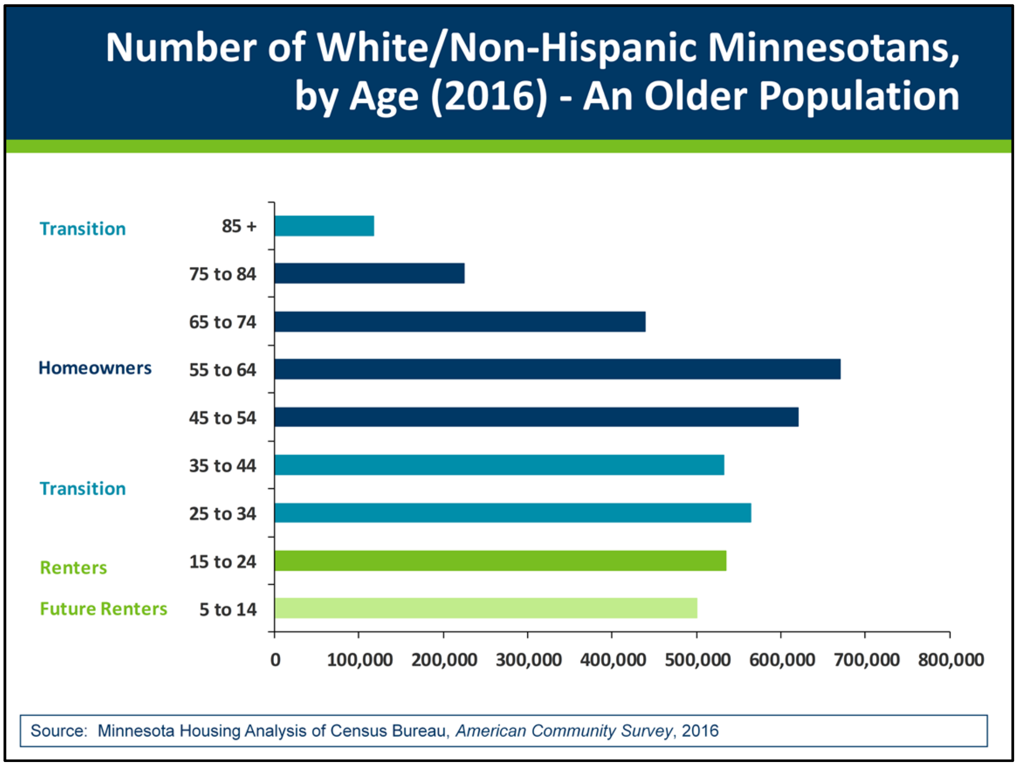
There are large homeownership disparities within communities of color and Hispanic ethnicity.

Key Points:

- While the Asian and Pacific Islander community has a homeownership rate of 58.0%, the African-American/Black community has a 22.8% rate (keeping in mind that the homeownership rates among Asian Americans is not consistent, for example, varying between people of Indian and of Hmong descent).

Implications:

- Programs that address the homeownership disparity need to recognize racial and ethnicity differences.



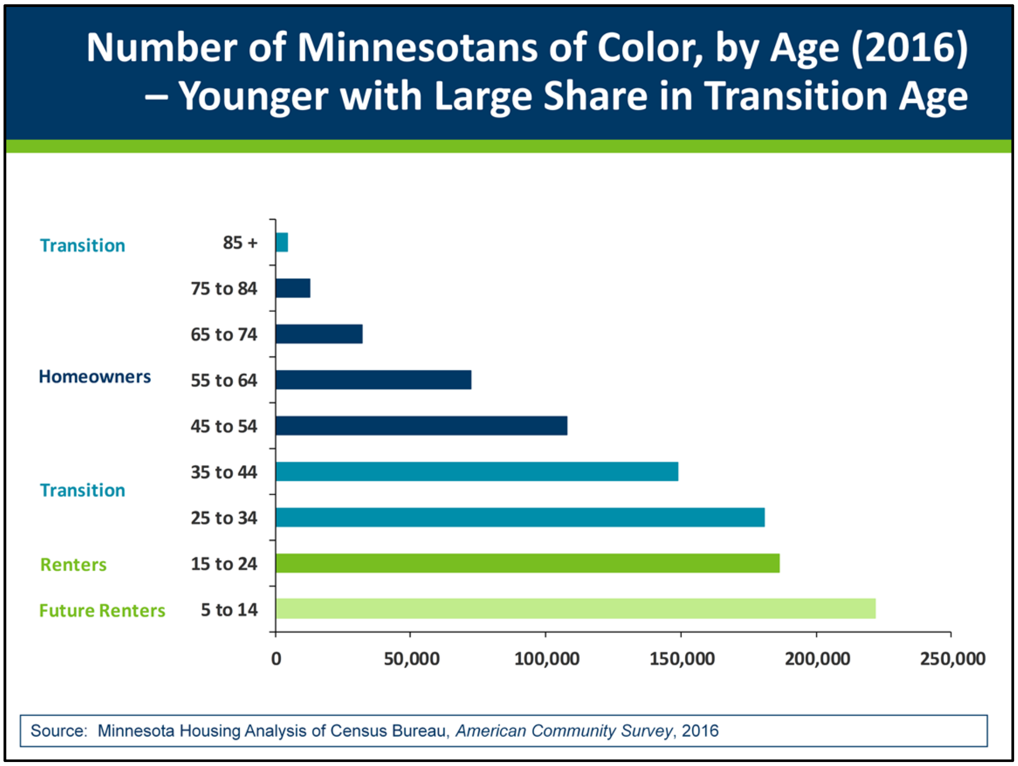
This graph shows the number of the white/non-Hispanic Minnesotans in each age groups, with color coding that reflects the housing phase of life (renter, transition, and homeowner).

Key Points:

- White/non-Hispanic Minnesotans are concentrated in the 45 to 64 year old age groups, who are already in the homeowners phase of life.

Implications:

- Compare this graph to the following one.



This graph shows the number of the Minnesotans of color or Hispanic ethnicity in each age group.

Key Points:

- People of color and Hispanic ethnicity are much younger and concentrated in the renter and transition phases of life.

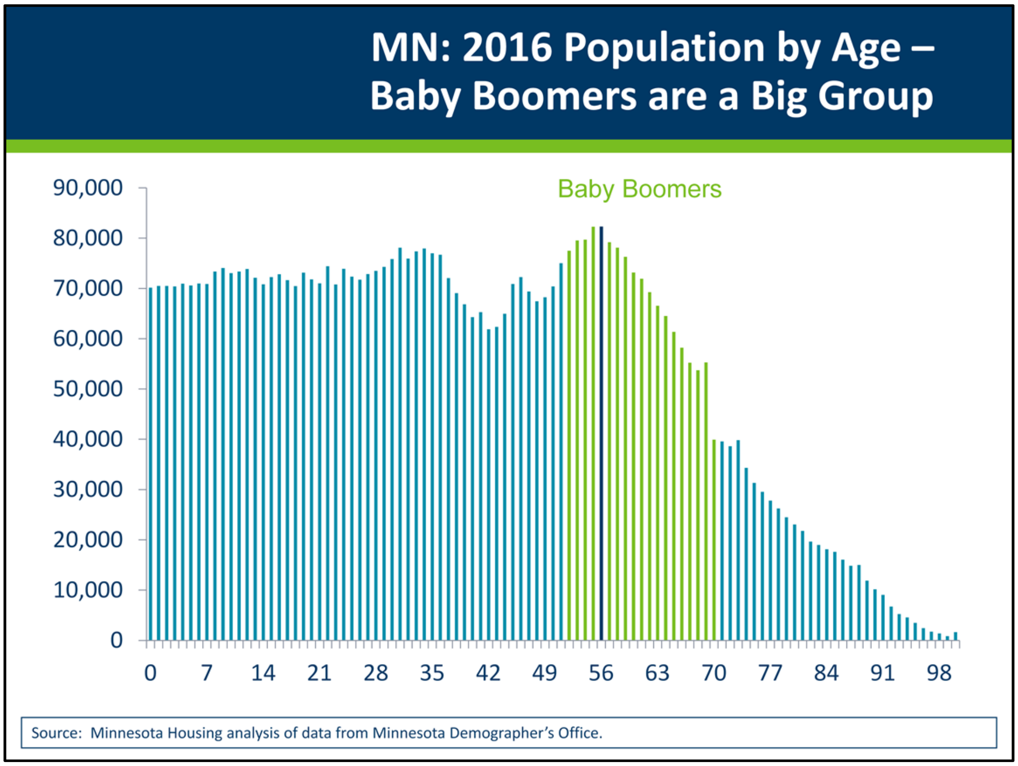
Implications:

- The home-buying market is becoming more and more dependent on households of color and Hispanic ethnicity.
- People who are 15 to 24 years old are the next generation of homebuyers. While there are about 535,000 Minnesotans who are white/non-Hispanic in this group (see the previous graph), there are 186,000 people of color or Hispanic ethnicity in it, accounting for 26%.
- In contrast, people of color account for just 10% of 55 to 64 year olds, which is the core of the Baby Boom generation and current homeowners.

MINNESOTA HOUSING

Theme/Trend #7

The Aging Baby Boom Generation will Create New Housing Needs and Challenges



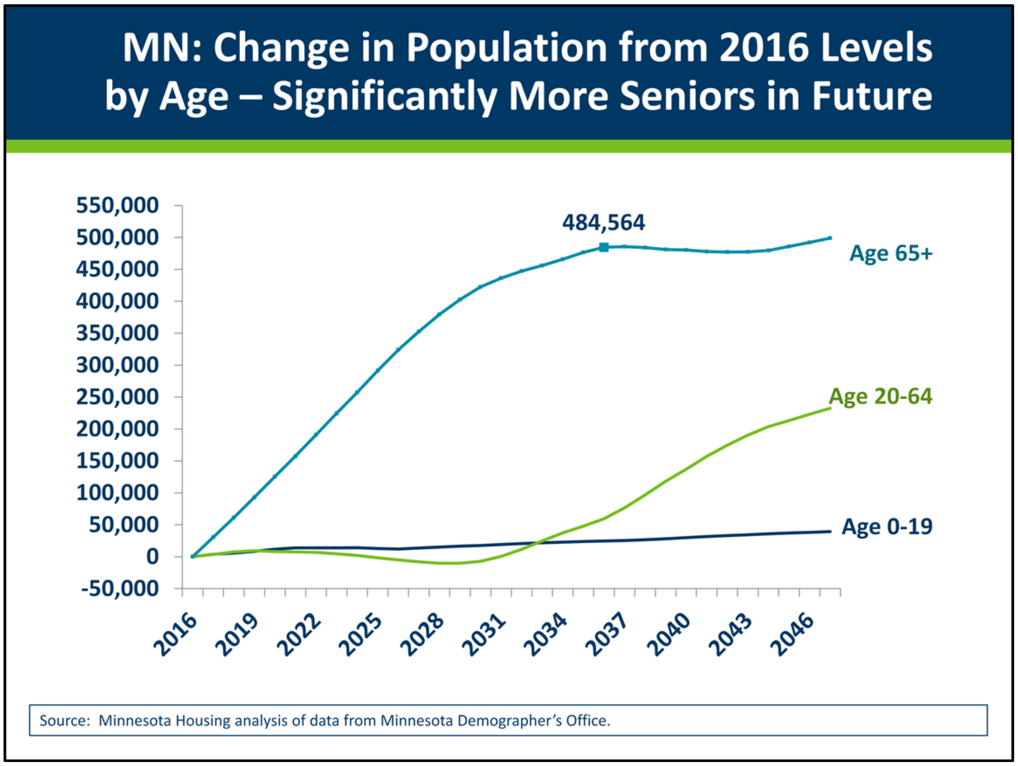
This graphs shows the number of Minnesotans by age. The Baby Boomer generation is shown with the green bars.

Key Points:

- Baby Boomers are a large generation that is retiring, or will retire over the next decade.
- Most Baby Boomers are on the younger half of the generation, with 56 year olds as the largest group (see black bar).

Implications:

- The changing housing needs and preferences of the Baby Boomers as they retire and age will present new challenges for Minnesota.



This graph shows the number of additional people in each age group over the next 30 years. The number for each year is the increase (or decrease) from the base year of 2016. For example, the Demographer's Office is forecasting 484,564 more seniors (age 65+) in 2036 than there were in 2016.

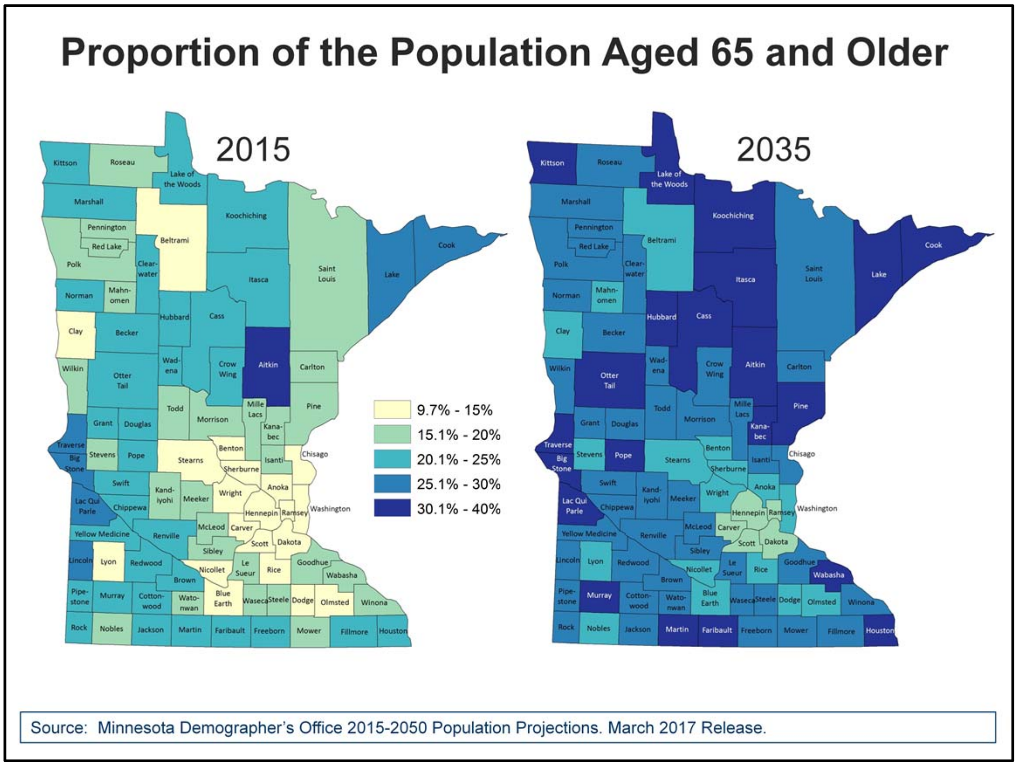
As a point of reference, there were about 840,000 Minnesotans age 65 or older in 2016.

Key Points:

- The senior population is increasing rapidly.

Implications:

- With limited resources, how do we address the affordable housing needs of this growing population and also address the needs of families with children and working-age adults without children?



This slide shows how the percentage of Minnesotans who are age 65+ in each county will change between 2015 and 2035.

Key Points:

- In 2035, seniors will account for more than 30% of the population in many counties, particularly in north central Minnesota and some the border counties around the state.
- Seniors will account for less than 20% of the population only in the metro area.

Key Findings about Baby Boomers

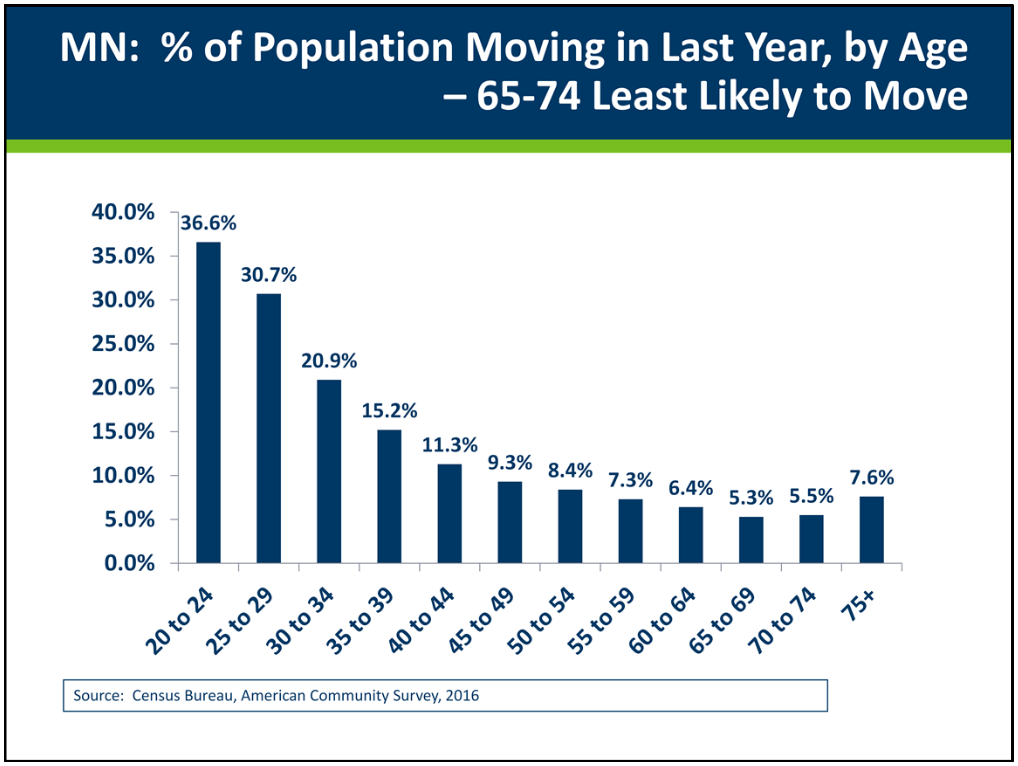
- Will play key role in dictating housing needs over the next few decades
- Healthier and more energetic than older seniors
- Pushing back retirement and entering life care facilities
- Want to stay in their communities
- Wants and needs:
  - Housing that is senior friendly, not necessarily senior housing
  - Access to services (e.g. health care and support) and amenities

This slide summarizes some the key findings in the literature about housing for seniors.

Implications:

- Minnesota will face challenges in providing housing to seniors that is: (1) affordable, (2) keeps them in the community as long as possible, and (3) provides adequate access to care, services, and amenities.

- This will be particularly challenging in rural areas.



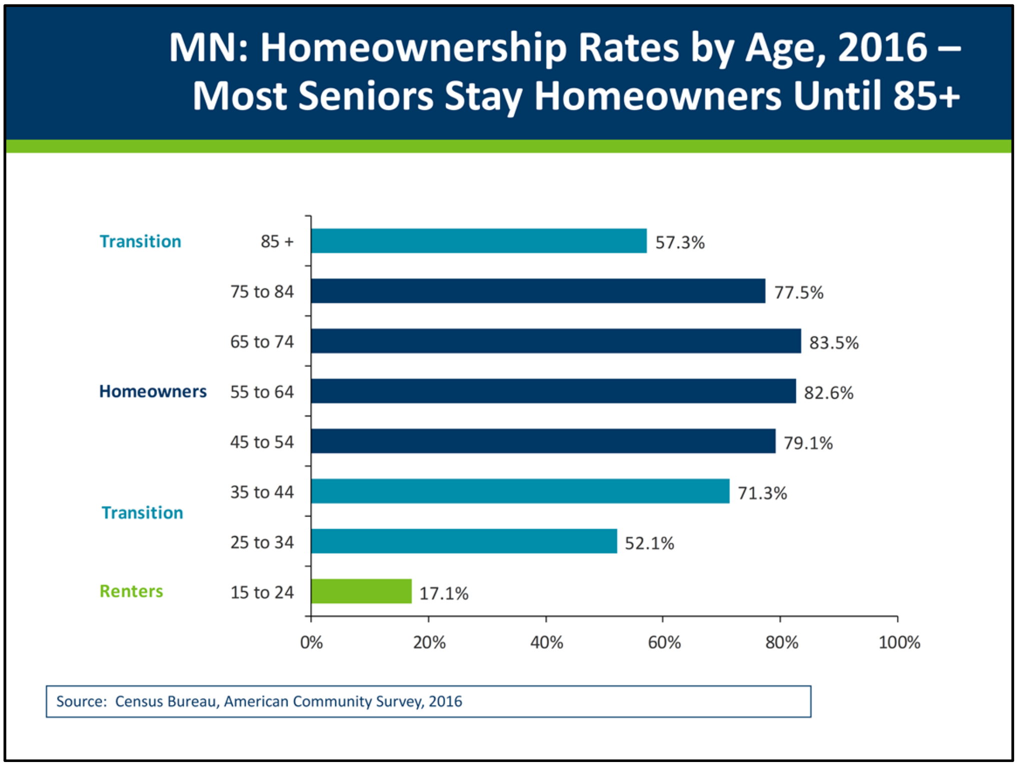
This slide shows the percentage of people by age group that moved in the last year.

Key Points:

- People age 65 to 74 are the least likely to move, with only 5.3% to 5.5% moving each year.
- Moving picks up after age 74.

Implications:

- In initial retirement, seniors are very likely to stay where they are currently living.
- Serving Baby Boomers in their current housing and aging in place are critical.



This graph of the homeownership rate by age is a repeat from an earlier graph, but this time we are focusing on the transition out of homeownership by older Minnesotans, rather than the initial transition into it by young adults.

Key Points:

- While there is a slight decrease in homeownership after age 74, a large decline occurs at age 85+.

Implications:

- This is consistent with the data on moving rates. People start to move after age 74, but most seniors do not transition out of homeownership until age 85 or later, which is consistent with increasing rates of disability among older seniors and the inability to live independently.

MN: Majority of Low-Income Seniors are Homeowners

	Homeownership Rate for Households with Income <= 50% of Statewide Median (adj. for household size)	Homeownership Rate for Households with Income <= 30% of Statewide Median (adj. for household size)
Senior Households	64%	53%

Source: Minnesota Housing analysis of data from Census Bureau, American Community Survey, 2015, Public Use Microdata Sample (PUMS). Median income data from HUD.

This table shows homeownership rates for households with incomes at or below 50% of the statewide median family income, and also at or below 30%.

Key Points:

- 53% of senior households with income at or below 30% of the statewide median are homeowners.

Implications:

- As this table and the previous graphs show, homeownership should be an initial priority:
    - Most seniors (including low-income) are homeowners,
    - Most seniors remain homeowners until at least ages 75 to 84, and
    - The largest group of baby boomers are under age 60.
- If current living patterns continue, the largest group of Baby Boomers won't be transitioning from homeownership to renting for at least another 15 years. What will be the housing needs of these lower-income homeowners? Will it be home repair and maintenance? Will it be the installation of accessibility features to the home? Will it be access to home and community based services?
- Nevertheless, the number of senior renters will also be increasing each year. Rental housing with services will become more and more important over time.

Rehabilitation Needs of Extremely-Low-Income Senior Homeowners in MN

- 16,400 households have home rehabilitation needs to remain in their homes for the next five years – For example:
    - New water heater 27%
    - New windows 25%
    - New roof 21%
    - Grab bars or hand rail 21%
    - Shower at floor level 20%
- On average, nearly $16,000 of work per home
- $250 million of rehabilitation needs over the next five years (or $50 million annually)
- 12,000 of these household also have unmet home and community based service needs

Source: Wilder Research, *An Assessment of Home Renovation and Rehabilitation Needs of Older Adult Homeowners in Minnesota*, December 2016

Last year, Minnesota Housing and the Department of Human Services worked with Wilder Research to assess the home rehabilitation needs of senior homeowners with incomes at or below 30% of the area median income, who are a primary customer of Minnesota Housing's Rehabilitation Loan program.

Key Points:

- There are roughly 16,400 extremely-low-income senior homeowner households that have rehabilitation needs to stay in their home for the next five years.
- About $50 million is needed annually to meet these needs.

Implications:

- Like most affordable housing needs, there are insufficient resources. The Rehabilitation Loan Program has an annual budget of $8.6 million.
- Without home rehabilitation and adequate in-home services, seniors may have to choose more expensive housing options, such as assisted living or nursing homes

MINNESOTA HOUSING

Theme/Trend #8

Minnesota Has A Large Stock of Affordable Rental Housing that Needs to be Preserved

Preserving Federally Subsidized Rental Housing is a Critical Issue

- Minnesota has nearly 36,000 housing units where rent assistance is tied to the units:
  - 30,000 project-based Section 8, and
  - 6,000 USDA Rural Development Section 515.
- These properties were generally developed in the 1970s and early 1980s.
- Many have capital improvement needs and limited reserves to pay for them.
- With their rent assistance, preserving federally subsidized units is critical.

Implications:

- While the State of Minnesota needs to preserve all types of affordable housing, preserving federally subsidized rental units is critical. The rent assistance provided through the units ensures that tenants pay no more than 30% of their income on rent.

Preserving Other Affordable Housing is Also Important

- In total, Minnesota has roughly 335,000 rental units that are affordable to households with incomes at or below 50% of AMI
- Of those:
  - About 36,000 have federal project-based rent assistance
  - About 23,000 are public housing
  - Another 50,000 are affordable through other income or rent restrictions (including Low-Income Housing Tax Credits)
  - Roughly 225,000 are naturally affordable, which are often affordable because they are dated, lack modern amenities, and/or need repairs or rehabilitation
    - Based on preliminary data, Minnesota Housing estimates that the state is losing nearly 2,000 of these units each year when properties are purchased, updated, and have their rents increased.
    - At best with current resources, Minnesota may be able to just offset the loss of those units with the construction of new affordable rental units.

Preservation of other rental units also needs to be addressed.

Key Points:

- Project-based rental assistance is key because it provides the deepest subsidies, but preserving other affordable units is also important.
- Many of the naturally affordable units are affordable because they are dated, lack modern amenities, and/or need repairs or rehabilitation. In markets with low vacancy rates and rising rents, these properties are at risk of being purchased, upgraded, and having their rents increased so they are no longer affordable.

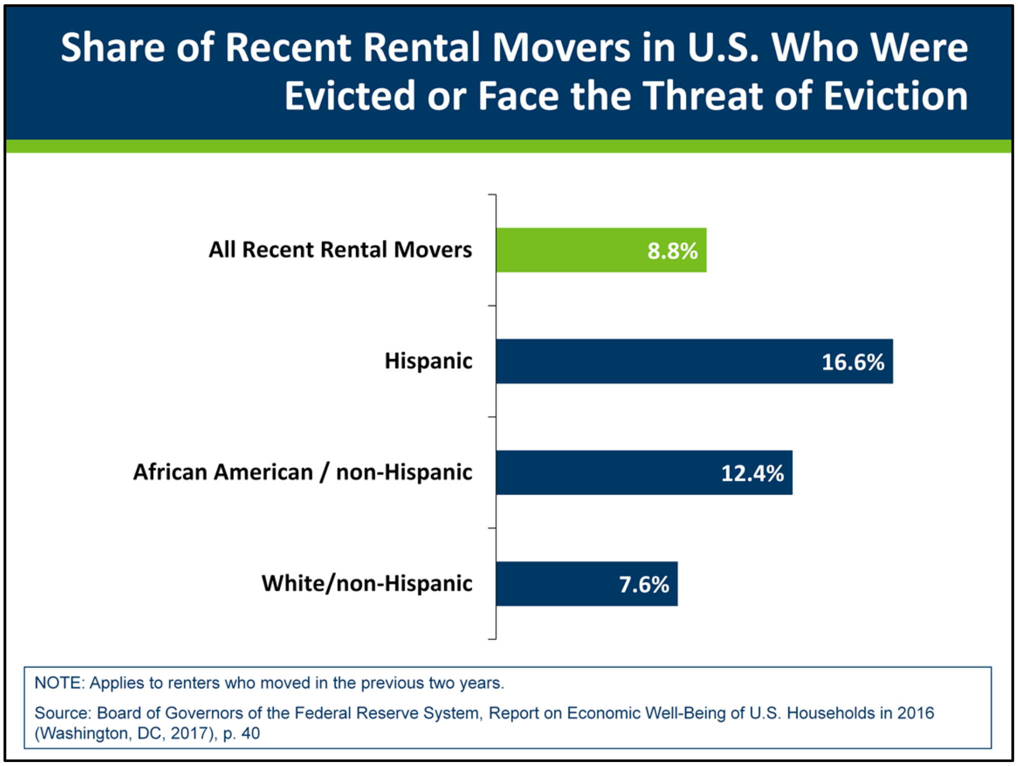
Implications:

- Preserving naturally affordable rental housing is another critical issue.

MINNESOTA HOUSING

Theme/Trend #9

Many Minnesotans Struggle with Housing Stability, Most Notably People Experiencing Homelessness



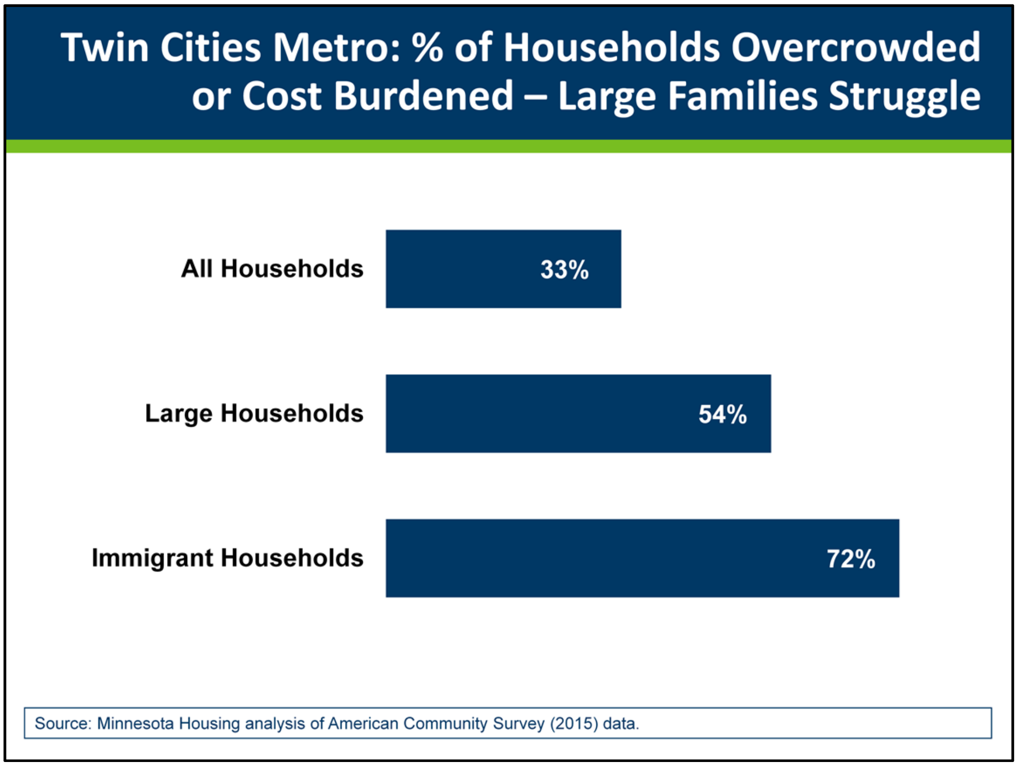
There are many causes of housing instability. People with criminal records, poor credit histories, or evictions struggle to find stable housing. This graph shows the share of recent rental movers (moved in the previous two years) who were evicted or faced the threat of eviction.

Key Points:

- Almost 1 in 10 recent rental movers (8.8%) faced eviction.
- People of color or Hispanic ethnicity are much more likely to face eviction.

Implications:

- Being evicted is not only extremely disruptive but also makes it far more difficult to access housing in the future. Landlords use rental histories to screen potential tenants.



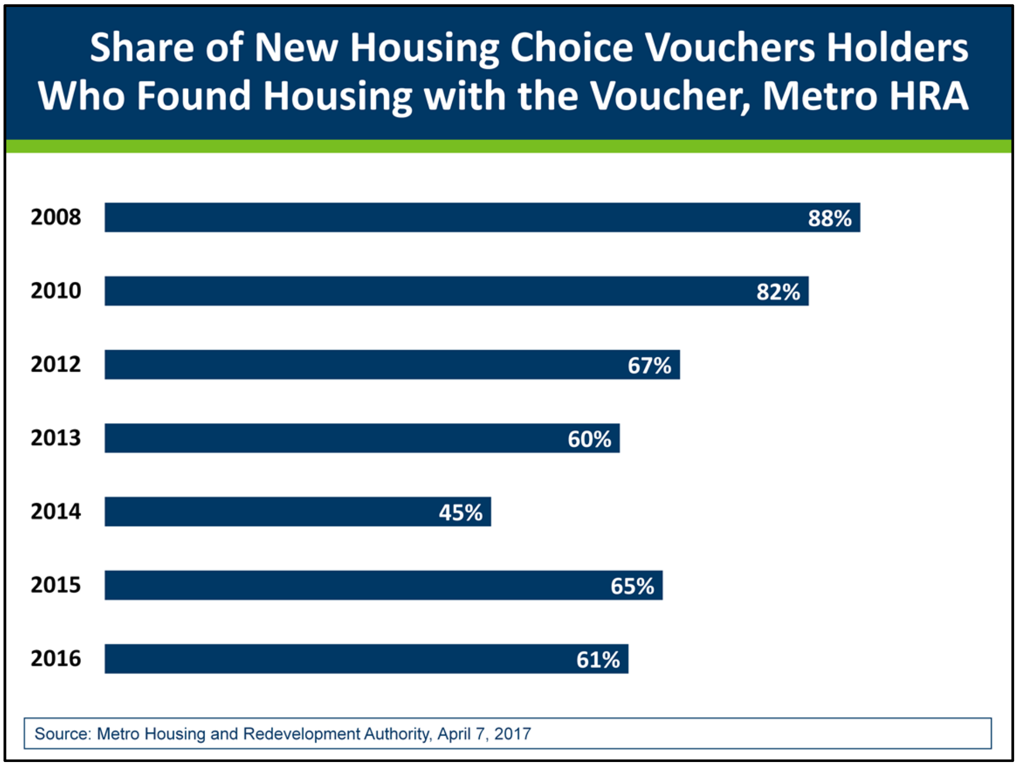
Large households and immigrants also struggle with housing instability. In 2015, 39,600 households in the Twin Cities metro area were large families (households with 6 or more people). Of these large families, 44 percent were immigrant families (with the head of household or spouse born outside of the U.S.).

Key Points:

- While 33 percent of all households are cost burdened and/or live in overcrowded housing, 54% of large households and 72% of immigrant households are.

Implications:

- Finding affordable housing with at least three or four bedrooms is very challenging.



On paper, housing vouchers can be an effective way to support housing affordability and stability. They allow the holders to pay no more than 30 percent of their income for rent, with the sponsor of the voucher (typically HUD or the state of Minnesota) paying the rest of the market-rate rent. However, in the current housing market, it can be very challenging to use the vouchers. With the low vacancy rates, voucher holders have to compete with all the other renters looking for the few available units.

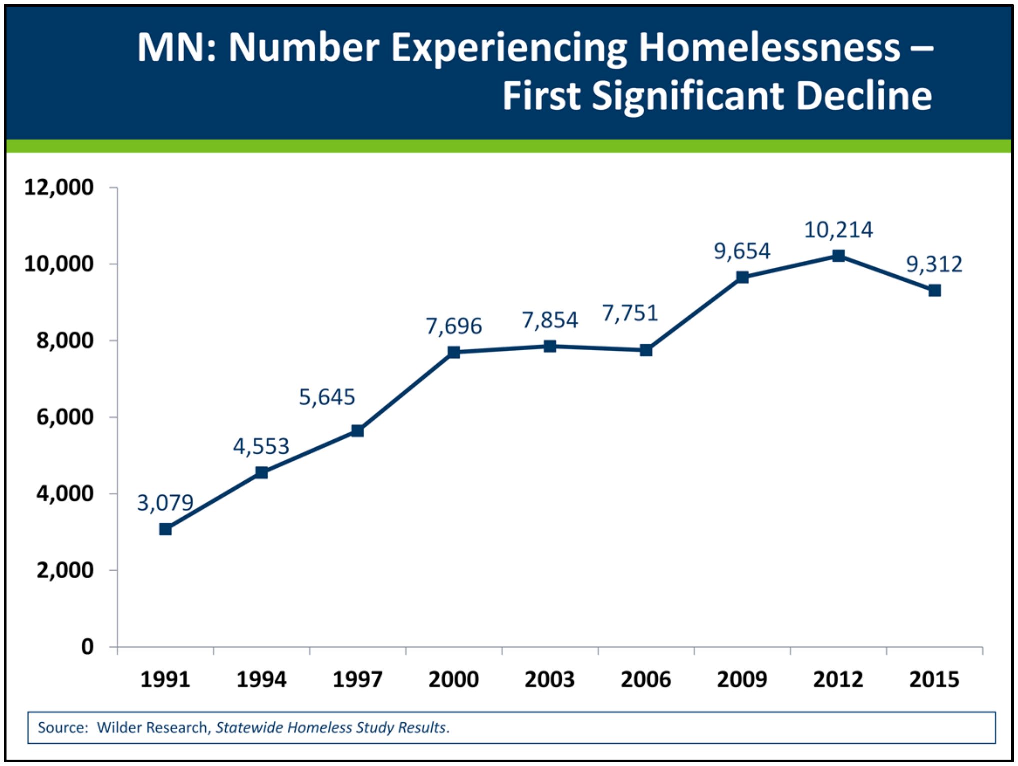
Key Points:

- In 2016, only 61 percent of new holders of Housing Choice Vouchers from Metro HRA were able to successfully find housing with the voucher. Nearly 40% were unsuccessful.

(The success rate improved in 2015 when the Metro HRA updated its waiting list. The previous list was eight years old.)

Implications:

- This data shows that even households with significant support struggle to achieve housing stability in the current housing market.



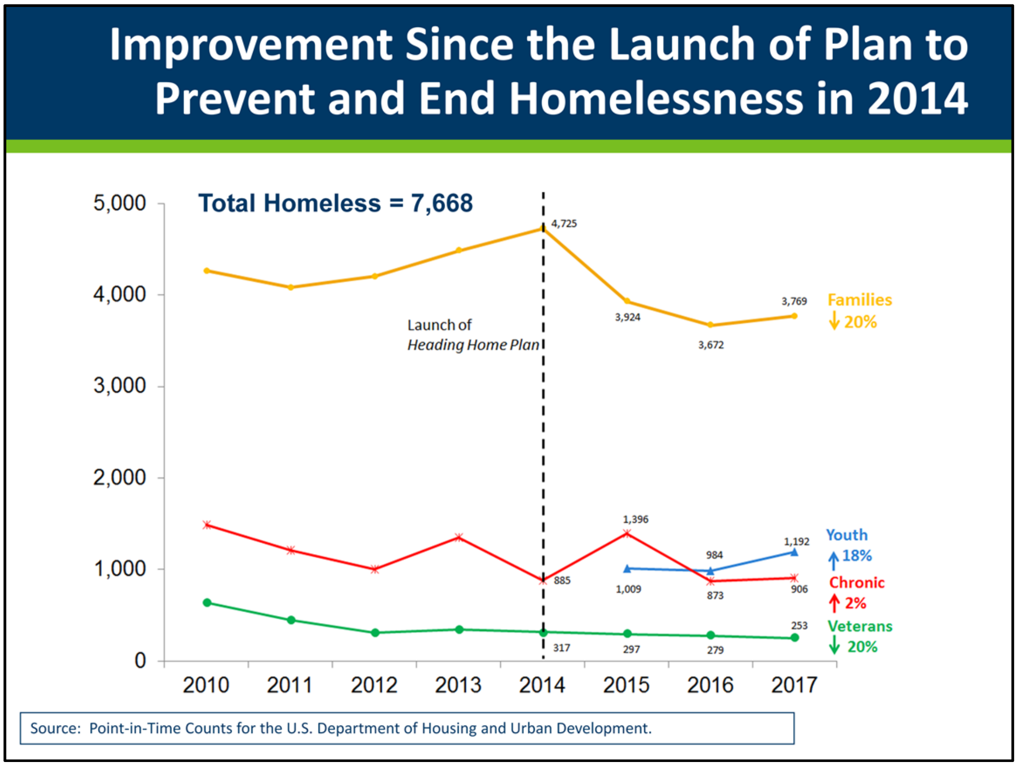
Homelessness is the extreme form of housing instability and is a chronic problem in Minnesota. This graph presents data from Wilder Research's triennial survey and shows the number of people experiencing homelessness on one night in October.

Key Points:

- After increasing for two decades, the number of people experiencing homelessness had its first significant decline in 2015.
- After leveling off in 2003 and 2006, the state experienced a large increase with the Great Recession.

Implications:

- Homelessness is a large problem that requires a coordinated and sophisticated strategy to address. To that end, Minnesota has an Interagency Council on Homelessness that brings together the resources of 11 state agencies and the Metropolitan Council, with the goal of aligning and coordinating housing, social services, and other supports. The Interagency Council launched its Plan to Prevent and End Homelessness in December 2013 and is now preparing its second update to the plan.



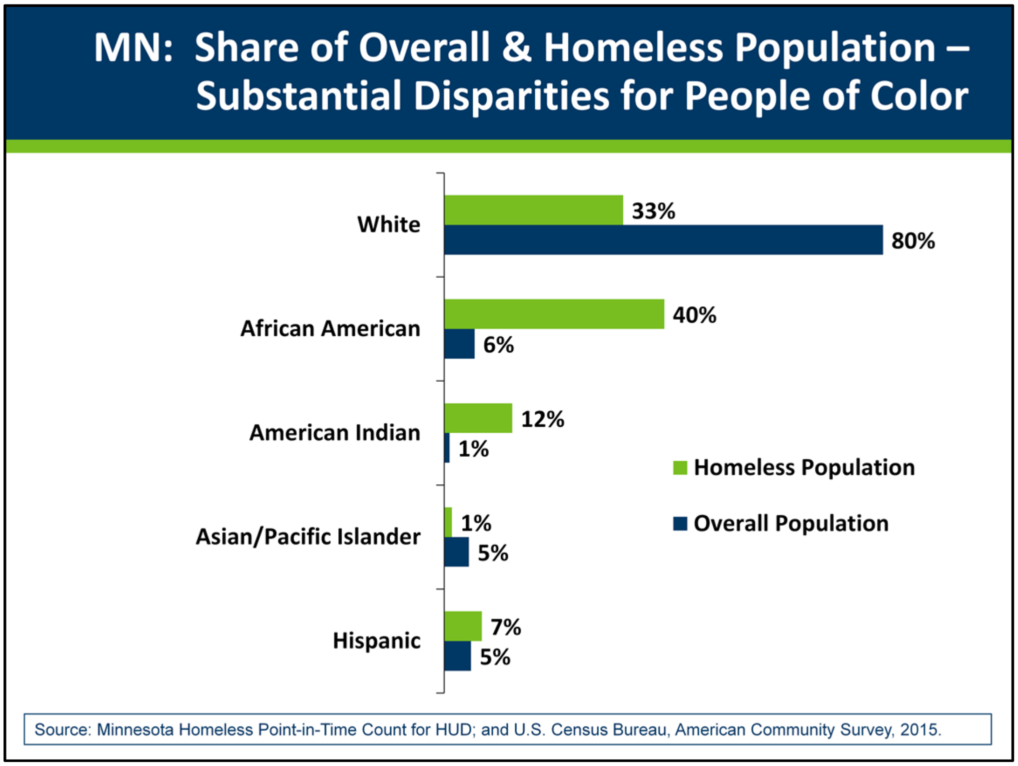
This graph shows trends in the number of people experiencing homelessness by sub-populations, before and after launching the Plan to Prevent and End Homelessness. These numbers come from HUD's Point-in-Time count, which is a different source and provides slightly lower numbers than the Wilder Research estimates in the previous graph. These numbers have the advantage of being produced annually.

Key Points:

- There was a slight increase in homelessness in 2017, which may reflect the very tight and challenging rental market.
- Families: Because over half of people experiencing homelessness are in families with children, this trend line largely drives the overall trend. Since the launch of the Plan, family homelessness has dropped by 20%, with a slight increase in 2017.
- Chronic: The number of people who experience chronic homelessness has fluctuated over the last few years.
- Youth: The number has increased, but this may just reflect better counting.
- Veterans: The number of veterans experiencing homeless is on a clear downward trajectory.

Implications:

- The state Plan to Prevent and End Homelessness will address all types of homelessness, with the goal of bending the trend line for all the populations significantly downward. More work is needed. In 2017, over 7,600 Minnesotans experienced homelessness on a given night.



This graph shows the disparities in the homeless populations by race and ethnicity.

Key Points:

- Blacks / African Americans account for just 6%of the Minnesota's overall population but 40% of the homeless population.
- American Indians represent just 1% of the overall population but 12% of the homeless population.

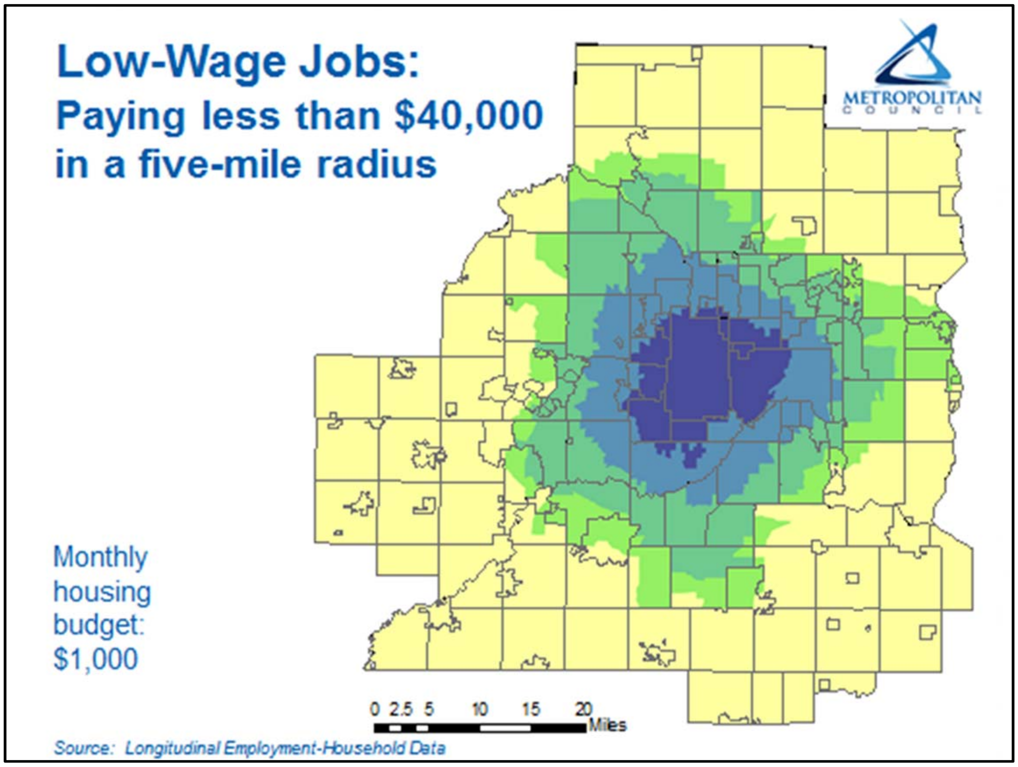
Implications:

- There are disparities throughout the housing system, from homelessness to homeownership.
- If we are to have an equitable society, these disparities must be addressed.

MINNESOTA HOUSING

Theme/Trend #10

Housing Location Matters, Providing Access to Jobs, Transit, Schools, Services, and Other Amenities



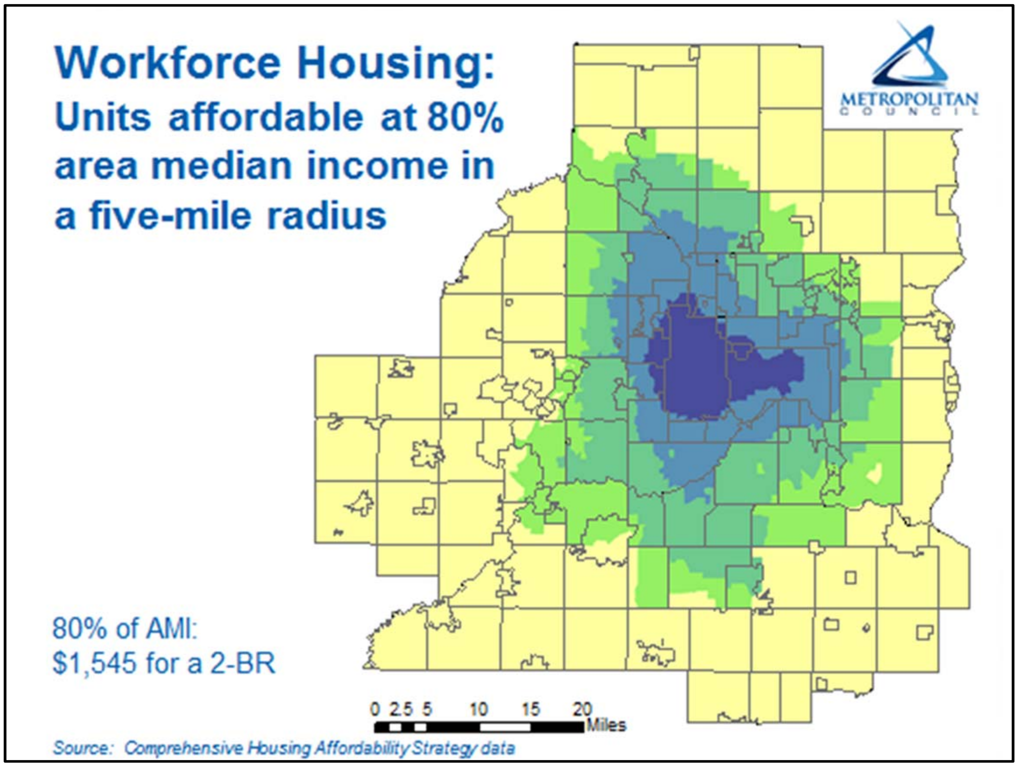
This map from the Metropolitan Council shows locations in the metro area with the greatest number of low-wage jobs within five miles, which are the types of jobs that people who need affordable housing have. The darker the color, the greater the number of jobs.

Key Points:

- The greatest number is in Minneapolis, the eastern have of St. Paul, and the western inner-ring suburbs.

Implications:

- Is there affordable housing for people who work in these areas?



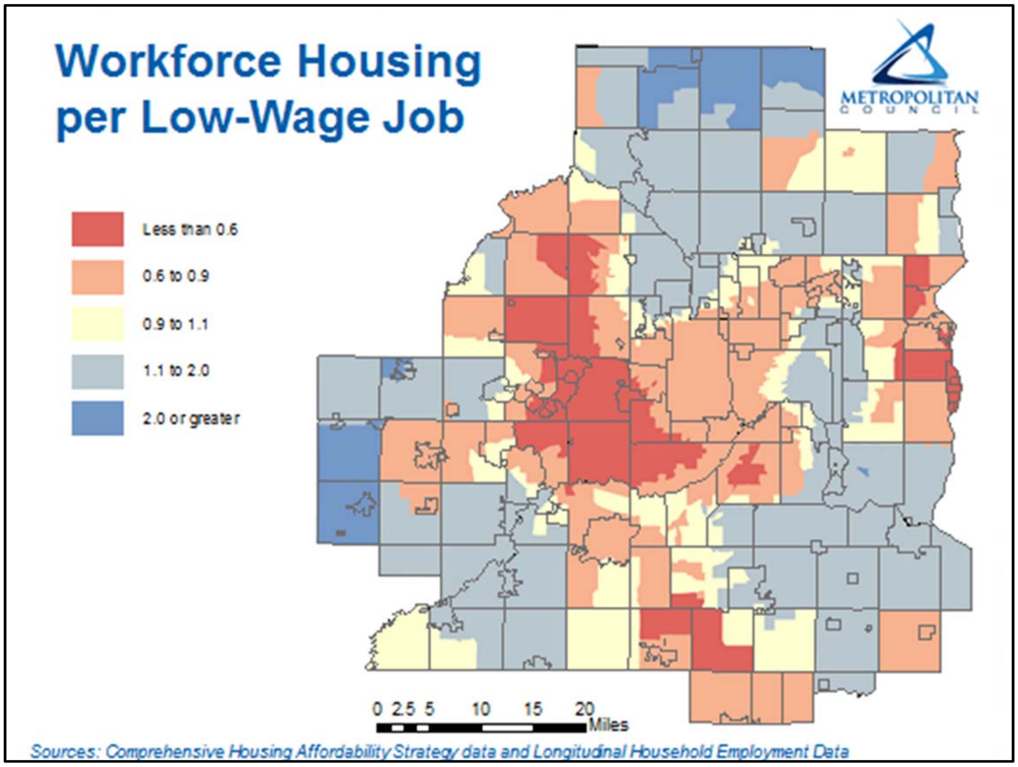
This map is also from the Metropolitan Council and shows the availability of housing that is affordable to households with incomes at or below 80% of the area median income. The darker the color, the greater the number of affordable units within five miles.

Key Points:

- Most of the affordable housing is concentrated in the central cities of Minneapolis and St. Paul, which has the highest density of people
- This is followed by the inner-ring and then the outer-ring suburbs.

Implications:

- Comparing the two maps, there is some alignment in the location of jobs and housing, but there is also some mismatch.



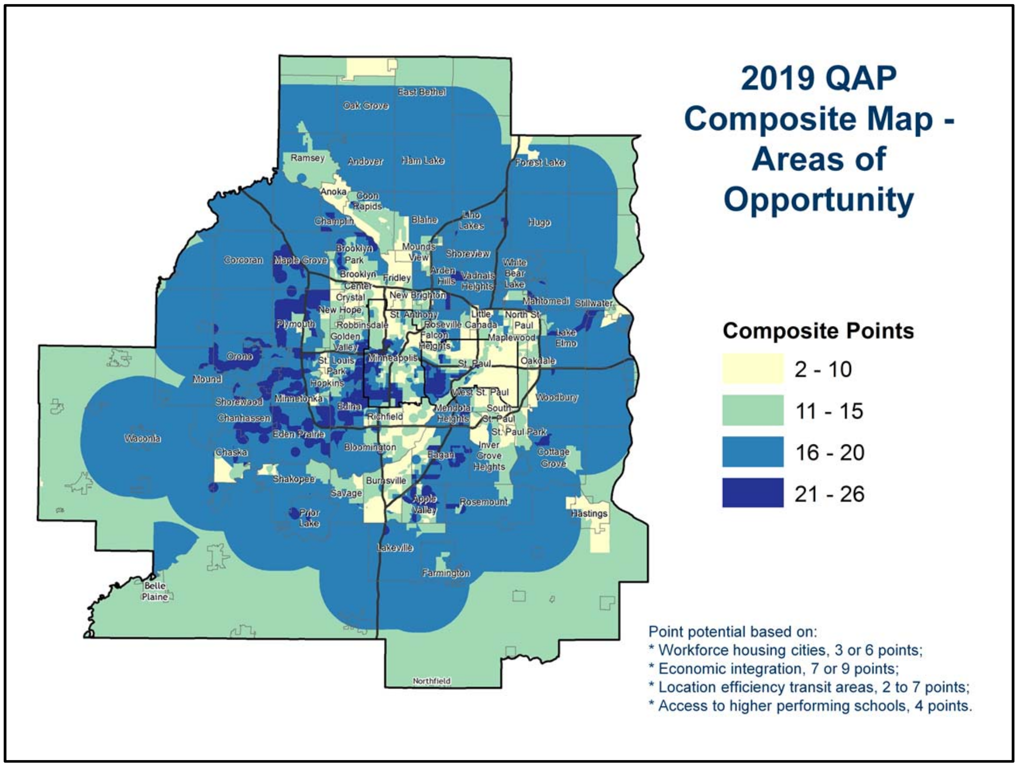
This map combines the previous two and more clearly shows the mismatches.

Key Points:

- The western suburbs, the far eastern suburbs around Stillwater, and southwestern Dakota County along with southeastern Scott Count have the greatest mismatch of housing and jobs, with less than 0.6 units of affordable housing per low-wage job.
- Minneapolis and the eastern half of St. Paul have 0.6 to 0.9 units of affordable housing per low-wage job.

Implications:

- Providing access to jobs and allowing people to live in the community in which the work are important housing choices that should be available to lower-income households.



Access to other opportunities, besides jobs, is also important. This map shows the geographic-based points that Minnesota Housing awards to applications for funding for multifamily rental housing, based on the access to opportunity that the property will provide. Minnesota Housing uses the pointing process to select projects for funding. Besides access to opportunity, other points are awarded for serving vulnerable populations, minimizing rents, efficiently using resources, being ready to proceed, preserving federally-subsidized units, and supporting community development/revitalization.

For access to opportunity, a location gets (as shown on the map):

- 3 or 6 points for access to jobs (workforce housing)
- 7 or 9 points for being in a moderate- to high-income community (economic integration)
- 2 to 7 points for access to transit (location efficiency)
- 4 points for access to higher performing schools

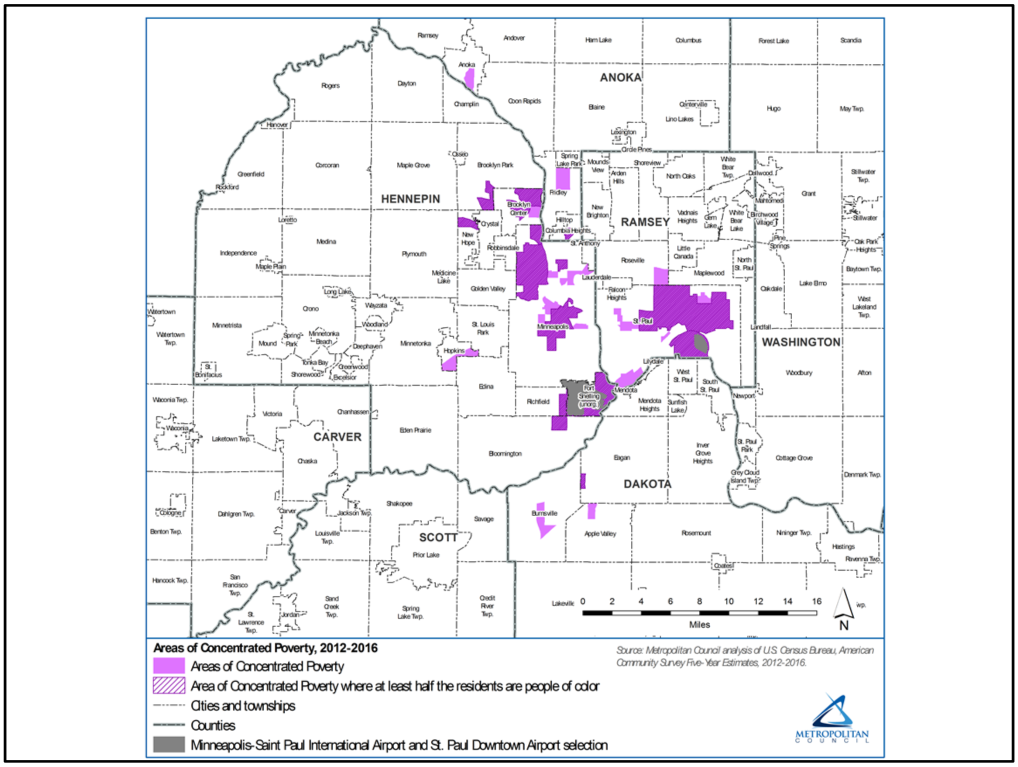
The maps show the combination of these four scoring criteria added together, with the aggregated points ranging from 2 to 26. The darker the color, the more points awarded.

Key Points:

- Areas with multiple opportunities are located throughout the region, including in parts of Minneapolis, St. Paul, and the suburbs.

Implications:

- While access to opportunity can play an important role in the selection process, Minnesota Housing pursues a balanced approach and funds projects in divested communities, particularly if it is part of a larger community revitalization effort and/or involves preserving existing federally-subsidized rental housing.



This map from the Metropolitan Council shows Areas of Concentrated Poverty, which are census tracts where 40% or more of the residents live with incomes below 185% of the federal poverty threshold. (Census tracts that meet this poverty threshold but have a high number of enrolled college or graduate students are removed.) For context, 185% of the federal poverty threshold in 2016 was $45,442 for a family of four and $22,622 for a single person.

Key Points:

- Over 370,000 people (about 12% of the Twin City metro population) lived in the 104 census tracts identified as Areas of Concentrated Poverty in 2012-2016.
- People of color face race-specific barriers that can limit their housing choices (see Metropolitan Council's report, Choice, Place and Opportunity: An Equity Assessment of the Twin Cities region for a full discussion). As a result, people of color are more likely to live in Areas of Concentrated Poverty. Eighty-one of the 104 census tracts identified as Areas of Concentrated Poverty are majority people of color.
- Areas of Concentrated Poverty are not just census tracts—they are neighborhoods with unique histories and built environments that people call home. That many residents living in Areas of Concentrated Poverty are low-income does not diminish the vibrancy or strength of these communities. Nonetheless, Areas of Concentrated Poverty are different from other places: research consistently links high-poverty places to negative effects on people's physical and mental health. Studies also find living in high-poverty neighborhoods reduces the cognitive abilities of children, making them more likely to have lower incomes as adults than their parents, and more likely to live in poverty across generations. For these reasons, Areas of Concentrated Poverty remain a concern.

Implications:

- Housing investments in the Twin Cities metro and in communities across Greater Minnesota need to be done strategically, balancing multiple policy goals – for example providing access to opportunity but also making investments in disinvested communities as part of revitalization efforts.

MINNESOTA HOUSING

For More Information

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Item: 2018 Division Work Plan Summary

Staff Contact(s):
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John Patterson, 651.296.0763, john.patterson@state.mn.us

Request Type:

☐ Approval	☒ No Action Needed
☐ Motion	☒ Discussion
☐ Resolution	☐ Information

Summary of Request:
For informational purposes, staff is summarizing the major key initiatives in the 2018 Divisional Work Plans that implement the 2016-2019 Strategic Plan and 2018 Affordable Housing Plan.

Fiscal Impact:
None. These plans are consistent with the approved 2016-2019 Strategic Plan, 2018 Affordable Housing Plan and 2018 Operating Budget.

Meeting Agency Priorities:
☐ Address Specific and Critical Local Housing Needs
☐ Finance Housing Responsive to Minnesota's Changing Demographics
☐ Preserve Housing with Federal Project-Based Rent Assistance
☐ Prevent and End Homelessness
☐ Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

Attachment(s):
- Background
- Strategy Management Framework

Agenda Item: 8.D
Background

2018 Division Work Plans Summary

Minnesota Housing takes a systematic approach to its overall strategic management and performance reporting. The system includes a "family of documents" that are integrated and build off each other. The planning documents include the Strategic Plan, Affordable Housing Plan, divisional work plans, and individual work plans (see attached outline of the planning documents in our Strategy Management Framework). Each has corresponding performance reports, including quarterly reports to the board, quarterly reports for divisional review meetings, regular reports for program managers and staff, and individual performance appraisals. This system creates a strategy management feedback loop for continuous improvement - the result should be an agency that gets better and better at achieving its mission.

The 2016-2019 Strategic Plan was approved by the Board in July 2015. It defines the Agency's vision, mission, values, guiding principles, priorities, and strategies. It also includes the list of the Agency's ongoing work each year:

- Promote and Support Successful Homeownership
- Finance New Affordable Rental Opportunities
- Preserve the Existing Housing Stock
- Provide Housing Resources to Support Community and Economic Development
- Lead, Collaborate, and Take Action on Critical Housing Issues
- Strengthen the Financial and Organizational Capacity of the Agency

The five strategic priorities are:

1. Address Specific and Critical Local Housing Needs
2. Finance Housing Responsive to Minnesota's Changing Demographics
3. Preserve Housing with Federal Project-Based Rent Assistance
4. Prevent and End Homelessness
5. Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

The Affordable Housing Plan (AHP) is the annual business plan for carrying out the Agency's core work for the upcoming year and implementing the Strategic Plan. It was approved by the Board in September 2017. The AHP outlines key programmatic and policy initiatives for the program year (October, 2017 through September, 2018), specifies program-by-program funding, and establishes production targets. In total, the plan allocates over $1.1 billion of federal, state, and agency resources, which will assist or produce approximately 68,000 households or housing opportunities. This is a $62 million increase from 2017.

Each division develops an annual work plan for implementing the Strategic Plan and AHP. These plans identify funding and production levels, key division/section activities, responsibilities, expected outcomes and program level measures.

The 2018 Division work plans are ambitious, particularly in light of uncertainties that we will face this year, including:

- Election year with pending State Administration transition;
- Governor's Task Force on Housing, set to complete its recommendations by July, 2018;
- State budget forecast that projects a deficit for the first time in six years;
- State legislative session, including pursuing a bonding request for $115 million in Housing

Infrastructure Bonds;
- Impacts of recent Federal Tax Reform, including changes in tax credit pricing;
- Federal budget and legislative uncertainties;
- New Project Based Section 8 Contract Administration (PBCA) procurement and contract process;
- Rising interest rates; and
- Availability and allocation of tax-exempt bonding authority.

Below is a summary of the key initiatives in the divisional work plans; this is not an exhaustive list.

Single Family
- Complete evaluation of the Agency's Home Improvement Programs and implement program changes;
- Maintain strong production of low-interest mortgages and enhancements (Start Up, Step Up, Deferred Payment Loans, Monthly Payment Loans) to support $630 million of lending and an estimated 3,663 households;
- Achieve the goal of 35% of first-time homebuyer loans going to households of color or Hispanic ethnicity;
- Continue implementation of the new single-family loan origination system to improve operations and customer service;
- Develop a new single-family compliance management system in accordance with Consumer Financial Protection Bureau and other regulations.

Multifamily
- Implement revised multifamily underwriting standards and program guidelines to respond to customer needs, and increase first mortgage production (goal is 10 first mortgages in addition to loans generated through the consolidated RFP);
- Assess the loss of naturally occurring affordable housing, identify Minnesota Housing's role in addressing the issues, and build partnerships;
- Investigate strategies for preserving and improving manufactured home parks, including a potential new pilot program to augment existing agency activities;
- Address workforce housing through Economic Development and Challenge Fund and Greater Minnesota Workforce Housing Development Programs;
- Continue carrying out the Multifamily Remodel Project, a multi-phased business process and technology improvement effort, focusing on the post-selection-to-closing processes and implementing a new business development function; and
- Secure the new HUD PBCA contract once a procurement process is announced.

Finance
- Pursue a larger $115 million request for Housing Infrastructure Bonds (and include senior rental housing as an eligible use along with supportive housing, rental preservation and community land trusts) and General Obligations Bonds to improve publicly-owned housing;
- Manage the Agency's cash, debt, investments and liquidity;

- Continue pursuing a best-execution policy that weighs the costs of selling tax exempt mortgage revenue bonds compared with selling mortgaged-backed securities backed by Agency mortgages; and
- Monitor and manage issues and activities related to tax-exempt bond cap allocation and capacity.

Collaborations and Partnership Actions

- Serve in multiple key roles for the Governor's Task Force on Housing that will recommend policies and practices to help alleviate Minnesota's housing challenges;
- Complete and begin implementation of the new State Plan to Prevent and End Homelessness, with a focus on a multi-sector, multi-organizational approach to implementation and on families and youth when financing supportive housing;
- Continue to implement the Olmstead Plan to provide increased housing options for persons with disabilities in integrated community settings;
- Assess Minnesota's rural delivery networks for housing resources and work with partners to support and improve those networks;
- Participate in the Homework Starts with Home Initiative to support community partnerships that create targeted responses to end homelessness for students and their families;
- Continue to work with DHS to develop and implement strategies to more effectively serve housing-related needs of seniors; and
- Continue to support and strengthen the Homeownership Opportunity Alliance, an industry-wide collaboration to reduce the homeownership disparities in Minnesota.

Community Engagement, Diversity, Capacity Building

- Release new Analysis of Impediments to Fair Housing Choice, and develop and begin implementation of its action plan;
- Build the capacity of local organizations to identify, create and implement housing solutions through technical assistance, capacity building grants, and other efforts;
- Continue to strengthen the capacity to work in partnership with Minnesota's Indian tribes and urban Indians to meet their housing needs through consultation, work sessions, training, technical assistance, program development and housing investments; and
- Implement the approved work plans related to the Governor's Diversity and Inclusion Executive Order, including procurement practices, State workforce, and civic engagement.

Other

- Build requirements and framework for Customer Relationship Management System, Business Intelligence, Data Strategy and Enterprise Content Management System as we implement the new Single Family Loan Origination System and complete Multifamily Remodel projects; and
- Recruit a new Chief Risk Officer, update Agency Risk Profile and complete risk assessments on several agency programs.

MINNESOTA HOUSING

Board Agenda Item: 8.E
Date: 1/25/2018

Item: Housing Task Force Update

Staff Contact(s):
Mary Tingerthal, 651.296.5738, mary.tingerthal@state.mn.us

Request Type:

☐ Approval
- ☐ Motion
- ☐ Resolution

☒ No Action Needed
- ☒ Discussion
- ☐ Information

Summary of Request:
The Governor's Task Force on Housing held its first meeting of the full Task Force on Friday January 12, 2018. The attached Task Force Framework Document provides an overview of the Task Force and how it will do its work.

Fiscal Impact:
None.

Meeting Agency Priorities:
☐ Address Specific and Critical Local Housing Needs
☐ Finance Housing Responsive to Minnesota's Changing Demographics
☐ Preserve Housing with Federal Project-Based Rent Assistance
☐ Prevent and End Homelessness
☐ Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

Attachment(s):
- Task Force Framework

Securing Minnesota's Housing Future

The Governor's Task Force on Housing

Housing Task Force Framework Brief

Inequitable access to safe, quality, stable housing is a person-centered problem and people from a broad range of communities with diverse perspectives and a wide range of expertise can create the solutions. We know that what has worked in the past is important but insufficient to meet the demands, needs and challenges of our changing communities. The goal of the Housing Task Force is to support what is working, gain a broader understanding of what success looks like for people across the state, identify gaps in the system, and develop innovative solutions to ensure that families, individuals, and communities have the foundation for success that they need.

There are a number of factors that have led to the affordable housing crisis in recent years:

- Median incomes have not kept up with the rising cost of housing.
  - The number of cost-burdened households (those paying more than 30% of income for housing costs) has increased 58% from 2000 to 2016.
  - Renters' costs have increased 12% since 2000 while real wages have fallen by 4%.
  - 550,000 Minnesotans are cost-burdened across the state.
- Vacancy rates in the Twin Cities metro are hovering at about 3 percent, whereas a balanced rental market usually has a 5 percent vacancy rate.
- Similar housing shortages exist in most regional job growth centers throughout Minnesota, with Rochester's workforce housing vacancy rate at just 1.2% as Destination Medical Center (DMC) economic growth takes off.
- Most low income households live in what is called "naturally occurring affordable housing," or "NOAH" - which is housing that is affordable but not government funded. We are losing thousands of these housing units each year to speculators charging higher rents and often displacing low income families. Minnesota Housing Partnership released a report on this issue in October 2016.
- Poor housing quality negatively impacts other quality of life elements such as family health, education and employment outcomes.
- The housing shortage makes it impossible for many working families to secure decent apartments they can afford, creating economic stress and instability at work and school.
- While Minnesota remains a high homeownership state, we are among the top five states in the nation with the largest disparities in home ownership among households of color.
- While our affordable housing system is one of the most effective in the country, annually producing over well 1,000 new rental units statewide, it likely falls short of replacing the nearly 2,000 naturally occurring affordable housing units being lost each year.

- 8,400 families are evicted annually in Hennepin and Ramsey counties alone, mostly due to non-payment of rent. Eviction interrupts the family's stability and relegates them to a future with limited housing choices, often competing for the poorest quality housing units in the market.

While it is imperative that we maintain our strong housing finance system, we cannot build our way out of the crisis with only existing tools and partners. We must consider new and innovative policies and partnerships to improve alignment with the essential systems that intersect with housing -- social services, schools, employment, courts and regulatory services. By ensuring a more comprehensive housing system, we will better serve all Minnesotans, provide greater housing stability and enable families to thrive.

What's at stake and what is needed?

Growing housing instability among Minnesotans risks the economic competitive advantage of the state and our communities.

To protect our economic vitality, Minnesota needs:

- A full range of housing choices, which is a fundamental characteristic of strong and healthy communities;
- Coordinated partnership between the public and private sectors; and
- Safe, stable affordable housing for all individuals and families so they can succeed and reduce demands on other public systems.

Housing Task Force Objective:

A **non-partisan Task Force** of housing experts, business leaders and community stakeholders representing the broadest perspectives will explore best practices, policies, gaps, and new strategies to ensure all Minnesotans achieve stable housing and have a place to call home.

The Task Force is tasked with five objectives:

- Review existing housing strategies that serve Minnesotans well and identify gaps in the system;
- Consider new practices that will better serve all Minnesotans and provide greater housing stability;
- Develop innovative solutions to ensure that families, individuals and communities have safe and stable housing as the foundation for success;
- Engage with individuals and organizations to affirm that recommendations align with community experiences, needs and priorities; and
- Recommend specific policy proposals and actions that can be taken by the executive and legislative branches of state government, local government, and the private sector to improve housing stability in the state.

Task Force Composition:

The broad objectives of the Task Force necessitated assembling members with diverse perspectives, including: professional experience (developers of rental and homeownership, homelessness issues, employers); geography in the state (greater Minnesota, suburban and urban areas); and people who represent households of color and Hispanic ethnicity and/or other underserved communities.

The Task Force will be led by co-chairs representing business and diverse community interests: Jeanne Crain, Chief Executive Officer, Bremer Financial Corporation and Acooa Ellis, Director of Social Justice Advocacy, Catholic Charities.

The Task Force is comprised of 28 members including 15 core members, 13 ex-officio members, including four current legislators.

Core Members of the Task Force:

- Jeanne Crain, Chief Executive Officer, Bremer Financial Corporation (Co-Chair)
- Acooa Ellis, Director of Social Justice Advocacy, Catholic Charities (Co-Chair)
- Jane Barrett, Executive Director, Red Lake Reservation Housing Authority
- Hukun Abdullahi, Executive Director, Afro American Development Association
- Emily Larson, Mayor, City of Duluth
- Sheila Kiscaden, Commissioner, Olmstead County Board
- Mar Valdecantos, Vice Chair, Northfield Human Rights Commission
- Rick Goodeman, Chief Executive Officer, Southwest Minnesota Housing Partnership
- Diane Sprague, Director, Lifetime Home Project
- Skip Duschesneau, President, D. W. Jones, Inc.
- Richelle Taylor, Realtor, RE/MAX Metro Realty
- Devean George, President, George Group North
- Lael Robertson, Staff Attorney, Housing Justice Center
- Mike Paradise, President, Bigelow Homes
- MayKao Hang, President, Wilder Foundation

Ex-Officio Members of the Task Force:

- Brad Hewitt, Chief Executive Officer, Thrivent Financial, representing the Itasca Project
- Mary Rippe, President, Minnesota Multi Housing Association, representing the Minnesota Multi Housing Association
- Deidre Schmidt, President, CommonBond Communities, representing the Minnesota Housing Partnership
- Terri Thao, Program Director, Nexus Community Partners, representing the Minnesota Housing Finance Agency
- Paul Williams, President, Project for Pride in Living, representing the Metropolitan Consortium of Community Developers
- Neal Loidolt, President, Minnesota Assistance Council for Veterans, representing Minnesota Assistance Council for Veterans
- Harry Melander, President, Minnesota State Building and Construction Trades Council, representing Minnesota State Building and Construction Trades Council

- Matt Kramer, Vice President for University and Government Relations, University of Minnesota, representing University of Minnesota
- Mike Maguire, Mayor, City of Eagan, representing the Urban Land Institute - Regional Council of Mayors
- Senator Rich Draheim, Majority Party of the Minnesota Senate
- Senator Nick Frentz, Minority Party of the Minnesota Senate
- Representative Bob Gunther, Majority Party of the Minnesota House of Representatives
- Representative Alice Hausman, Minority Party of the Minnesota House of Representatives

Timeline:
The Task Force will meet five times between January 1 and June 30, 2018 and a final report will be issued no later than July 31, 2018.

In addition to the regular meetings, the Task Force will use a variety of forums to gather information and develop recommendations:

- Three (3) **Work Groups** which will serve as the Task Force's working meetings and will be focused on specific topics in the housing market. The focus of the Work Groups is outlined below.

- SIx (6) **Regional Housing Forums** will be held in the four corners of the state and two in the metro area. Task Force members will be encouraged to attend the Regional Forums, which will be held between Task Force meetings #2 and #4. Each Forum will be focused on housing themes relevant for that region and will include invited local stakeholders to present their perspective on the themes. Following the presentations, public comments will be invited on the full range of housing topics being considered by the Task Force.

- The Task Force will have an **open call for position papers that will include implementable ideas** on topics of interest to the Task Force to gather the widest range of thought possible on solutions that will expand housing opportunities and advance housing stability.

- A **Task Force website** at - https://www.mnhousingtaskforce.com - will provide ongoing and changing opportunities for input and feedback related to the work of the Task Force and its Work Groups, through the use of surveys, topic specific questions, and feedback related to recent meetings and documents under review.

Scope of the Work Groups:
The Task Force's Work Groups will explore and form consensus opinions on recommendations within three key topics of concentrated interest: homeownership, rental housing, and housing stability & opportunity.

Each of these core areas will require an analysis of the impact of current strategies, gaps that have been identified and emerging strategies that could be deployed to impact housing stability. Topics to be considered:

<u>Home Ownership</u>

Scope: This Work Group will focus on supporting and expanding tools required for the production or preservation of homes (single family, condos, townhomes) and to ensure affordable options with equitable access and sustainable homeownership opportunities, especially for households of color or Hispanic ethnicity in Minnesota.

Co-Chairs: Mike Paradise and Terri Thao

<u>Rental Housing</u>

Scope: This Work Group will focus on development and preservation tools to support a full range of rental housing options in the market place that meet the diverse needs of Minnesotans.

Co-Chairs: Deidre Schmidt and Skip Duschesneau

<u>Housing Stability & Opportunity</u>

Scope: This Work Group will focus on strategies to ensure that ALL Minnesotans, including those with the lowest incomes and the greatest barriers to housing, have access to and ability to maintain a quality place to call home.

Co-Chairs: Paul Williams and Sheila Kiscaden

Scope of Regional Forums:

The Task Force's Regional Forums will create a venue to listen to community stakeholders' perspectives on crucial community housing issues and provide an opportunity for all interested Minnesotans to be heard in the process. Additionally, the Forums will provide an opportunity for the Task Force and Work Groups to get feedback on ideas and strategies under its consideration. The agenda of each Forum will be shaped by a small local leadership group who will help identify key issues, assist with outreach and identify key stakeholders. The Forums will be a combination of presentation and open discussion for community input and concerns.

Sponsors and Leadership Support:

Several organizations are joining the Governor's office as Sponsors of the Governor's Task Force on Housing. Staff support for the work of the Task Force is being provided by:

- The Itasca Project
- The McKnight Foundation
- Minnesota Housing

- Greater Minnesota Housing Fund
- Family Housing Fund
- Metropolitan Council

In addition, the following funders are providing grants to support the operations of the task force, including the funding of the task force project manager:

- McKnight Foundation
- Blandin Foundation
- Saint Paul Foundation
- Minnesota Housing

The Greater Minnesota Housing Fund (GMHF) is serving as fiscal agent for the financial resources.

Staffing and Communication:

A Project Manager will coordinate the work of the Task Force and the Work Groups. Staff assigned by each sponsor organization will provide research, subject expertise and administrative support to the Work Groups.

A website will provide a centralized point of information and resources to the Task Force, its Work Groups, interested stakeholders and the public. It will also provide a vehicle for community engagement, soliciting input on various topics under consideration by the Task Force or Work Groups, and serving as a repository for agendas and schedules of Task Force meetings and Regional Forums.

The Task Force will strive to integrate communications about the work of the Task Force with other high-profile communication opportunities and with the Governor's office to maximize the impact of the Task Force's work and its potential to deliver implementable recommendations.

Long-term Stewardship:

Some may wonder why such an ambitious effort and the Task Force are being launched now, given that we are approaching the final year of the Governor's term. However, the work of this non-partisan Task Force will provide both a challenge and a blueprint for the next Governor to continue the trajectory of leadership, investment and innovation in housing that has been the hallmark of current and past administrations. Additionally, the private organizations of Family Housing Fund, the Greater Minnesota Housing Fund, The Itasca Project and the McKnight Foundation, working collaboratively with Minnesota Housing, will provide long-term stewardship to ensure that recommendations of this Task Force are realized.

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MINNESOTA HOUSING

Board Agenda Item: 9.A
Date: 1/25/2018

Item: Post-Sale Report, Residential Housing Finance Bonds (RHFB) 2017 Series DEF

Staff Contact(s):
Kevin Carpenter, 651.297.4009, kevin.carpenter@state.mn.us

Request Type:

☐ Approval
- ☐ Motion
- ☐ Resolution

☒ No Action Needed
- ☐ Discussion
- ☒ Information

Summary of Request:
The Agency sold $104,220,000 of Residential Housing Finance Bonds on December 4, 2017. Along with $40,000,000 of variable rate debt in the 2017 Series F, there was a total of $144,220,000 of bonds sold, with a closing on December 21, 2017. In accordance with the Debt Management Policy the attached detailed post-sale report is provided by the Agency's financial advisor, CSG Advisors.

Fiscal Impact:
None.

Meeting Agency Priorities:
- ☐ Address Specific and Critical Local Housing Needs
- ☐ Finance Housing Responsive to Minnesota's Changing Demographics
- ☐ Preserve Housing with Federal Project-Based Rent Assistance
- ☐ Prevent and End Homelessness
- ☐ Reduce Minnesota's Racial and Ethnicity Homeownership Disparity

Attachment(s):
- Post-Sale Report

CSG | advisors

M E M O R A N D U M

Date: **January 3, 2017**

To: **Minnesota Housing Finance Agency**

From: **Gene Slater, Tim Rittenhouse, Eric Olson, David Jones**

Re: **Post-Sale Report**
$144,220,000 Residential Housing Finance Bonds (RHFB)
2017 Series DEF

KEY RESULTS FOR MINNESOTA HOUSING

Opportunity. This bond issue took advantage of the opportunity to economically refund several issues of outstanding bonds under the Residential Housing Finance Bond indenture ("RHFB") and to finance approximately $120 million of new mortgages.

Overall Purpose. Series DEF accomplished the following major objectives:

1. Enabled Minnesota Housing to profitably keep almost all tax-exempt eligible production on the balance sheet. This helps Minnesota Housing to earn net annual income over future years.

2. Generated significant savings by refunding old bonds at today's lower interest rates.

3. Achieved full spread, financing new loans without using any of Minnesota Housing's existing zero participations and created approx. $12 million of additional zero participations to help assure a full spread on future issues.

Key Measurable Objectives and Accomplishments. The results of the issue were very successful:

Objective	***Result***
Finance new production on balance sheet	$120 million of new loans, primarily at low rates in 3% coupon pass-through MBS securities
Provide at least a similar return to the Agency as selling new loans on the secondary market	Higher return from including loans in the new issue (based on average prepayment speeds the Agency has recently experienced on similar loans).
Refund bonds at lower interest rates	Reduced average yield on $24 million of old bonds from approx. 4.77% all-in to 2.77% (average yield on entire new issue). The refunding savings are thus over $450,000 per year. These savings allow new loans to be financed at full spread.
Strengthen the RHFB indenture going forward	Increases the expected net present value to the Agency by approximately $7.4 million.
Achieve full spread on the overall transaction	Agency will earn the maximum spread permitted by the IRS
Minimize use of any existing zero participations	None were needed
Increase zero participations for future issues	Increases the Agency's zero participations from approx. $35 million to $47 million

Variable Rate Debt. An important design decision was to include a variable rate series with an interest rate swap. This was Series F for $40 million (the same size as the variable rate series included in the prior RHFB issue in June); this was 28% of the total issue. The swap replaces an existing swap of the Agency that was terminated on the date of the bond sale, with a termination fee of $900,000, in order to allow the Agency to take advantage of today's much lower swap rates (2.26% versus 4.12%).

The benefit of including the swapped variable rate debt is to lower the average all-in cost to Minnesota Housing and thus maximize the zeros created by the transaction for financing future production. This variable rate series was designed in accordance with the criteria that have been provided to the Board, including:

- obtaining a rated liquidity facility, in this case from RBC, and
- having that liquidity facility extend for the entire period until the swap is first optionally terminable at par by Minnesota Housing (in this case 5 years, until January 1, 2023).

Because of the significant pay down of past variable rate series, the amount of Minnesota Housing's variable rate debt is very reasonable from a rating agency perspective, compared to other HFAs that use such debt.

This was Minnesota Housing's second swap with Wells Fargo, helping to continue to balance the Agency's exposure to counterparties. The new swap extends to 2041 at a rate of 2.26%. This indicates the benefit of low swap rates in today's market and the modest cost of assuring flexibility for the housing finance agency to terminate the swap at par in Jan. 2023.

Relationship to Recent and Future Issues and Loan Pipeline. In 2017, Minnesota Housing issued three successful new pass-through bond issues under its newer, Aaa-rated Homeownership Finance Revenue Bond indenture. It is desirable, however, to take advantage of the ability to refund and replace old higher rate bonds in the RHFB indenture together with efficiently financing new production. Blending the old and new loans in the same transaction creates financial efficiencies and future savings.

2017 Issues. A summary of the Agency's single-family financings for 2017 indicates the Agency financed $ 601.7 million of new production on balance sheet. This required $218.3 million of volume cap. In addition, the Agency refunded $85.0 million of old bonds. The average cost of debt for all the issues was approximately 2.87%. As it turned out, the zeros used for Homeownership Finance Bonds happened to almost entirely offset the zeros created on RHFB issues.

Indenture	Sale Date	$ from Taxable Bonds	Volume Cap Needed*	Total $ New Production	$ of Refunding	Total Issue Size	Ave. Bond Yield	Net Change in Zeros
HFB								
2017 A & B	Feb. 19	25.0 mill.	4.0 mill.	$49.9 mill.	n.a.	$49.9 mill.	3.10%	- 11.0 mill.
2017 C & D	Mar. 13	23.9 mill.	6.2 mill.	47.8 mill.	n.a.	47.8 mill.	3.26%	- 10.3 mill.
2017 E & F	May 10	19.3 mill.	18.5 mill.	58.6 mill.	n.a.	58.6 mill.	2.97%	-5.0 mill.
2017 G & H	Sept. 12	65.0 mill.	45.7 mill.	150.0 mill.	n.a.	150.0 mill.	2.80%	-0.0 mill.
2017 I & J	Nov. 9	46.1 mill.	36.4 mill.	115.4 mill.	n.a.	115.4 mill.	2.92%	-2.3 mill.
Subtotal		179.3 mill.	110.8 mill.	421.7 mill.	n.a.	421.7 mill.	2.94%	-26.3 mill.
RHFB								
2017 ABC	June 20	0.0 mill.	18.5 mill.	$60.0 mill.	$60.8 mill.	120.8 mill.	2.75%	14.0 mill.
2017 DEF	Dec. 4	0.0 mill.	88.5 mill.	$120.0 mill.	$24.2 mill.	144.2 mill.	2.77%	12.0 mill.
Subtotal		0.0 mill.	107.0 mill.	180.0 mill.	85.0 mill.	265.0 mill.	2.76%	26.0 mill.
2017		**$179.3 mill.**	**$217.8 mill.**	**$601.7 mill.**	**$85.0 mill.**	**$686.7 mill.**	**2.87%**	**-0.3 mill.**

*Under IRS rules, a small portion of volume cap needs to be allocated for the bond premium on premium PAC bonds

Future Issues. The Agency is in a good position to continue its single-family program. The number of investors purchasing the Agency's HFB monthly pass-through bonds has increased, while traditionally structured RHFB bonds have continued to be effectively marketed. Minnesota Housing has a balance of approximately $47 million of zero participations to help ensure it earns full spread on its future bond issues.

The major challenge in future years is likely to be new private activity bond volume cap. There is increasing demand for such volume cap for multi-family 4% tax credit projects (both by the Agency and local issuers), even as the volume of new single-family originations continues to be very high. To help deal with this demand, the Agency has three resources that can help it leverage new volume cap:

- The Agency still has some single-family carryforward volume cap from several years ago that is gradually being depleted.
- The Agency last year established a volume cap recycling line of credit with RBC that allows it to retain bond authority from old bonds being redeemed each month. This has proven very effectively in preserving old volume cap.
- Finally, the Agency's zero participations can help the Agency issue some amount of taxable bonds in conjunction with tax-exempt debt to partly reduce the amount of new volume cap needed.

Relationship to Pipeline. The new loans were hedged in the TBA market until after bond pricing to protect the Agency from interest rate risk on its new lending.

TIMING AND STRUCTURE

Timing. The fixed rate bonds were priced on Monday, December 4th. The bonds closed on Thursday, December 21st.

Sizing. The issue was sized at $144.22 million, including $24.2 million to refund old bonds plus $120.0 million for new lending.

Major Design Decisions. Key decisions by Minnesota Housing were to:

- Use available RHFB cash to redeem old bonds and help reduce the size of the refunding,
- Include a variable rate series of bonds that is efficiently sized, with a liquidity facility of 5 years to match the 5-year date on which the interest rate swap can be terminated at par. This approach is consistent with the criteria for such issues presented to the Board over the years.
- Structure the AMT bonds, 28.5% of the total financing, as the shorter fixed rate bonds through 2030 (Series D). This incurs the least additional cost from AMT on overall bond yield.

- Utilize the fixed rate non-AMT bonds (Series E) as the longest term bonds, including a small 2034 term bond for 13.3% of the entire issue and a PAC bond at the end of the maturity structure for 30.4% of the entire issue.

Rating. Bonds under the RHFB indenture are rated Aa1 by Moody's and AA+ by S & P.

BOND SALE RESULTS

The sale was very successful. A total of $320 million orders were received for the $100 million of fixed rate bonds that were offered.

1. ***Retail Interest*****.** This issue had relatively few bonds that were likely to be purchased by retail investors, since most of the issue was either AMT or Non-AMT PAC bonds. Retail was given priority on $7,235,000 of the $19,235,000 of Non-AMT 2034 term bonds. A total of $4,850,000 of Minnesota retail orders were received and allotted on that maturity.

   On the AMT bonds, although retail was not a priority, a total of $4,605,000 of in-state orders were received and $1,265,000 were allotted (some as net designated orders, depending on how they were submitted).

   Altogether then there was $9,455,000 of retail in-state orders.

2. ***Institutional Interest*****.** The PAC bonds, as usual, received an extraordinary amount of institutional interest. This included $158 million of orders, 3.6 times the amount of bonds. As a result, the PACs were repriced lower in yield by 3 basis points.

   There was much more interest in the AMT bonds than there had been in the AMT bonds in Series ABC in June. The AMT bonds as a whole were oversubscribed by 3 times. The yield on the 2030 AMT maturity was reduced by an extraordinary 10 basis points because it was oversubscribed by almost 9 to 1. Yields were reduced by 5 basis points on six of the other maturities as well.

   There was also strong institutional interest in the 2034 Non-AMT term bond, with approximately $30 million of orders compared to $14 mill. of bonds not sold to retail in that maturity. The 2034 maturity was also reduced in yield by 5 basis points.

3. ***Timing.*** The bonds were sold on Monday morning, December 4th, because the calendar for the week was one of the busiest for the year. This strategy was helpful in completing the transaction quickly at attractive bond yields.

4. ***Comparable Transactions.*** MHFA offered several types of fixed rate bonds:

   Series A (AMT) serial and term bond from 2018 through 2030: totaling $41.145 million.
   Series B (Non-AMT) term bond due in 2034: $19.235 million.
   Series B (Non-AMT) PAC bond due in 2048 with 4.81 year average life: $43.84 million.
   Series C (AMT) variable rate bond due in 2038, with an interest rate swap: $40.0 million.

AMT Bonds. The AMT serial bonds were priced as much as 15 basis points tighter than Massachusetts with the same rating level.

Non-AMT Non-PAC Bonds. The 2034 non-AMT maturity was most comparable to Maine's 2034 maturity priced on the same day, at the same spread to MMD, and about 10 basis points tighter than Illinois a week before and Wyoming a month before.

Non-AMT PAC Bonds. Minnesota's PAC bond was priced at 61 basis points above the interpolated 4.8 year Municipal Market Data index. This was one of the tightest spreads of any PAC bond during the year.

UNDERWRITING

Underwriters. RBC was the senior manager; regular co-managers were Piper Jaffray and Wells Fargo. Fidelity Capital Markets was added as a co-manager.

Retail Sales. As indicated above, this RHFB issue was not particularly suited to retail investors. When counting both the retail orders on the retail priority 2034 Non-AMT bond and other in-state orders on AMT bonds (whether submitted as member or net designated orders, to indicate the potential in-state demand) Piper Jaffray, as a co-manager brought in $2.8 million of in-state retail orders. This was followed among regular co-managers by Wells at $1.5 million. Northland brought in $.53 million and Morgan Stanley $.43 million of in-state retail orders

The table shows in-state retail orders, whether submitted as net designated or member orders, across all maturities.

Member	Role	Minnesota Retail Orders	Minnesota Retail Allotments
RBC	Senior Manager	3,800,000	3,800,000
Piper Jaffray	Co-Manager	2,810,000	1,070,000
Wells Fargo	Co-Manager	1,580,000	80,000
Fidelity Capital Markets	Co-Manager added	195,000	195,000
Subtotal for managers		8,385,000	**5,145,000**
Northland Securities	Selling Group	530,000	430,000
Morgan Stanley	Selling Group	390,000	390,000
Bank of America Merrill	Selling Group	150,000	150,000
Raymond James	Selling Group	0	0
Robert W. Baird	Selling Group	0	0
Barclays	Selling Group	0	0
George K. Baum	Selling Group	0	0
Daugherty	Selling Group	0	0
City Securities	Selling Group	0	0

Member	Role	Minnesota Retail Orders	Minnesota Retail Allotments
Edward Jones	Selling Group	0	0
UBS	Selling Group	0	0
Subtotal selling group		1,070,000	**970,000**
Total		9,455,000	**6,115,000**

Selling group performance varied significantly among firms, indicating:

- The benefit of continuing the use of a large and active selling group, rather than relying on only a few firms, especially given the variability from one issue to the next.
- However, several firms have not brought in any retail sales on recent sales, and it may be worthwhile to trim the membership in the selling group

Underwriter Fees. Management fees were appropriate, consistent with industry standards, and in the same range as fees reported for other housing issues of similar size and structure.

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ISSUE DETAILS

Key Dates:	RHFB 2017 Series DEF	
	Pricing for fixed rate (Series DE):	Monday, December 4, 2017
	Closing Date:	Thursday, December 21, 2017.

Economic Calendar. Key economic news in the week before the sale included an increase in personal income by 0.4%, higher than the consensus estimate of 0.3%, while initial unemployment claims dropped for the second straight week, suggesting a tightening labor market. Outgoing Fed chairwoman Janet Yellen spoke on Wednesday, indicating that the central bank is concerned with growth getting out of hand, while her successor Jerome Powell testified in Congress on Tuesday that he expected the Fed rate in the longer-run to be around 2.5%, 1.25% above current levels.

Treasuries. The 10-year Treasury yield had dropped to close to 2% in early September with concerns about hurricanes as well as North Korea leading to a flight to security. When these concerns were seen as overblown, yields backed up. They increased during September to the 2.30% level. They were 2.33% on the date of sale of 2017 HFB Series I&J on November 9th and remained close to that level for several weeks, but spiked up during the week after Thanksgiving from 2.32% to 2.42%, its highest level since late October. One key factor on the Thursday prior to the sale was Senator John McCain's announcement that he would support the Senate GOP tax bill, significantly increasing odds of its passage. Expectations about the tax bill have led to a boom in the stock market and higher yields on Treasury debt, given likely ballooning of the deficit.

Municipals. While municipal bond yields generally closely track the movements in Treasury yields, the relationship has been distorted by high profile municipal credit events (Puerto Rico's problems, most recently) and international investment flows, as well as supply and demand for municipal bonds. Municipals rallied significantly in early November after the House Ways and Means Committee's proposed tax bill included a prohibition on advance refundings and on private activity bonds, which together constitute about half of municipal market volume. The 10-year MMD to 10-year Treasury ratio reached the lowest point since early 2016.

In the weeks leading up to the sale, volume increase dramatically as issuers hurried advance refundings and some private activity bonds to meet the pending year-end deadline. With four straight weeks of $11 to $15 billion issuance, municipals significantly underperformed treasuries. As a result, the 10-year Treasury increased 4 basis points while the 10-year MMD increased by 12 basis points since the sale of HFB I & J. The differential was especially striking at the long end of the curve. The 30-year Treasury decreased 4 basis points, while the 30-year MMD increased by 4 basis points.

Issue	Date	10-Year Treasury	10-Year MMD	MMD/ Treasury Ratio	30-Year Treasury	30-Year MMD	MMD/ Treasury Ratio
2016 A	1/12/16	2.12%	1.78%	84.0%	2.89%	2.73%	94.5%
2016 B	3/1016	1.93%	1.88%	97.4%	2.70%	2.86%	105.9%
2016 RHFB ABC	5/25/16	1.87%	1.66%	88.8%	2.67%	2.45%	91.8%
2016 E/F		1.53%	1.41%	92.2%	2.25%	2.05%	91.1%
2016 E/F	7/14/16	1.68%	1.52%	90.5%	2.40%	2.23%	92.9%
2016 G/H		1.76%	1.73%	98.3%	2.50%	2.56%	102.4%
2016 RHFB DEF	9/12/16	2.48%	2.37%	95.6%	3.14%	3.16%	100.6%
	10/20/16						
	12/13/16						
2017 HFB A/B	2/9/17	2.40%	2.28%	95.0%	3.02%	3.06%	101.3%
2017 HFB C/D	3/13/17	2.62%	2.49%	95.0%	3.20%	3.25%	101.6%
2017 HFB E/F	5/20/17	2.41%	2.17%	90.0%	3.03%	3.01%	99.3%
2017 *RHFB ABC*	6/20/17	2.16%	1.86%	86.1%	2.74%	2.70%	98.5%
2017 HFB G/H	9/12/17	2.17%	1.86%	85.7%	2.78%	2.73%	98.2%
2017 HFB I/J	**11/9/17**	**2.33%**	**1.93%**	**82.8%**	**2.81%**	**2.62%**	**93.2%**
2017 *RHFB DEF*	**12/4/17**	**2.37%**	**2.05%**	**86.5%**	**2.77%**	**2.66%**	**96.0%**
Change from 2017 HFB I/J		**+4 bp**	**+12 bp**	**+3.7%**	**- 4 bp**	**+ 4 bp**	**+2.7%**

MinnesotaRHFB17DEF_AMTPost-PricingComps_171208.pdf

MinnesotaRHFB17DEF_NonAMTPost-PricingComps_171208.pdf

AMT SINGLE FAMILY HOUSING BOND PRICING COMPARABLES, PAST 6 MONTHS PLUS MHFA 2016-

Pricing Date		12/4/17		12/7/17		12/6/17		12/6/17		12/4/17		11/2/17	
Amount		$41,145,000		$16,605,000		$43,730,000		$175,205,000		$19,995,000		$19,300,000	
Issuer		Minnesota HFA		Massachusetts HFA		Oregon HCSD		Pennsylvania HFA		Indiana HCDA		Connecticut HFA	
Series		2017 Series D		Series 191		2017 Series G		Series 2017-125A		2017 Series C-2		2017 Series F-2	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		Aa1 / AA+ /		Aa1 / AA+ /		Aa2 / - / -		Aa2 / AA+ /		Aaa / - / AAA		Aaa / AAA / -	
Tax Status		AMT		AMT		AMT		AMT		AMT		AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017												
1	2018	1.450	+24	1.30 / 1.50	+14 / +29	1.400	+23	1.50 / 1.55	+36 / +36			1.15 / 1.25	+15 / +22
2	2019	1.70 / 1.80	+32 / +31	1.75 / 1.85	+37 / +42	1.70 / 1.80	+41 / +40					1.40 / 1.50	+31 / +37
3	2020	2.00 / 2.05	+47 / +50	2.00 / 2.05	+54 / +58	2.00 / 2.05	+56 / +59					1.60 / 1.70	+43 / +48
4	2021	2.20 / 2.25	+64 / +65	2.15 / 2.20	+66 / +67	2.10 / 2.20	+63 / +70					1.80 / 1.90	+55 / +59
5	2022	2.35 / 2.40	+71 / +72	2.35 / 2.40	+80 / +81	2.30 / 2.35	+77 / +79					2.00 / 2.10	+64 / +67
6	2023	2.45 / 2.50	+73 / +74	2.45 / 2.50	+84 / +85								
7	2024	2.55 / 2.60	+76 / +78	2.60 / 2.65	+93 / +95								
8	2025	2.75 / 2.80	+90 / +92	2.75 / 2.80	+104 / +105			2.375	+64				
9	2026	2.90	+99 / +95	2.90 / 2.95	+113 / +114			2.90 / 2.95	+114 / +115				
10	2027	2.95 / 3.00	+96 / +97	3.00 / 3.05	+115 / +117			3.00 / 3.05	+116 / +118				
11	2028	3.10 / 3.15	+104 / +105	3.10 / 3.15	+117 / +120			3.15 / 3.20	+125 / +127				
12	2029												
13	2030	3.300	+110										
14	2031												
15	2032							3.400	+125				
16	2033					3.450	+125						
17	2034												
18	2035												
19	2036												
20	2037							3.700	+134				
21	2038												
22	2039												
23	2040												
24	2041												
25	2042												
26	2043												
27	2044												
28	2045												
29	2046												
30	2047												
PAC 1						4.00C/2.37Y	+78 to 5yr			4.00C/2.30Y	+71 to 3.5yr		
Notes						1/1/40 PAC bond has 4% coupon priced at 107.460 to yield 2.37% and has an average life of 5 years from 100-400% PSA		2025 is a term bond, in contrast to 2026-2028 which are serials		1/1/37 PAC bond has 4% coupon priced at 105.644 to yield 2.30% and has an average life of 3.5 years from 100-500% PSA			
Maturity Dates		7/1 and 1/1		12/1		7/1 and 1/1		4/1 and 10/1		7/1 and 1/1		5/15 and 11/15	
Call Provisions		1/1/27 at par		6/1/27 at par		1/1/27 at par		4/1/27 at par		1/1/27 at par		None	
Mkt Index		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.29% / 3.77%		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.67% / 4.04%	
Sr Manager		RBC Capital Markets		RBC Capital Markets		J.P. Morgan		RBC Capital Markets		Jefferies		RBC Capital Markets	

AMT SINGLE FAMILY HOUSING BOND PRICING COMPARABLES, PAST 6 MONTHS PLUS MHFA 2016-

Pricing Date		11/1/17		10/19/17		10/10/17		10/5/17		10/5/17		10/3/17	
Amount		$19,455,000		$6,550,000		$53,050,000		$5,390,000		$21,565,000		$12,250,000	
Issuer		Connecticut HFA		Vermont HFA		SONYMA		Colorado HFA		Wisconsin HEDA		New Mexico MFA	
Series		2017 Series F-5 COB		2017 Series C		Series 206		2017 Series D		2017 Series B		2017 Series B-2	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		Aaa / AAA / -		Aa2 / - / AA		Aa1 / - / -		Aaa / AAA / -		Aa2 / AA / -		Aaa / - / -	
Tax Status		AMT		AMT		AMT		AMT		AMT		AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017												
1	2018	1.300	+27			1.20 / 1.30	+31 / +36	1.10 / 1.20	+20 / +26	1.15 / 1.25	+27 / +32		
2	2019					1.35 / 1.45	+38 / +45	1.35 / 1.45	+38 / +44	1.40 / 1.50	+44 / +50		
3	2020					1.50 / 1.60	+46 / +51	1.60 / 1.70	+55 / +60	1.60 / 1.70	+57 / +62		
4	2021					1.70 / 1.80	+56 / +60	1.800	+65	1.85 / 2.00	+72 / +81		
5	2022					1.95 / 2.05	+66 / +69			2.10 / 2.15	+81 / +79		
6	2023					2.150	+71			2.25 / 2.35	+82 / +86		
7	2024									2.45 / 2.55	+89 / +92		
8	2025												
9	2026												
10	2027												
11	2028												
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27	2044												
28	2045												
29	2046												
30	2047												
PAC 1				4.00C/2.08Y	+83 to 4.3yr	4.00C/2.10Y	+79 to 4.5yr					3.75C/2.19Y	+80 to 5yr
Notes		11/15/39 maturity but shown at 11/15/18 mandatory tender above		5/1/48 PAC bond has 4% coupon priced at 107.804 to yield 2.08% and has an average life of 4.3 years from 100-400% PSA		10/1/37 PAC bond has 4% coupon priced at 108.046 to yield 2.10% and has an average life of 4.5 years from 100-400% PSA						3/1/48 PAC bond has 3.75% coupon priced at 107.239 to yield 2.19% and has an average life of 5 years from 100-500% PSA	
Maturity Dates		11/15		5/1		4/1 and 10/1		5/1 and 11/1		3/1 and 9/1		9/1 and 3/1	
Call Provisions		5/15/18 at par		11/1/26 at par		10/1/26 at par		None		None		3/1/27 at par	
Mkt Index		BBI / RBI 3.65% / 3.98%		BBI / RBI 3.53% / 3.86%		BBI / RBI 3.63% / 3.84%		BBI / RBI 3.63% / 3.84%		BBI / RBI 3.63% / 3.84%		BBI / RBI 3.64% / 3.85%	
Sr Manager		Morgan Stanley		Raymond James		Morgan Stanley		Barclays		RBC Capital Markets		RBC Capital Markets	

AMT SINGLE FAMILY HOUSING BOND PRICING COMPARABLES, PAST 6 MONTHS PLUS MHFA 2016-

Pricing Date		9/7/17		8/29/17		8/24/17		8/23/17		8/22/17		8/16/17	
Amount		$11,900,000		$22,775,000		$81,965,000		$6,000,000		$41,845,000		$8,190,000	
Issuer		Montana BOH		Oregon HCSD		Pennsylvania HFA		Washington SHFC		Nebraska IFA		North Dakota HFA	
Series		2017 Series B-1		2017 Series E		Series 2017-124A		2017 Series 2A-R		2017 Series B		2017 Series E	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		Aa1 / AA+ / -		Aa2 / - / -		Aa2 / AA+ / -		Aaa / - / -		- / AA+ / -		Aa1 / - / -	
Tax Status		AMT		AMT		AMT		AMT		AMT		AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017												
1	2018			0.95 / 1.05	+23 / +29	1.00 / 1.10	+25 / +31	0.95 / 1.05	+19 / +26	0.95 / 1.05	+21 / +27	1.050	+28
2	2019			1.20 / 1.30	+41 / +46	1.25 / 1.35	+43 / +48	1.20 / 1.30	+36 / +43	1.20 / 1.30	+38 / +44	1.20 / 1.30	+40 / +45
3	2020			1.40 / 1.50	+53 / +57	1.45 / 1.55	+54 / +59	1.45 / 1.55	+52 / +59	1.45 / 1.50	+55 / +55	1.45 / 1.55	+57 / +61
4	2021			1.60 / 1.65	+65 / +64	1.65 / 1.75	+65 / +70	1.65 / 1.75	+63 / +69	1.60 / 1.70	+61 / +65	1.65 / 1.75	+67 / +71
5	2022			1.75 / 1.85	+70 / +74	1.85 / 1.95	+75 / +79	1.85 / 1.90	+73 / +72	1.850	+76	1.85 / 1.90	+76 / +75
6	2023					2.05 / 2.15	+81 / +84	2.05 / 2.15	+80 / +83				
7	2024					2.30 / 2.35	+90 / +87	2.30 / 2.40	+88 / +91				
8	2025							2.50 / 2.55	+92 / +90				
9	2026												
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28	2045												
29	2046												
30	2047												
PAC 1		4.00C/1.82Y	+78 to 4yr	3.50C/1.97Y	+83 to 5yr	4.00C/1.90Y	+86 to 3.9yr			3.50C/2.00Y	+85 to 5yr		
Notes		12/1/48 PAC bond has 4% coupon priced at 108.4 to yield 1.82% and has an average life of 4.04 years from 100-500% PSA		1/1/40 PAC bond has 3.5% coupon priced at 107.183 to yield 1.97% and has an average life of 5 years from 100-400% PSA		10/1/38 PAC bond has 4% coupon priced at 107.810 to yield 1.9% and has an average life of 3.9 years from 100-500% PSA				3/1/40 PAC bond has 3.5% coupon priced at 107.009 to yield 2% and has an average life of 5 years from 100-500% PSA			
Maturity Dates		12/1		1/1 and 7/1		4/1 and 10/1		6/1 and 12/1		3/1 and 9/1		7/1 and 1/1	
Call Provisions		12/1/26 at par		1/1/27 at par		10/1/26 at par		None		9/1/26 @ 101.628, 9/1/28 par		None	
Mkt Index		BBI / RBI 3.49% / 3.70%		BBI / RBI 3.53% / 3.74%		BBI / RBI 3.53% / 3.74%		BBI / RBI 3.57% / 3.78%		BBI / RBI 3.57% / 3.78%		BBI / RBI 3.52% / 3.73%	
Sr Manager		RBC Capital Markets		BofA Merrill		BofA Merrill		RBC Capital Markets		J.P. Morgan		RBC Capital Markets	

AMT SINGLE FAMILY HOUSING BOND PRICING COMPARABLES, PAST 6 MONTHS PLUS MHFA 2016-

Pricing Date		7/24/17		7/19/17		6/28/17		6/20/17		6/20/17	
Amount		$3,685,000		$44,355,000		$15,740,000		$19,185,000		$43,455,000	
Issuer		Connecticut HFA		Massachusetts HFA		Indiana HCDA		SONYMA		Minnesota HFA	
Series		2017 Series D-2		Series 188		2017 Series B-2		Series 204		2017 Series A	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		Aaa / AAA / -		Aa1 / AA+ / -		Aaa / - / AAA		Aa1 / - / -		Aa1 / AA+ / -	
Tax Status		AMT		AMT		AMT		AMT		AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017										
1	2018	1.00 / 1.05	+16 / +17	1.05 / 1.20	+20 / +30			1.10 / 1.20	+29 / +33	1.00 / 1.10	+21 / +26
2	2019			1.40 / 1.50	+43 / +49			1.30 / 1.40	+36 / +41	1.35 / 1.40	+44 / +43
3	2020			1.60 / 1.70	+54 / +60			1.55 / 1.60	+53 / +53	1.50 / 1.55	+50 / +50
4	2021			1.80 / 1.90	+65 / +71			1.75 / 1.80	+64 / +64	1.70 / 1.75	+62 / +61
5	2022			2.05 / 2.10	+81 / +80			1.90 / 2.00	+68 / +72	1.90 / 1.95	+72 / +70
6	2023			2.25 / 2.30	+88 / +88			2.05 / 2.15	+71 / +76	2.10 / 2.15	+79 / +78
7	2024			2.350	+86			2.25 / 2.30	+81 / +79	2.25 / 2.30	+84 / +83
8	2025							2.400	+83	2.45 / 2.50	+92 / +89
9	2026									2.65 / 2.70	+95 / +93
10	2027									2.80 / 2.85	+98 / +98
11	2028										
12	2029										
13	2030									3.200	+104
14	2031										
15	2032										
16	2033										
17	2034										
18	2035										
19	2036										
20	2037										
21	2038										
22	2039										
23	2040										
24	2041										
25	2042										
26	2043										
27	2044										
28	2045										
29	2046										
30	2047										
PAC 1				4.00C/2.07Y	+84 to 4.8yr	4.00C/2.00Y	+79 to 4.2yr				
Notes				6/1/43 PAC bond has 4% coupon priced at 108.679 to yield 2.07% and has an average life of 4.8 years from 100-400% PSA		7/1/38 PAC bond has 4% coupon priced at 107.987 to yield 2% and has an average life of 4.2 years from 100-500% PSA					
Maturity Dates		5/15 and 11/15		6/1 and 12/1		7/1		4/1 and 10/1		1/1 and 7/1	
Call Provisions		None		12/1/26 at par		7/1/26 at par		None		1/1/27 at par	
Mkt Index		BBI / RBI 3.51% / 3.70%		BBI / RBI 3.61% / 3.77%		BBI / RBI 3.53% / 3.70%		BBI / RBI 3.53% / 3.70%		BBI / RBI 3.53% / 3.70%	
Sr Manager		Morgan Stanley		Morgan Stanley		RBC Capital Markets		Citigroup		RBC Capital Markets	

AMT SINGLE FAMILY HOUSING BOND PRICING COMPARABLES, PAST 6 MONTHS PLUS MHFA 2016-

Pricing Date		12/13/16		5/25/16	
Amount		$11,340,000		$63,135,000	
Issuer		Minnesota HFA		Minnesota HFA	
Series		2016 Series D		2016 Series A	
Program		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		Aa1 / AA+ / -		Aa1 / AA+ / -	
Tax Status		AMT		AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017				
1	2018	1.300	+49	0.85 / 0.95	+33 / +36
2	2019	1.40 / 1.50	+45 / +43	1.05 / 1.10	+37 / +37
3	2020	1.80 / 1.90	+57 / +57	1.25 / 1.30	+45 / +45
4	2021	2.05 / 2.15	+62 / +63	1.50 / 1.55	+58 / +58
5	2022	2.300	+67	1.70 / 1.75	+66 / +67
6	2023			1.95 / 2.00	+81 / +80
7	2024			2.10 / 2.15	+84 / +84
8	2025			2.25 / 2.30	+88 / +88
9	2026			2.45 / 2.50	+96 / +95
10	2027			2.65 / 2.70	+103 / +103
11	2028				
12	2029				
13	2030				
14	2031				
15	2032			3.100	+110
16	2033				
17	2034			3.200	+110
18	2035				
19	2036				
20	2037				
21	2038				
22	2039				
23	2040				
24	2041				
25	2042				
26	2043				
27	2044				
28	2045				
29	2046				
30	2047				
PAC 1					
Notes					
Maturity Dates		7/1 and 1/1		1/1 and 7/1	
Call Provisions		N/A		7/1/25 at par	
Mkt Index		BBI / RBI 3.78% / 3.87%		BBI / RBI 3.26% / 3.48%	
Sr Manager		RBC Capital Markets		RBC Capital Markets	

STATE HFA SINGLE FAMILY NON-AMT PRICING COMPARABLES, PAST 3 MONTHS PLUS MHFA 2016-

Pricing Date		12/4/17		12/7/17		12/6/17		12/6/17		12/4/17		12/4/17	
Amount		$63,075,000		$62,065,000		$27,545,000		$125,000,000		$14,295,000		$38,500,000	
Issuer		Minnesota HFA		Massachusetts HFA		Oregon HCSD		Pennsylvania HFA		Indiana HCDA		Maine SHA	
Series		2017 Series E		Series 190		2017 Series F,H		Series 2017-125B		2017 Series C-1		2017 Series H	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		Aa1 / AA+ /		Aa1 / AA+ /		Aa2 / - / -		Aa2 / AA+ /		Aaa / - / AAA		Aa1 / AA+ /	
Tax Status		Non-AMT		Non-AMT		Non-AMT		Non-AMT		Non-AMT		Non-AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017												
1	2018												
2	2019												
3	2020												
4	2021												
5	2022												
6	2023					2.10 / 2.15	+51 / +53					2.100	+32
7	2024					2.25 / 2.30	+60 / +62			2.350	+53	2.250	+41
8	2025					2.35 / 2.40	+65 / +68			2.45 / 2.55	+60 / +67	2.450	+55
9	2026					2.50 / 2.55	+75 / +77			2.60 / 2.70	+69 / +75	2.600	+63
10	2027					2.65 / 2.70	+83 / +84			2.80 / 2.85	+81 / +82	2.700	+65
11	2028			2.700	+75	2.75 / 2.80	+87 / +88			2.90 / 2.95	+84 / +85	2.850	+73
12	2029											3.000	+81
13	2030											3.050	+81
14	2031												
15	2032			3.150	+98					3.250	+91		
16	2033											3.250	+86
17	2034	3.300	+86										
18	2035												
19	2036												
20	2037			3.500	+112							3.550	+100
21	2038												
22	2039												
23	2040												
24	2041												
25	2042			3.650	+121	3.650	+124	3.650	+124			3.700	+109
26	2043												
27	2044												
28	2045												
29	2046												
30	2047							3.700	+124			3.750	+109
PAC 1		4.00C/2.31Y	+61 to 4.8yr	4.00C/2.21Y	+62 to 5yr								
Notes		1/1/48 PAC bond has 4% coupon priced at 107.547 to yield 2.31% and has an average life of 4.81 years from 100-500% PSA		12/1/48 PAC bond has 4% coupon priced at 108.346 to yield 2.21% and has an average life of 5 years from 100-500% PSA									
Maturity Dates		1/1		12/1		7/1 and 7/1		10/1		7/1 and 1/1		11/15	
Call Provisions		1/1/27 at par		6/1/27 at par		1/1/27 at par		4/1/27 at par		1/1/27 at par		11/15/26 at par	
Mkt Index		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.29% / 3.77%		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.59% / 4.04%	
Sr Manager		RBC Capital Markets		RBC Capital Markets		J.P. Morgan		RBC Capital Markets		Jefferies		Citigroup	

STATE HFA SINGLE FAMILY NON-AMT PRICING COMPARABLES, PAST 3 MONTHS PLUS MHFA 2016-

Pricing Date		12/1/17		11/30/17		11/30/17		11/30/17		11/8/17		11/7/17	
Amount		$43,855,000		$120,000,000		$54,500,000		$67,200,000		$99,900,000		$60,385,000	
Issuer		Alaska HFC		Illinois HDA		Missouri HDC		North Dakota HFA		Tennessee HDA		Wyoming CDA	
Series		2017 Series C		2017 Series B		2017 Series D		2017 Series F,G		Issue 2017-4		2017 Series 5	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		- / AA+ / AA+		Aaa / - / -		- / AA+ / -		Aa1 / - / -		Aa1 / AA+ / -		Aa1 / AA+ / -	
Tax Status		Non-AMT		Non-AMT		Non-AMT		Non-AMT		Non-AMT		Non-AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017												
1	2018			1.20 / 1.35	+1 / +10					0.950	-7	1.05 / 1.15	+3 / +10
2	2019			1.60 / 1.70	+12 / +14	1.600	+3	1.55 / 1.70	+13 / +17	1.15 / 1.25	+8 / +13	1.30 / 1.375	+19 / +24
3	2020			1.80 / 1.85	+22 / +25	1.75 / 1.80	+16 / +20	1.75 / 1.85	+18 / +26	1.35 / 1.45	+21 / +26	1.50 / 1.55	+32 / +33
4	2021			1.95 / 2.05	+33 / +38	1.90 / 2.00	+28 / +32	1.95 / 2.00	+35 / +36	1.50 / 1.60	+28 / +33	1.65	+39 / +34
5	2022			2.15 / 2.20	+45 / +45	2.05 / 2.10	+35 / +34	2.10 / 2.15	+42 / +43	1.65 / 1.75	+34 / +38	1.75 / 1.90	+39 / +48
6	2023			2.25 / 2.30	+47 / +48	2.15 / 2.20	+37 / +37	2.25 / 2.30	+49 / +50	1.80 / 1.90	+38 / +42	1.95 / 2.00	+47 / +47
7	2024	2.21 / 2.26	+39 / +40	2.35 / 2.45	+50 / +55	2.25 / 2.35	+40 / +44	2.40	+57 / +53	2.00	+48 / +43	2.10 / 2.15	+53 / +53
8	2025	2.34 / 2.39	+45 / +46	2.55 / 2.60	+62 / +62	2.45 / 2.55	+52 / +56	2.55	+64 / +60	2.10 / 2.20	+49 / +53	2.25 / 2.30	+58 / +57
9	2026	2.43 / 2.48	+47 / +48	2.75 / 2.80	+74 / +74	2.70 / 2.75	+68 / +68	2.75 / 2.80	+76 / +76	2.30 / 2.35	+58 / +57	2.45 / 2.55	+67 / +72
10	2027	2.52 / 2.56	+48 / +49	2.85 / 2.90	+75 / +76	2.85 / 2.90	+74 / +75	2.90	+82 / +77	2.45 / 2.50	+62 / +62	2.65 / 2.70	+77 / +77
11	2028			3.00 / 3.05	+81 / +82	3.00 / 3.05	+80 / +82	3.00	+84 / +79	2.65 / 2.70	+72 / +72	2.80	+81 / +79
12	2029	2.68 / 2.71	+50 / +50			3.10 / 3.15	+83 / +84			2.75 / 2.80	+74 / +74		
13	2030					3.20 / 3.25	+86 / +89			2.85 / 2.90	+76 / +78		
14	2031	2.81	+50					3.350	+94				
15	2032	2.86	+50			3.375	+92			3.043	+81	3.150	+90
16	2033			3.450	+94								
17	2034												
18	2035												
19	2036												
20	2037					3.588	+92			3.350	+90	3.400	+93
21	2038												
22	2039												
23	2040									3.450	+95	3.500	+98
24	2041			3.875	+115								
25	2042					3.762	+102						
26	2043												
27	2044												
28	2045					3.808	+104						
29	2046												
30	2047												
PAC 1				4.00C/2.42Y	+66 to 5yr	4.00C/2.46Y	+70 to 5yr	4.00C/2.42Y	+66 to 5yr	4.00C/2.02Y	+60 to 5yr	4.00C/2.04Y	+64 to 4.8yr
Notes		Coupons are 5%		10/1/48 PAC bond has 4% coupon priced at 107.294 to yield 2.42% and has an average life of 5 years from 100-400% PSA		5/47 PAC is 4% at 107.118/ 2.46% yld w/5 yr avg life 100-300% PSA; '37 is 3.5% at 98.75/ 3.588% yld; '42 is 3.7% at 99/ 3.762% yld; '45 is 3.75% at 99/ 3.808% yld		7/1/48 PAC bond has 4% coupon priced at 107.316 to yield 2.42% and has an average life of 5 years from 100-500% PSA		12/1/48 PAC has 4% cpn at 109.271 to yield 2.02% w/avg life of 5 yrs from 100-400% PSA; 7/1/32 is 3% cpn at 99.5 to yield 3.043% to mat.		12/1/46 PAC bond has 4% coupon priced at 108.839 to yield 2.04% and has an average life of 4.8 years from 100-400% PSA	
Maturity Dates		6/1 and 12/1		4/1 and 10/1		11/1 and 5/1		1/1 and 7/1		7/1 and 1/1		6/1 and 12/1	
Call Provisions		12/1/27 at par		4/1/27 at par		5/1/27 at par		1/1/27 at par		1/1/27 at par		6/1/27 at par	
Mkt Index		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.51% / 3.97%		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.59% / 4.04%		BBI / RBI 3.67% / 4.04%		BBI / RBI 3.67% / 4.04%	
Sr Manager		Jefferies		J.P. Morgan		George K. Baum		RBC Capital Markets		RBC Capital Markets		RBC Capital Markets	

STATE HFA SINGLE FAMILY NON-AMT PRICING COMPARABLES, PAST 3 MONTHS PLUS MHFA 2016-

Pricing Date		11/6/17		11/2/17		10/19/17		10/11/17		10/10/17		10/5/17	
Amount		$125,000,000		$101,865,000		$24,845,000		$91,860,000		$51,590,000		$50,000,000	
Issuer		South Dakota HDA		Connecticut HFA		Vermont HFA		Michigan SHDA		SONYMA		Colorado HFA	
Series		2017 Series D		2017 Series F-1		2017 Series D		2017 Series B		Series 205		2017 Series C	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		Aaa / AAA / -		Aaa / AAA / -		Aa2 / - / AA		Aa2 / AA+ / -		Aa1 / - / -		Aaa / AAA / -	
Tax Status		Non-AMT		Non-AMT		Non-AMT		Non-AMT		Non-AMT		Non-AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017												
1	2018	0.95 / 1.05	-6 / +1					0.95 / 1.05	+4 / +11				
2	2019	1.20 / 1.30	+10 / +16			1.15 / 1.25	+18 / +24	1.15 / 1.25	+17 / +24				
3	2020	1.375 / 1.45	+21 / +23			1.35 / 1.45	+30 / +35	1.40 / 1.50	+34 / +40				
4	2021	1.50 / 1.55	+25 / +24	1.600	+29	1.50 / 1.60	+36 / +39	1.60 / 1.70	+44 / +47			1.40 / 1.50	+25 / +28
5	2022	1.65 / 1.75	+29 / +32			1.70 / 1.80	+41 / +44	1.80 / 1.90	+48 / +51			1.65 / 1.75	+33 / +36
6	2023	1.85 / 1.90	+36 / +35	1.875 / 1.95	+39 / +40	1.85 / 1.95	+43 / +47	2.00 / 2.10	+55 / +59	1.850	+36	1.85 / 1.95	+39 / +43
7	2024	2.00 / 2.10	+41 / +45	2.00 / 2.10	+39 / +43	2.10 / 2.20	+56 / +60	2.20 / 2.30	+62 / +65	2.00 / 2.10	+44 / +47	2.05 / 2.15	+46 / +49
8	2025	2.20 / 2.25	+50 / +49	2.25 / 2.35	+52 / +56	2.30 / 2.40	+64 / +67	2.40 / 2.50	+67 / +70	2.20 / 2.30	+49 / +52	2.25 / 2.35	+51 / +54
9	2026	2.35 / 2.45	+54 / +59	2.45 / 2.50	+60 / +60	2.50 / 2.60	+71 / +76	2.60 / 2.70	+73 / +78	2.40 / 2.45	+54 / +54	2.40 / 2.50	+53 / +58
10	2027	2.55 / 2.60	+64 / +64	2.60 / 2.65	+65 / +65	2.70 / 2.75	+82 / +82	2.80 / 2.85	+83 / +83	2.55 / 2.60	+59 / +59	2.60 / 2.65	+63 / +63
11	2028	2.70	+68 / +64	2.70	+64 / +60	2.80 / 2.85	+82 / +83	2.90 / 2.95	+83 / +85	2.70 / 2.75	+64 / +65	2.75 / 2.80	+68 / +69
12	2029			2.85	+71 / +67	2.900	+85	3.000	+85	2.85 / 2.90	+71 / +72	2.85 / 2.90	+70 / +71
13	2030												
14	2031												
15	2032	3.100	+77					3.250	+88	3.125	+75		
16	2033			3.200	+76	3.150	+82						
17	2034							3.350	+86				
18	2035												
19	2036												
20	2037	3.375	+83										
21	2038					3.500	+96						
22	2039												
23	2040	3.500	+90										
24	2041												
25	2042												
26	2043												
27	2044												
28	2045												
29	2046												
30	2047												
PAC 1		4.00C/2.07Y	+63 to 5yr	4.00C/2.08Y	+65 to 5yr	4.00C/1.95Y	+70 to 4.3yr	3.50C/2.08Y	+70 to 5yr	4.00C/1.95Y	+64 to 4.5yr	4.00C/2.00Y	+67 to 4.6yr
Notes		11/1/47 PAC bond has 4% coupon priced at 109.042 to yield 2.07% and has an average life of 5 years from 100-400% PSA		5/15/47 PAC bond has 4% coupon priced at 108.964 to yield 2.08% and has an average life of 5 years from 75-500% PSA		5/1/48 PAC bond has 4% coupon priced at 108.368 to yield 1.95% and has an average life of 4.3 years from 100-400% PSA		6/1/48 PAC bond has 3.5% coupon priced at 106.636 to yield 2.08% and has an average life of 5 years from 75-500% PSA		4/1/40 PAC bond has 4% coupon priced at 108.720 to yield 1.95% and has an average life of 4.5 years from 100-400% PSA		5/1/48 PAC bond has 4% coupon priced at 108.579 to yield 2% and has an average life of 4.6 years from 100-400% PSA	
Maturity Dates		5/1 and 11/1		11/15 and 5/15		5/1 and 11/1		6/1 and 12/1		10/1 and 4/1		5/1 and 11/1	
Call Provisions		5/1/27 at par		5/15/27 at par		11/1/26 at par		12/1/26 at par		10/1/26 at par		11/1/26 at par/101.056 PAC	
Mkt Index		BBI / RBI 3.67% / 4.04%		BBI / RBI 3.67% / 4.04%		BBI / RBI 3.53% / 3.86%		BBI / RBI 3.63% / 3.84%		BBI / RBI 3.64% / 3.85%		BBI / RBI 3.63% / 3.84%	
Sr Manager		BofA Merrill		RBC Capital Markets		Raymond James		Barclays		Morgan Stanley		Barclays	

STATE HFA SINGLE FAMILY NON-AMT PRICING COMPARABLES, PAST 3 MONTHS PLUS MHFA 2016-

Pricing Date		10/5/17		10/3/17		9/19/17		9/19/17		9/14/17		9/7/17	
Amount		$60,000,000		$45,000,000		$40,000,000		$20,000,000		$51,365,000		$30,700,000	
Issuer		Wisconsin HEDA		New Mexico MFA		Maine SHA		Orange County FL HFA		Oregon		Montana BOH	
Series		2017 Series C		2017 Series B-1		2017 Series F		Series 2017A		2017 Series N,P,Q (Veterans)		2017 Series B-2	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		G.O. Single Family / Negot.		Single Family / Negotiated	
Rating(s)		Aa2 / AA / -		Aaa / - / -		Aa1 / AA+ / -		Aaa / - / -		Aa1 / AA+ / AA+		Aa1 / AA+ / -	
Tax Status		Non-AMT		Non-AMT		Non-AMT		Non-AMT		Non-AMT		Non-AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017												
1	2018			1.000	+7			0.875	+11	0.80 / 0.85	+6 / +7	0.850	+7
2	2019			1.10 / 1.20	+14 / +20	1.000	+11	1.00 / 1.10	+17 / +22	0.95 / 1.00	+11 / +13	0.95 / 1.00	+12 / +14
3	2020			1.30 / 1.40	+27 / +32	1.250	+26	1.25 / 1.30	+32 / +32	1.10 / 1.20	+16 / +22	1.10 / 1.20	+18 / +25
4	2021			1.50 / 1.60	+37 / +41			1.40 / 1.50	+36 / +41	1.35 / 1.40	+25 / +22	1.30 / 1.35	+29 / +30
5	2022			1.70 / 1.80	+41 / +44			1.55 / 1.65	+38 / +42	1.40 / 1.45	+22 / +21	1.40 / 1.50	+30 / +34
6	2023			1.85 / 1.95	+42 / +46	1.750	+36	1.75 / 1.85	+45 / +49	1.65 / 1.70	+35 / +34	1.65 / 1.70	+42 / +41
7	2024	2.250	+62	2.05 / 2.15	+49 / +52	2.000	+45	1.95 / 2.00	+50 / +49	1.85 / 2.05	+40 / +43	1.80 / 1.90	+43 / +46
8	2025	2.35 / 2.45	+64 / +67	2.25 / 2.35	+54 / +57	2.200	+50	2.10 / 2.20	+49 / +53	2.05 / 2.10	+43 / +41	2.05 / 2.10	+52 / +50
9	2026	2.55 / 2.65	+70 / +75	2.50 / 2.55	+65 / +65	2.400	+57	2.35 / 2.40	+60 / +60	2.20 / 2.07	+45 / +21	2.30 / 2.35	+64 / +62
10	2027	2.75 / 2.80	+80 / +80	2.65 / 2.70	+70 / +70	2.600	+67	2.55 / 2.60	+69 / +69	2.07 / 2.12	+21 / +21	2.45 / 2.55	+66 / +71
11	2028	2.900	+84	2.80 / 2.85	+74 / +75	2.750	+73	2.70 / 2.75	+72 / +74	2.55 / 2.60	+57 / +59	2.65 / 2.70	+74 / +76
12	2029			2.95	+81 / +77	2.875	+78			2.29 / 2.32	+22 / +22	2.80 / 2.85	+79 / +81
13	2030					3.000	+83						
14	2031												
15	2032			3.150	+77	3.150	+85	3.150	+85			3.100	+88
16	2033									3.100	+75		
17	2034												
18	2035												
19	2036												
20	2037			3.550	+91	3.500	+92	3.500	+92			3.375	+91
21	2038												
22	2039												
23	2040												
24	2041												
25	2042			3.700	+94	3.650	+93	3.650	+93			3.500	+90
26	2043												
27	2044												
28	2045												
29	2046												
30	2047			3.800	+98			3.750	+96			3.600	+94
PAC 1		4.00C/2.04Y	+71 to 4.6yr	3.75C/2.06Y	+67 to 5yr	3.50C/1.93Y	+69 to 5yr	3.50C/1.95Y	+71 to 5yr	3.50C/1.90Y	+69 to 5yr		
Notes		3/1/48 PAC bond has 4% coupon priced at 108.474 to yield 2.04% and has an average life of 4.6 years from 100-500% PSA		3/1/48 PAC bond has 3.75% coupon priced at 107.873 to yield 2.06% and has an average life of 5 years from 100-500% PSA		11/15/47 PAC bond has 3.50% coupon priced at 107.332 to yield 1.93% and has an average life of 5 years from 100-500% PSA		9/1/48 PAC bond has 4% coupon priced at 109.588 to yield 1.95% and has an average life of 5 years from 100-400% PSA		12/47 PAC is 3.5% cpn at 107.515 to yield 1.90% w/avg life of 5 yrs 75-400% PSA; 2027 and 2029 are 5% cpn no special redemption			
Maturity Dates		9/1 and 3/1		9/1 and 3/1		11/15		9/1 and 3/1		6/1 and 12/1		12/1 and 6/1	
Call Provisions		3/1/27 at par		3/1/27 at par		11/15/26 at par		9/1/26 at par		12/1/26 at par		12/1/26 at par	
Mkt Index		BBI / RBI 3.63% / 3.84%		BBI / RBI 3.64% / 3.85%		BBI / RBI 3.56% / 3.77%		BBI / RBI 3.56% / 3.77%		BBI / RBI 3.56% / 3.77%		BBI / RBI 3.49% / 3.70%	
Sr Manager		RBC Capital Markets		RBC Capital Markets		Barclays		RBC Capital Markets		Goldman Sachs		RBC Capital Markets	

STATE HFA SINGLE FAMILY NON-AMT PRICING COMPARABLES, PAST 3 MONTHS PLUS MHFA 2016-

Pricing Date		9/6/17		6/20/17		12/13/16		5/25/16	
Amount		$120,000,000		$37,390,000		$75,005,000		$74,985,000	
Issuer		Ohio HFA		Minnesota HFA		Minnesota HFA		Minnesota HFA	
Series		2017 Series D		2017 Series B		2016 Series E		2016 Series B	
Program		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated		Single Family / Negotiated	
Rating(s)		Aaa / - / -		Aa1 / AA+ / -		Aa1 / AA+ / -		Aa1 / AA+ / -	
Tax Status		Non-AMT		Non-AMT		Non-AMT		Non-AMT	
Year	Maturity ('17 pricings)	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD	Coupon/ Yield	Spread to iMMD
0	2017								
1	2018	0.800	+3						
2	2019	0.90 / 0.95	+9 / +10						
3	2020	1.15 / 1.20	+26 / +26						
4	2021	1.30 / 1.35	+32 / +32						
5	2022	1.45	+38 / +33			2.00 / 2.10	+37 / +38		
6	2023	1.65	+45 / +39			2.30 / 2.40	+52 / +54		
7	2024	1.80 / 1.90	+45 / +49			2.50 / 2.60	+58 / +60		
8	2025	2.00 / 2.05	+49 / +48			2.70 / 2.80	+65 / +68		
9	2026	2.25 / 2.30	+60 / +60			2.90 / 2.95	+74 / +73		
10	2027	2.40 / 2.45	+61 / +61			3.05 / 3.10	+76 / +76		
11	2028	2.55 / 2.60	+63 / +65			3.20 / 3.25	+81 / +82		
12	2029	2.70 / 2.75	+68 / +70						
13	2030	2.85 / 2.90	+75 / +78						
14	2031								
15	2032	3.050	+80			3.700	+97		
16	2033								
17	2034								
18	2035								
19	2036							3.100	+90
20	2037	3.400	+91						
21	2038			3.400	+82			3.150	+85
22	2039								
23	2040								
24	2041								
25	2042	3.550	+93						
26	2043								
27	2044								
28	2045								
29	2046								
30	2047	3.625	+95						
PAC 1		4.00C/1.82Y	+70 to 5yr	4.00C/1.90Y	+73 to 4.4yr	4.00C/2.47Y	+82 to 4.16yr	3.50C/1.82Y	+82 to 4.4yr
Notes		3/1/48 PAC bond has 4% coupon priced at 110.284 to yield 1.82% and has an average life of 5 years from 100-500% PSA		7/1/47 PAC bond has 4% coupon priced at 108.747 to yield 1.90% and has an average life of 4.41 years from 100-500% PSA		1/1/47 PAC bond has 4% coupon priced at 105.928 to yield 2.47% and has an average life of 4.16 years from 100-500% PSA		7/1/46 PAC bond has 3.5% coupon priced at 106.987 to yield 1.82% and has an average life of 4.41 years from 100-400% PSA	
Maturity Dates		9/1 and 3/1		7/1		1/1 and 7/1		7/1 and 1/1	
Call Provisions		9/1/26 at par; PAC 3/1/27		1/1/27 at par		1/1/26 at par		7/1/25 at par	
Mkt Index		BBI / RBI 3.51% / 3.72%		BBI / RBI 3.53% / 3.70%		BBI / RBI 3.78% / 3.87%		BBI / RBI 3.26% / 3.48%	
Sr Manager		Citigroup		RBC Capital Markets		RBC Capital Markets		RBC Capital Markets	