# Ability of Virginia Housing to Provide Allocations for REACH Activities

Prepared for Joint Legislative Audit and Review Commission

by

CSG Advisors

November 2021

# Organization

# I. Executive Summary

# Major Findings

1. **Virginia Housing is very strong financially**
   - Net assets more than 2x that of any other state housing finance agency
   - Annual net income exceeds $100 million
     - More than 9x the median state HFA

2. **Virginia Housing was a national leader** among state Housing Finance Agencies (HFAs) in creating an affordability fund, that became REACH

3. Virginia Housing has, over time, **increased the REACH formula** and made one-time additional allocations

4. Like other state HFAs with their own affordability funds, Virginia Housing **makes annual allocations for REACH based on the net income it earns from its ongoing activities**

# Major Findings

5. Unlike affordability funds of other state housing finance agencies, REACH remains **within the corpus of Virginia Housing** rated by the rating agencies. REACH is a way of tracking these affordability activities rather than a separate outside fund

6. **Keeping REACH activities within Virginia Housing's corpus should <u>not</u> reduce the amount allocated to REACH**

7. **However, the current REACH formula greatly diminishes how much Virginia Housing provides for REACH compared to if it was a separate fund**

   This is because the current REACH formula is 60% of net income <u>after REACH grants made from past allocations</u>

   This formula:
   - automatically reduces future REACH allocations by the very grants made from past REACH allocations, and
   - significantly diminishes how much Virginia Housing provides for REACH activities over the next several years and long-term

# Recommendations

1. **REACH allocations should be based on net income <u>before</u> grants**, rather than net income <u>after</u> grants

2. **REACH allocations for the next two years should be based on 60% of net income <u>before</u> grants.** This 60% is the same as the current REACH percentage. This formula would go into effect at the end of FY 22, for the allocation to be made for FY 23

3. **Thereafter REACH allocations would be based on 75% of net income <u>before</u> grants.** This change would go into effect at the end of FY 24, for the allocation to be made for FY 25

4. The current approach of basing REACH allocations on the rolling average of Virginia Housing's earnings in past years should be slightly modified, to use a **3-year rather than a 5-year rolling average**

   *This approach:*

   *- continues to help smoothe out year-to-year fluctuations and provide planning predictability, while <u>better reflecting more recent financial performance</u>, and*

   *- <u>better protects Virginia Housing</u> in an economic downturn from allocation commitments <u>based on higher earnings many years in the past that are no longer achievable</u>*

# Recommendations

5. In case REACH is used in the future for direct loans, **repayments of principal of those loans should be recycled for future REACH loans**

6. **Based on our analysis, we <u>do not</u> recommend a one-time contribution of Virginia Housing's net assets for REACH, that would reduce the agency's net assets**

   *Allocations based on annual income help link Virginia Housing's financial performance and what it provides for affordability activities*

7. **Because recent dramatic increases in multi-family production -- especially mixed-use mixed income developments -- are significantly affecting Moody's assessment of Virginia Housing's risks, Virginia Housing should develop a long-term strategy to address this challenge**

   *This looming challenge is related to the <u>volume</u> and <u>types of new production</u> – and affects Virginia Housing regardless of the REACH formula*
   *<u>It should not affect adjusting the REACH formula</u>*

# Impact of Recommendations

*Based on 10 years of detailed financial projections of Virginia Housing performance under three economic and production scenarios, these recommendations would result in:*

1. **The amount allocated to REACH would increase significantly compared to the current formula**
   - In a moderate growth scenario, the amounts for REACH over the next 10 years would **increase from $657 million to $1.082 billion, a difference of over $400 million**
   - In all scenarios, the amounts for REACH would be **approximately $400 million more and increase by 2/3 from the current formula**

2. At the same time, Virginia Housing's **net assets, currently $3.5 billion, would continue to increase by over $500 million in all scenarios**

3. **Virginia Housing can provide more funds for REACH, without reducing and indeed while growing its net assets**

# Impact of Recommendations

4. **A potential set of steps to address Moody's risk adjustments shows how Virginia Housing can continue to grow while meeting Moody's requirements**

   Such a strategy shows how Virginia Housing can:
   - dramatically lower the risk adjustments Moody's would otherwise make,
   - help assure that risk-adjusted net assets remain strongly positive,
   - avoid the risk-adjusted net asset parity ratio falling far below Moody's standards,
   - be far more sustainable over the long run, with only a slight reduction in future income and an almost 50% reduction in risk adjustments

5. **Such a risk-reduction strategy -- together with the proposed REACH formula of 60% before grants for 2 years and 75% thereafter – would:**
   - enable Virginia Housing to meet <u>rating requirements in all scenarios</u>,
   - <u>build net assets</u>, and
   - <u>significantly increase REACH contributions</u> in a way that is <u>financially sustainable</u>

# II. Purpose

# Objectives

*On behalf of JLARC and in cooperation with Virginia Housing, to independently analyze:*

1. **How Virginia Housing's financial resources** affects its ability to allocate funds for REACH activities
2. **Relationship** between Virginia Housing's overall financial position and REACH
3. **Funds projected to be allocated for REACH** under the current formula for measuring available resources
4. **Impacts of alternative formulas** for annually measuring available resources
5. **Feasibility of an additional one-time allocation** from Virginia Housing's existing
fund balance
6. **Other potential changes to Virginia Housing policies and practices** to maximize
funds allocated for REACH

# CSG Experience

**Independent financial advisors**

- #1 ranked housing financial advisor for each year since 1982, according to Securities Data
- Structured $90 billion of housing revenue bonds
- *Have worked for 26 state HFAs and currently represent:*

  Colorado, Mass., Michigan, Minnesota, Missouri, Montana, New Mexico, New York State, Tennessee and others
- Structured capital adequacy studies: Calif., Colorado, Mass., Minnesota, Missouri, New York and Virginia (2002)

**Gene Slater, Chairman and Co-founder of CSG**

**42 years national experience in housing finance**

- Helped design with Treasury the New Issue Bond Program and Temporary Credit Liquidity Program
- Designed and helped implement:
  - long-range financial sustainability strategies for 7 state hfas and major housing authorities
  - housing trust funds for Los Angeles, San Francisco, Seattle and Washington D.C.
  - major housing strategies for Pittsburgh, Chicago, Denver, D.C, Los Angeles, Phoenix, San Francisco,
  - public housing modernization for New York City and Puerto Rico
- Resolution Trust Corporation's national financial advisor for tax-exempt assets from savings and loans
- HUD Central's national advisor on housing rehab, FHA MF refundings and expeditor for major HOPE VI projects
- 2 national Bondbuyer Deals of the Year

**Education:** B.A., Columbia University (summa cum laude); Kohn Fellow, London School of Economics; Master of City Planning, MIT; mid-career Loeb Fellow, Harvard; Master's, Stanford on history of residential segregation

**David Jones, Principal of CSG**

**19 years national experience in housing finance**

- 9 years as financial advisor to a variety of HFAs including Tennessee, Missouri, Colorado, New Mexico, Minnesota
- Capital adequacy studies for Colorado and New Mexico
- Oversees all CSG quantitative services for state housing finance agencies
- Specializes in strategic planning, single family bond structuring, and optimizing indenture performance, funding executions and new issuance opportunities

**Education:** B.B.A. in Accounting, and Masters in Accountancy, Millsaps College

# Study Approach

1. **View Virginia Housing and REACH holistically**
    - Review agency as a whole, given the ability to shift resources between indentures and general fund
    - Recognize synergy between non-REACH and REACH activities

2. **Focus on how allocating funds for REACH affects Virginia Housing's overall ability to carry out its mission**

3. **As methodology:**
    - Using Virginia Housing's detailed historic income statements,
    - Incorporate basic new production assumptions from Virginia Hsg,
    - Project a range of financial outcomes under 3 economic / production scenarios

4. **Evaluate and project rating agency risk assessments of Virginia Housing**

# Framework for REACH

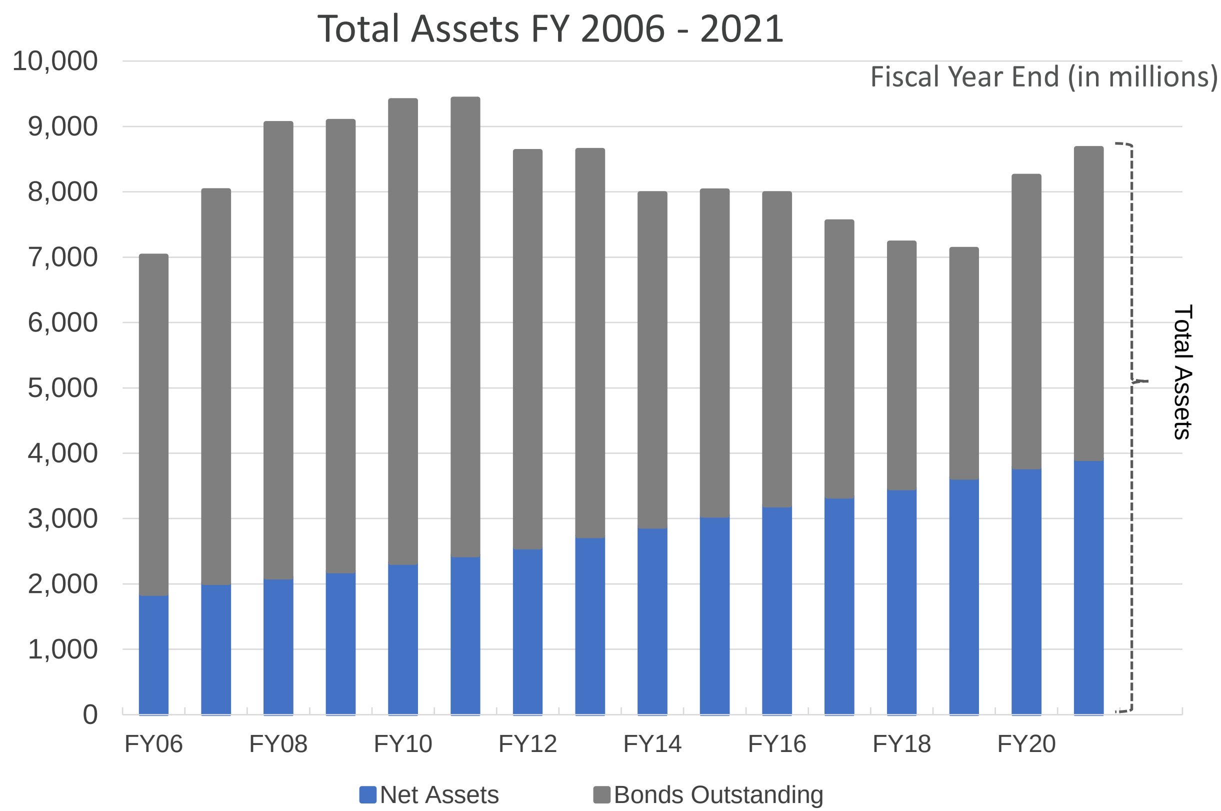
1. **Potential value of providing a long-term analysis for JLARC, Virginia Housing and potential stakeholders by:**
   - Systematically understanding how Virginia Housing's different activities and choices affect each other financially
   - Looking at allocations for REACH now and in the future
2. **Such a framework has been less necessary in the past, given Virginia Housing's ability to:**
   - Substantially keep increasing the REACH formula,
   - Provide major one-time allocations related to Amazon, and
   - Reserve portions of REACH uses for new & growing activities;
   - All while dramatically increasing Virginia Housing's net assets (e.g. net worth)
3. **A specific framework for projecting REACH allocations may therefore be especially useful going forward** for managing choices and constraints

# III. Virginia Housing Financial Overview

# Agency’s Financial Strengths

## Balance Sheet is Very Large and Has Rebounded in Recent Years, While Net Assets Have Continued to Grow Substantially

Net assets (e.g. net worth) are equal to total assets less bonds outstanding
This has grown by $1.5 billion, from $2 billion to $3.5 billion, since 2008.

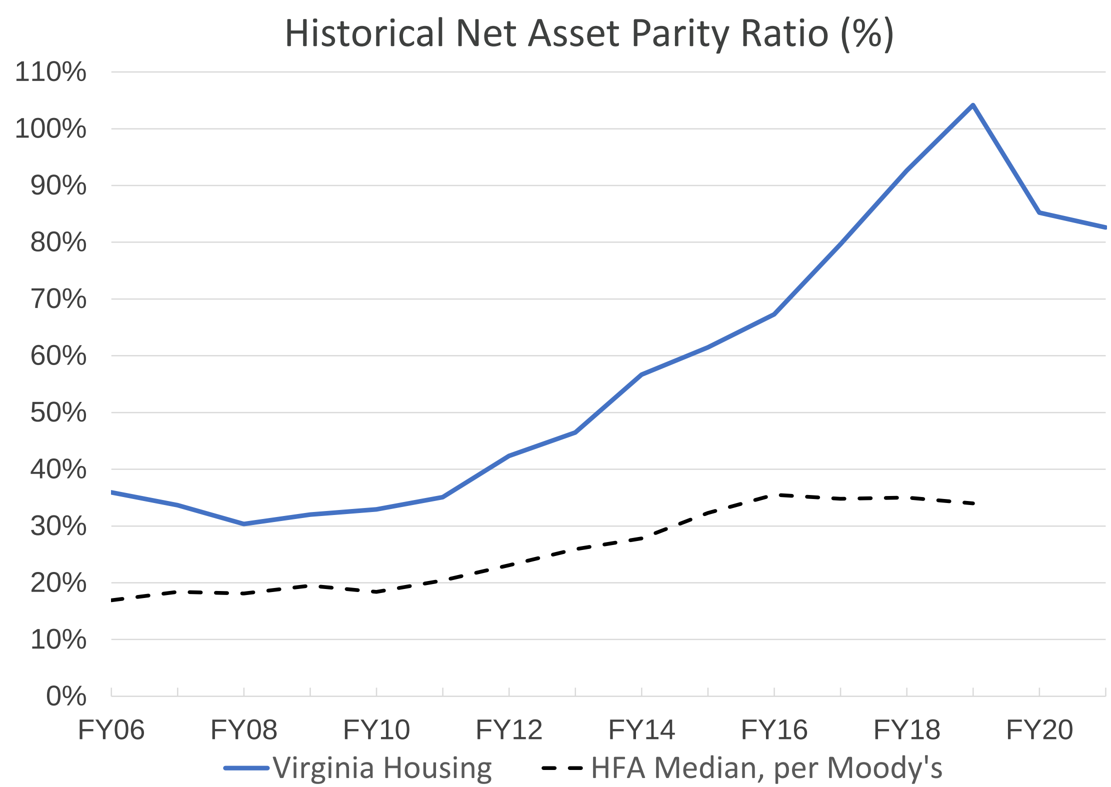



* *Balance sheet figures including assets and net assets are adjusted to reflect items included by rating agencies such as adding back loan loss reserves. Balance sheet figures do not include assets serviced by Virginia Housing for other entities.*

# Agency's Financial Strengths

## Net Asset to Debt Ratio Is Very Strong and Far Above Most HFAs

- **Net asset parity ratio (net assets / debt outstanding) is key measure of relative housing finance agency strength**
- **Ratio Increased every year since FY08, but has begun to decline after FY19, because**:
    - Virginia Housing has dramatically increased production on its balance sheet, especially bonds for multi-family mixed use mixed income projects
    - Total assets and bonds are thus increasing much faster than each year's modest increase in net assets
- **Net asset parity ratio is 80%, still several times higher than most HFAs *(state HFA median is 34%)***




* *Balance sheet figures including assets and net assets are adjusted to reflect items included by rating agencies such as adding back loan loss reserves.*

# Agency's Financial Strengths

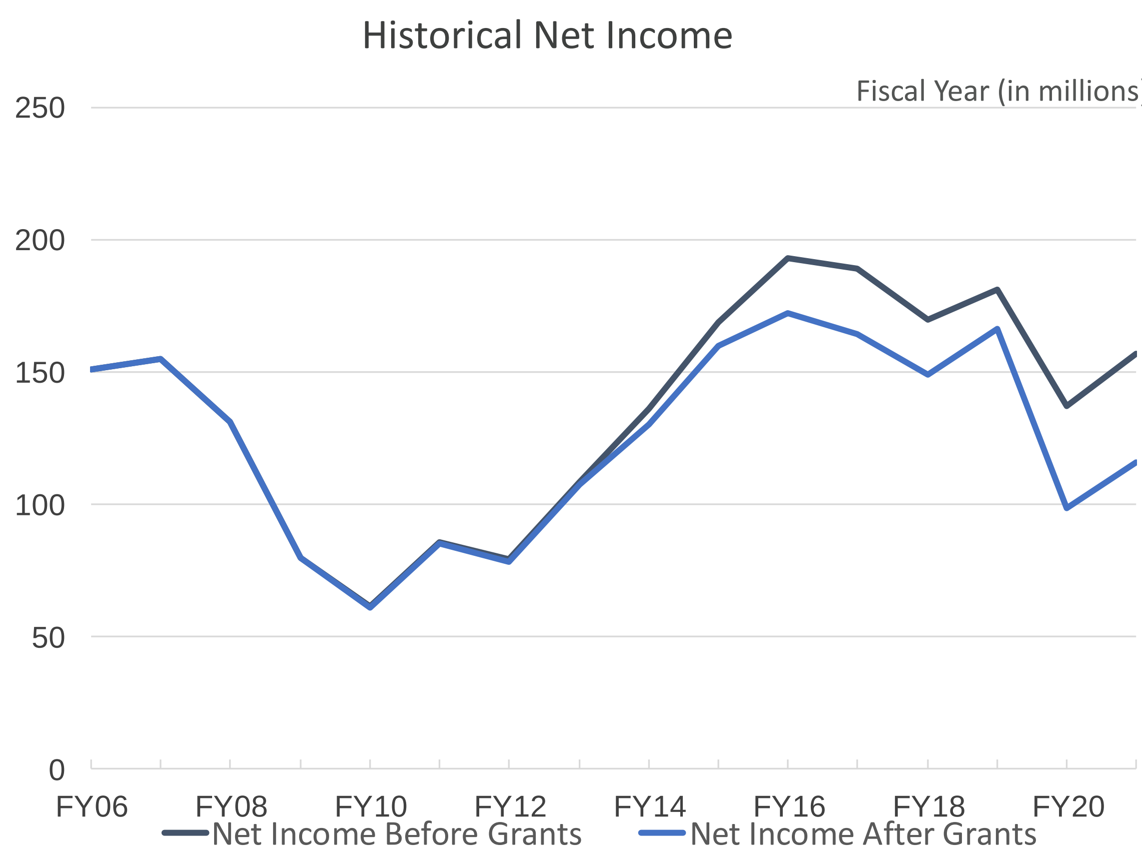
## Net Annual income is Very Strong, approx. $150 mill. Before Grants

**Like most HFAs, net income declined during the recession**

**Net income has grown since, in part from gains on sale of most single family production**

**Key factors affecting net income in recent years are:**

1. $40MM for loan loss reserves in FY 20 (due to pandemic)
2. Grants for REACH activities have significantly increased
3. Increased amount of grants has widened the difference between net income before and after grants



# Agency's Financial Strengths

## Virginia Housing Has Active, Large, Ongoing Programs

**Single-family**

- For range of income groups
- Downpayment assistance for different incomes,
- Mix of bond and loan sale executions to take advantage of the market

**Multi-family**

- For range of types of projects
- Ability to use strength of its ratings and resources for borrowers and activities beyond those of most HFAs
  - mixed-use/mixed-income, as well as
  - 4% and 9% tax credit developments

# Financial Flexibility and Risks

## Virginia Housing Has Done an Excellent Job of Managing Its Risks

***Sustainability of an HFA depends on how it addresses 3 major types of risks***

### 1. Real estate / lending risk

- Partial use of MBS for single-family reduces loan risks
- Multi-family: modestly used FHA risk-share but primarily uninsured
- Underwriting standards
- Has avoided significant loan losses

### 2. Financing risk

- No variable rate bonds
- Significant cash liquidity

### 3. Income stream risk

- Strong ongoing sources of income
- For example, net interest income from loans and investments is approx. 2x administrative expenses, helping provide stability

# Financial Flexibility and Risks

## Virginia Housing Has Very Strong Financial Flexibility

### Liquidity

- **Resources**
  - Approx. $1.5 billion in short-term investments for loan funding and agency activity needs
  - Outstanding lines of credit for warehousing etc.
- **Needs**
  - No need for liquidity for variable rate debt
  - Liquidity is very strong: 17 x annual administrative expenses
- **Benefits**
  - Helps make possible issuing pass-through bonds without mortgage-backed securities
- **Internal Flexibility**
  - Significant ability to move funds between indentures and general fund, subject to covenants
  - These strengths have enabled Virginia Housing to make significant and increasing allocations of funds for REACH activities

# Ratings

## Ratings and Rating Agency Risk-Adjusted Net Assets Are Very Strong,

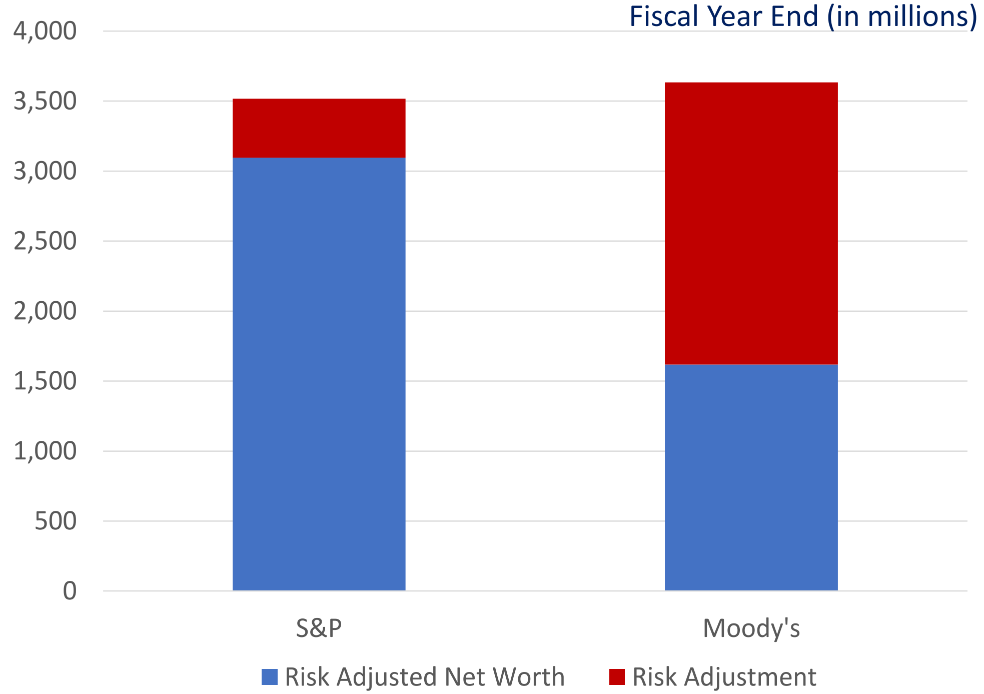
**Virginia Housing has strong ratings from both Moody's (Aa1) and Standard & Poor's (AA+)**

- S&P and Moody's evaluate a state housing finance agency by assuming losses in a Depression-era scenario
- Each rating agency calculates net assets by adding back Virginia Housing's own loss reserves and making its own assessments of risk
- Each rating agency then
  - calculates "haircuts" (risk adjustments) against each type of asset and
  - deducts those from Virginia Housing's net assets

**= Risk Adjusted Net Assets**

**This is a key measure of a state HFA**

Risk Adjusted Net Assets
FYE 2020 Estimate



# Ratings

## … But Moody's Assesses Much Higher Risks Than Standard & Poor's

**Moody's risk assessments are *much more severe* than S&P**

**Key reasons are that:**

- **Virginia Housing has repurchase agreements, backed by federal securities, from a party not rated by Moody's**
  - Moody's does not give any credit for these investments because the party isn't rated
  - Virginia Housing can easily change this by shifting to repurchase agreements from a rated party

- **Moody's has much more severe assessment of multi-family loans**
  - Virginia Housing makes loans based on 1.15 to 1 debt service coverage, the same general standard as HFAs, banks, Fannie Mae and Freddie Mac
  - Moody's, however, assesses these loans in their 'Depression-era' scenario by using a benchmark of 2.25 to 1 debt service coverage, given Virginia Housing's rating level
  - This results in a 43% "haircut" on a typical loan
  - The more uninsured loans Virginia Housing makes, the larger these total risk assessments

**While Moody's risk assessments may seem unrealistic, they are important to address, since:**

- Virginia Housing's indentures under which it issues bonds require ratings from both Moody's and S&P, and
- Bond investors look to the ratings from both agencies

# Ratings

## Risk-Adjusted Net Asset Parity Ratios Are Strong But Moody's Has Declined

- Each rating agency uses its own risk assessments to compute the:
  **Risk-adjusted net asset parity ratio**
  ***(risk-adjusted net assets to debt)***

- This ratio is an important rating criteria

- Virginia Housing has been far above most HFAs

- Since 2019, however, high multi-family production is increasing both Moody's risk adjustments and debt, thus lowering its risk-adjusted parity ratio

- Virginia Housing's ratio of risk-adjusted assets to debt is still well above the Moody's standard for AA rated HFAs of 15-20%, but it is important to watch and plan for this going forward

| | Moody's Est. FYE 20* | S&P FYE 20 |
|---|---|---|
| **Combined Net Assets** | **$3,790.5 mill.** | **$3,689.7 mill.** |
| *Risk Adjustments:* | | |
| Multi-family | $1,510.3 | $ 340.3 |
| Single family | $273.3 | $ 203.3 |
| Repurchase Agreements | $600.0 | -- |
| Other Risk Adjustments | -- | -- |
| **Total Risk Adjustments** | **$2,383.6 mil.** | **$ 543.7 mill.** |
| | | |
| **Risk-Adjusted Net Assets** | **$1,406.9 mill.** | **$3,146.1 mill.** |
| Outstanding Debt | $4,448.8 mill. | $4,448.8 mill. |
| **Risk-Adjusted Net Asset Parity Ratio** | **32%** | **71%** |

* *risk charge ratios for FYE 19 applied to FYE 20 balances*

# IV. Virginia Housing and REACH

# State HFA Affordability Funds: Overview

## Affordability Funds, Such as REACH, Are a Key Tool for Some Major HFAs

Affordability fund is a vehicle by which HFAs:

1. Dedicate funds otherwise **not needed for covering general operations or establishing adequate reserves**

2. Use such funds in ways that involve **significantly higher risk or higher cost or lower return** than HFA would otherwise invest

3. **Manage, allocate & use funds directly** (rather than through a separate state housing trust fund, etc.)
   - greater flexibility than state-appropriated funds
   - can be shifted from year-to-year with board approval to meet emerging needs
   - helps build partnerships
   - enables HFA to engage in / assist activities not possible otherwise
   - enables HFA to use such funds synergistically:
     - *in conjunction with and to leverage HFA's normal financing programs*
     - *to provide deeper affordability for borrowers while maintaining the HFA's regular return on its moneys not provided through its affordability fund*

# State HFA Affordability Funds: Overview

## Systematically Comparing REACH With Other Affordability Funds Helps Distinguish REACH's Key Features

**Pioneering role of Virginia Housing**

- Virginia Housing was among the 1st HFAs in the nation to establish a dedicated source of resources for such affordability activities
- Initially as the Virginia Housing Fund and then after FY 06 as REACH

**Comparing REACH and other funds**

- Numerous other HFAs have similar types of funds, including Minnesota and MassHousing as key comparisons
- Virginia Housing's net assets, net income and annual affordability fund allocations are all larger than other state HFAs
- Comparison of key features of such funds helps illustrate REACH's structure (see Appendix for detailed comparison)

# REACH and Other HFA Affordability Funds

## Like Other Affordability Funds, REACH Allocations Are Based on % of Net Annual Income

**The percentages vary depending on the HFA:**

- Minnesota provides 100% of prior year net income;
- MassHousing (and recent Connecticut fund) provides 50% of net income because of the need to build the agency's net worth and/or cash to deal with liquidity needs and indenture restrictions

Model of setting a % of net annual income at 50% or such higher amount as sustainable thus applies to Virginia Housing as well

**Fundamental idea is the same in all such funds:**

- A portion of net earnings on regular activities
- Can be dedicated to affordability activities that the HFA doesn't rely on to sustain future operations

# REACH and Other HFA Affordability Funds

## While Timing of Allocations Differs From Other HFAs, This Does Not Have Significant Long-Term Effects on What Is Allocated to REACH

**Amount dedicated to REACH is based on:**

- Modified accounting net income (v. cash net income in other HFAs, which excludes changes in loan loss reserves)
- 5-year rolling average, looking 2 years' prior, i.e., a 1-year lag (vs. immediate prior year in other HFAs)

**This combined approach helps:**

- Gives REACH more predictability and stability, which can be useful for planning by Virginia Housing and potential REACH users
- Reduces impact of year-to-year fluctuations from purely accounting changes (e.g. annual ups and downs in loan loss reserve calculations)

**This stabilizing effect of a rolling average could be accomplished with a 3-year rolling average,** which could better link REACH to recent agency performance

# REACH and Other HFA Affordability Funds

## Unlike Other Affordability Funds, REACH Is Included in Virginia Housing's Balance Sheet Rated by the Rating Agencies

- Unlike other state HFA affordability funds, funds dedicated for REACH remain within the rated corpus and thus do **not** reduce net assets

- Rather REACH is a tracking mechanism for certain activities Virginia Housing allocates resources to and carries out

*Implications:*

1. REACH can provide the same affordability from the same amount of dedicated resources as a separate fund
2. A separate fund would generate repayments that would stay within and add to the affordability fund to supplement future allocations; however, current REACH uses (present value subsidies on rental loans and direct grants) do not generate repayments
3. Keeping REACH within the rated corpus of Virginia Housing can be desirable in terms of rating agency net worth and risk-adjusted net worth

# REACH and Other HFA Affordability Funds

## That REACH Is Located Within Virginia Housing's Rated Corpus Should Not In Any Way Reduce the Amount Allocated for REACH

If anything, it benefits Virginia Housing financially to keep REACH within its rated corpus

The amount that Virginia Housing can dedicate to REACH within the corpus ***should not be any less than*** if Virginia Housing was transferring the monies to a separate fund outside the agency's net worth

The reason is simple:
What Virginia Housing can afford to provide for REACH while maintaining its financial sustainability **is not any less simply because the moneys remain within the rated corpus**

# REACH and Other HFA Affordability Funds

## REACH Should Remain Within Virginia Housing's Rated Corpus and Receive No Less Than If It Were a Separate Fund

Virginia Housing has long established REACH as a mechanism for tracking affordability activities and funding within its rated corpus.

There is no reason to create a separate fund for REACH

But this also means that the dollar amount allocated for REACH activities should not be any less than if Virginia Housing were transferring its allocation to a separate fund

# REACH Formula

## But the Current Formula Provides Less for REACH Than If It Were a Separate Fund, Because Amounts for REACH Are Reduced by REACH's Own Activities

- **The current formula subtracts the REACH grants that were based on prior years' net income**
- **The REACH formula is 60% of the net income after REACH grants from past allocations**

This approach **deducts the amount of REACH grants from what Virginia Housing calculates for future REACH allocations** – unlike if the same REACH allocation been deposited in a separate fund, and grants had been made from that fund

For example, if Virginia Housing earns say $150 million from its regular non-REACH activities:

| | REACH within Virginia Housing's Corpus Under Current Formula | If REACH was a separate fund | |
|---|---|---|---|
| | **Within Corpus** | **Within Corpus** | **Separate Fund** |
| **Income from regular activities** | $150 million | $150 million | n/a |
| **REACH grants from past years' allocations** | $ 40 million<br>Inside corpus | $ 0 million | $ 40 million |
| **Net income from corpus after REACH grants** | $110 million | $150 million | |
| **Future REACH allocation based on 60% of net income after grants** | **$ 66 million** | **$ 90 million** | |

# REACH Formula

## This Effectively Circular Result is a Byproduct of the Current REACH Formula of 60% of Net Income After Grants

**Because the REACH formula is 60% of net income after grants and REACH remains in the rated corpus, grants from REACH are counted against the net income for future REACH allocations**

**This dramatically reduces future years' allocations compared to if REACH allocations had simply been put into a separate fund – in which case REACH grants would not count against the net income of the rated corpus**

Using net income after grants thus deducts what can go for REACH ***twice***:

- First, in deciding how much can be made available from agency income without regard to REACH, and then
- Second, subtracting the REACH grants made with those same funds

**The more Virginia Housing allocates for REACH, the more the grants made from those same REACH allocations reduce what Virginia Housing allocates in the future for REACH**

# Impact of REACH Formula

## While in the Past, this Secondary Effect Did Not Have a Major Impact, It Is Now Having a Large Impact on What Virginia Housing Provides for REACH

**Basing REACH allocations on net income after grants made little difference in the early years when the REACH percentage was 15-20% and REACH grants were only a few million dollars**

**But continuing to base REACH on net income after grants makes a significant difference now**

- REACH % has increased to 60%
- REACH grants are approx. $40 mill. per year,
- There is a significant overhang of REACH grants to be made from unspent past REACH allocations, and
- Impact is magnified by grants from Amazon-related allocations

For example, when Virginia Housing committed an additional $75 million for REACH related to Amazon:

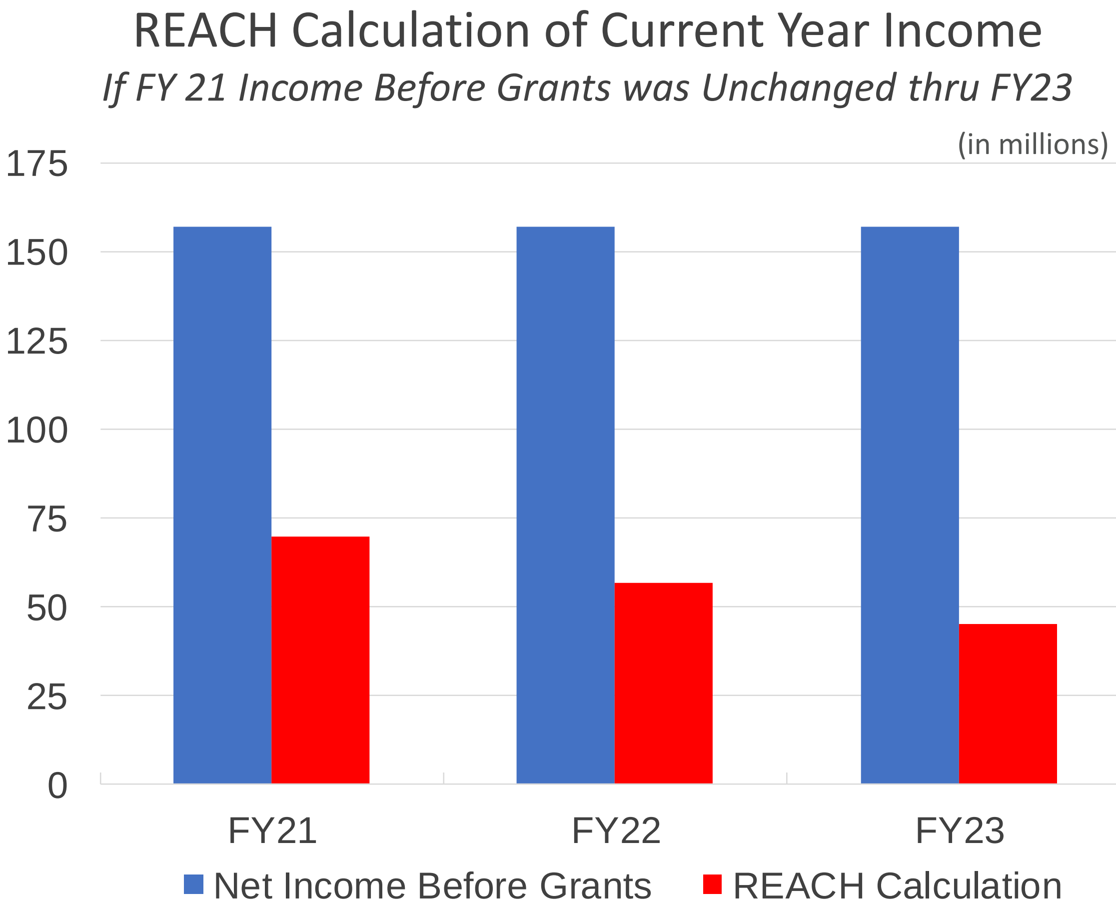
- If it uses 2/3 of those funds, or $50 million, for grants, when those grants are made, they will reduce net income after grants by $50 million
- The amount for REACH will therefore be reduced by 60% of that $50 million, e.g. by $30 million
- **Thus, the net effect of that $75 million related to Amazon will actually be $45 million, because it will reduce regular REACH allocations by $30 million**

# Impact of REACH Formula

## If Virginia Housing's Net Income Before Grants Remains Exactly the Same Over Next 2 Years, the Current Formula Would Reduce What is Available for REACH

- Each year, Virginia Housing calculates 60% of net income after grants, and includes this in the rolling average for future REACH allocations

- Because the agency is now making grants from past REACH allocations, these grants are significantly reducing the REACH calculation – even if Virginia Housing continues to earn the same on all its regular activities



# Impact of REACH Formula

## Deducting REACH Grants to Determine REACH Allocations Is Dramatically Reducing Upcoming REACH Funds

**If Virginia Housing continues the current formula over the next 2 years (FY22-23):**

- **The net income the agency earns from all its regular activities (e.g. net income before REACH grants) is likely to go down modestly, by about 20%**
- **<u>But what is included in the REACH formula for FY22-23 will be reduced by 60%</u>**

# Addressing the Impact of the REACH Formula

## How Can Virginia Housing Address These Impacts of the Formula?

- Virginia Housing could try to offset these consequences by creating further special adjustments
  - For example, it could set some <u>minimum amount</u> to be allocated to REACH each year <u>regardless</u> of agency performance or the formula itself *(in effect, offsetting the results of the formula)*
- However, this would further separate what it allocates for REACH from Virginia Housing's actual financial performance
- Like the impacts from overhangs from past REACH amounts under the current formula, the Amazon initiative, and the many changes in the REACH percentage itself, **such an approach would <u>not</u> be based on or provide an ongoing consistent way to link REACH allocations to Virginia Housing's overall financial sustainability**
- Yet the fundamental premise of REACH and affordability funds is that allocations should be based on how well the housing finance agency performs financially -- on what it earns from its regular activities
- **Therefore, instead of special adjustments, can look more systematically and long-term at the relationship between REACH and Virginia Housing's future sustainability**

# Sustainability for REACH and Virginia Housing

## We Have Therefore Modeled 10 Years of Virginia Housing Financial Projections to:

1. Examine how the current REACH formula would impact both REACH and Virginia Housing's long-term financial sustainability, and then
2. Test impact of alternative REACH formulas

We have analyzed the impact on Virginia Housing's overall financial position of:

- Continuing the current formula of 60% of income **after** grants
- Revising to **60% of income before grants**
  (e.g. without regard to, and thus without reducing future REACH allocations by, the amount of grants made from past REACH allocations)
- Revising to **75% of income before grants**

These alternative formulas:

- Continue the fundamental structure of REACH:
  keeping all monies for REACH activities within Virginia Housing's balance sheet sheet rated by the rating agency
- While not treating spending on REACH as further reducing what Virginia Housing can afford to allocate in the future

# V. Projecting Virginia Housing Net Income under Current REACH Formula

# Approach to Projections

## Projections Quantify How Current Production Plans and Current REACH Formula Are Likely to Impact Virginia Housing

Working with Virginia Housing, we have created:

- a range of projections of what Virginia Housing's net income before REACH grants
  - could be each year over the next 10 years
  - under 3 market and production scenarios

This allows us to project the impacts of the existing REACH formula under this range of scenarios on:

- allocations to REACH
- the agency's net assets
- the agency's parity ratio (net assets / debt)

***These projections provide a base before considering the impacts of different potential REACH formulas***

# Range of Scenarios

## Using a Range of Scenarios Helps Show What Factors Affect Virginia Housing's Financial Position Over the Long Term

**To illustrate how income may be affected by Virginia Housing's current production plans, under several different environments:**

- Moderate Growth
- Low Growth
- No Growth / Recession

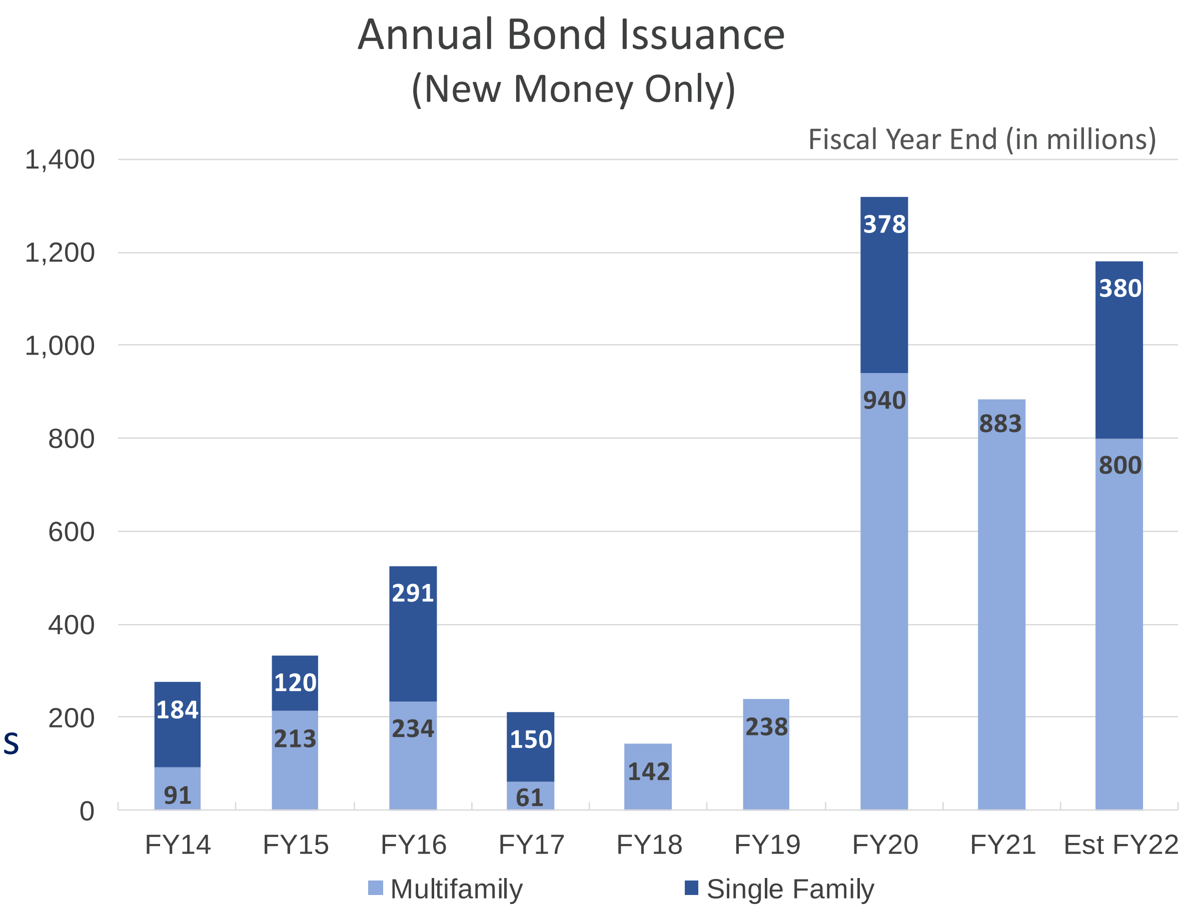
**Aim is not to predict the future, but just the opposite:**

1. To test how Virginia Housing's financial performance may be affected by a variety of changes in financial & economic markets and in production over the next 10 years
2. To understand impacts on the agency's net income, net assets and REACH under the current methodology
3. Actual performance will be highly affected by changes in financial markets and the economic environment, as well as by management's responses and decisions in navigating those changes

# Range of Scenarios

## A Key Difference in These Scenarios is the Level of Production, Which Has Recently Risen Dramatically, Especially Multi-Family

- **Continued major growth in production, esp. multifamily, would significantly increase agency's balance sheet**
- In "No Growth" scenario, assume operating expenses would not grow as rapidly, with fewer loan originations, servicing, and less growth of staff
- Scenarios assume loan loss reserves increase solely by production, without fluctuations in loss level calculations due to economy (such as in FY 20 pandemic)

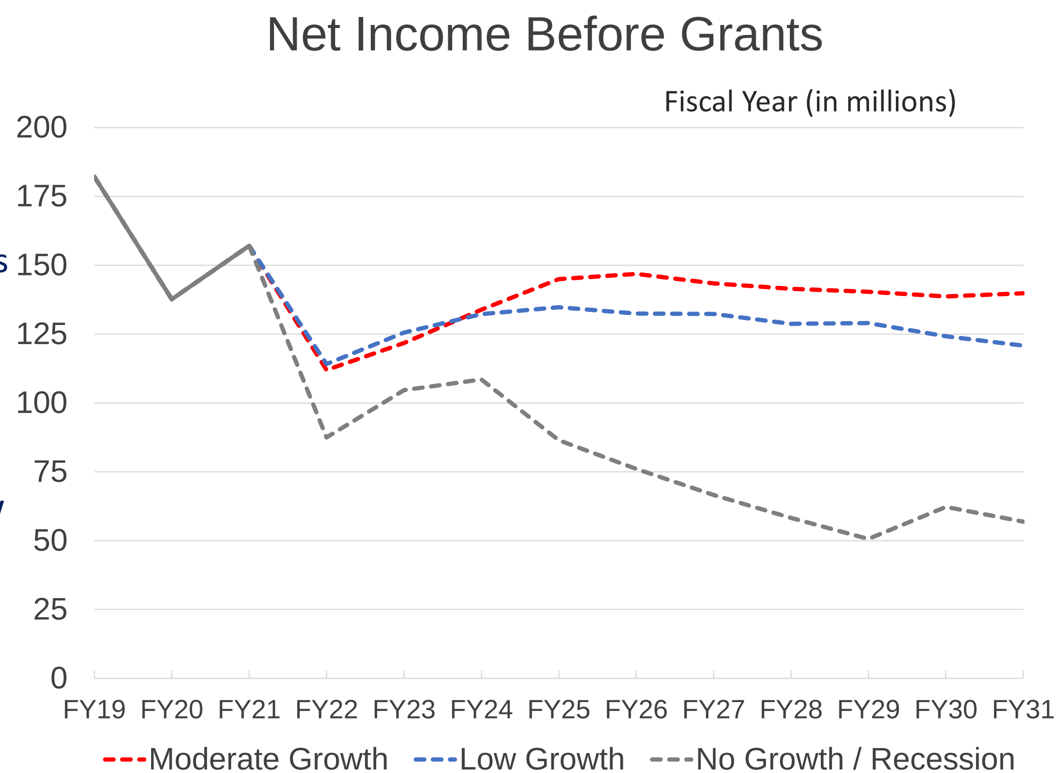


# Projections Under Current REACH Formula

## Projected Net Income Before Grants Is Stable in Both Moderate & Low Growth Scenarios....

- **FY 22 net income before grants is likely to go down from FY 21**
  - ancillary fees no longer reflect one-time items in FY 21 (-16 m.)
  - less robust gains on mortgage loan sales (-11 m.)
  - Virginia Housing expects increase in loss reserves v. reduction in FY 21 (-13 mill.)

- FY 22 figures based on discussion with Virginia Housing finance staff
- Then likely to be stable in both Mod. & Low Growth environments
- Slightly increased income in Mod. case because HFAs do better with higher rates, earn more on cash investments and loans remain outstanding longer
- Significantly reduced income in No Growth/ Recession case because of lower interest earnings, lower gains on mortgage loans and increased loss reserves

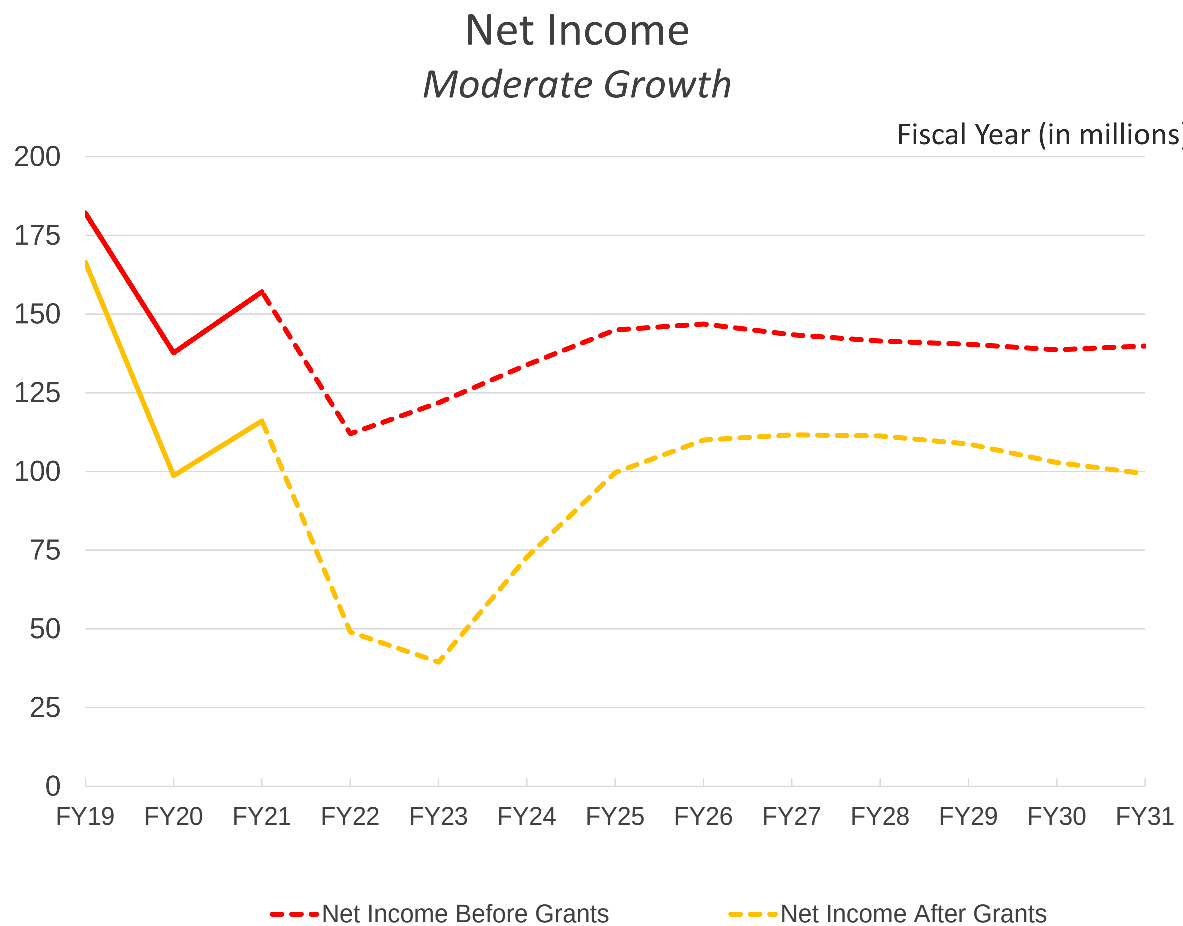


# Projections Under Current REACH Formula

## ….but Net Income After REACH Grants, that is Used to Calculate REACH, Drops Significantly

- While net income before grants is relatively stable, **net income after grants drops dramatically in next few years**

- Reason for the decline:
    - So many grants have already been committed due to recent increase in REACH %, overhang of unspent allocations from past years, and Amazon initiative

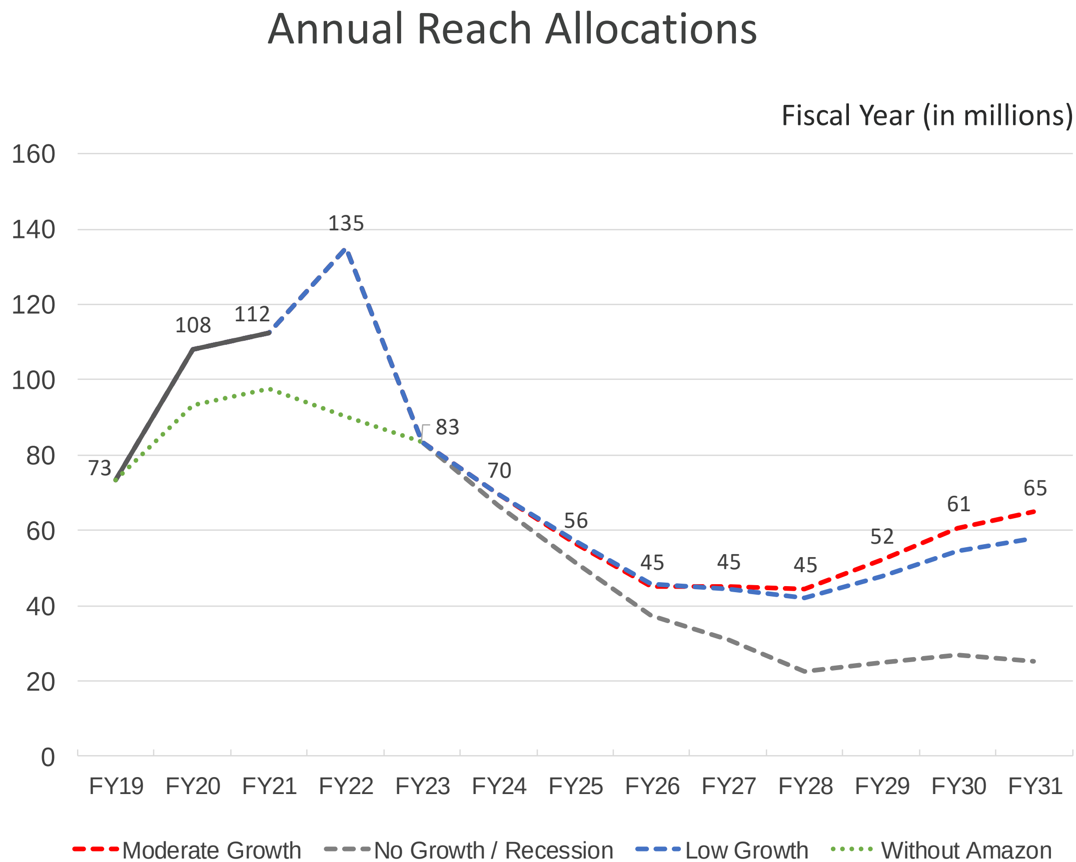


# Projections Under Current REACH Formula

**Because Net Income After REACH Grants Drops, Future REACH Allocations Drop Significantly Long-Term Under Current Formula**

**Why Less for REACH?:**

- Net income before grants is stable
- However, net income after grants is much lower than in the past few years under all scenarios
- This is accentuated when compared to additional amounts related to Amazon



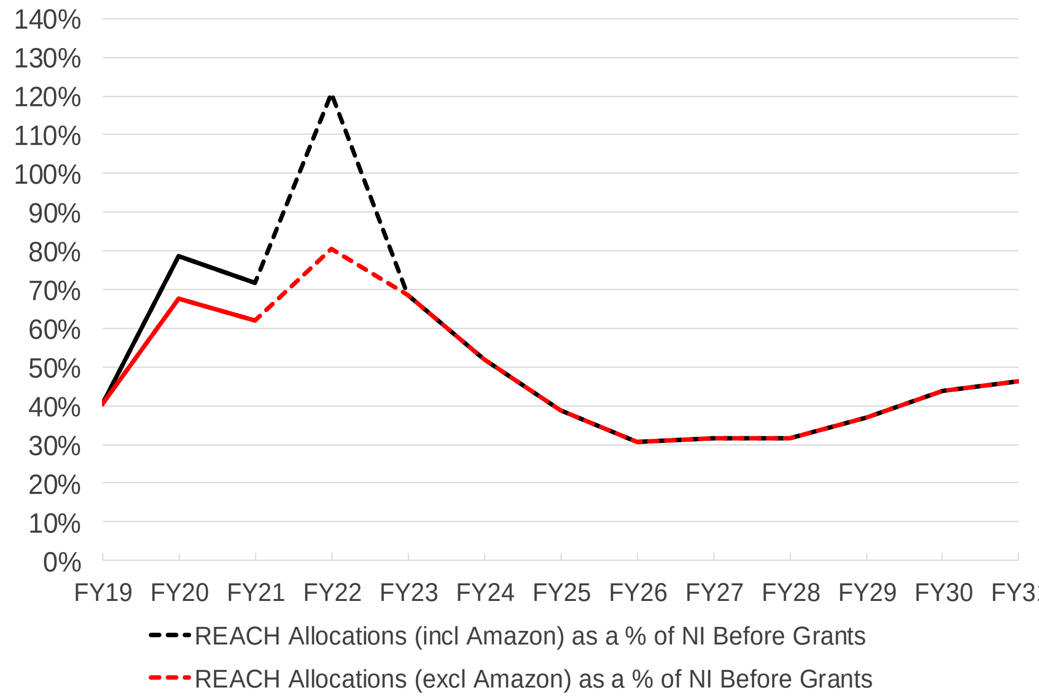
# Projections Under Current REACH Formula

## REACH Allocations Drop Dramatically Compared to Net Income From Virginia Housing's Regular Activities

- Net income before grants remains relatively stable, about $150 m. per year in Moderate Growth scenario, similar to FY 21
- But: Annual REACH allocations would be about $50 m. per year, approx. half that of FY 21
- **REACH allocations become a much smaller share of net income before grants**

**Much less of Virginia Housing's earnings on regular activities will go for REACH**

REACH Allocations as a % of Net Income Before Grants (Moderate Growth)



# Projections Under Current REACH Formula

## While REACH Allocations Decline,
## Virginia Housing's Net Assets Continue to Grow Strongly in all Scenarios

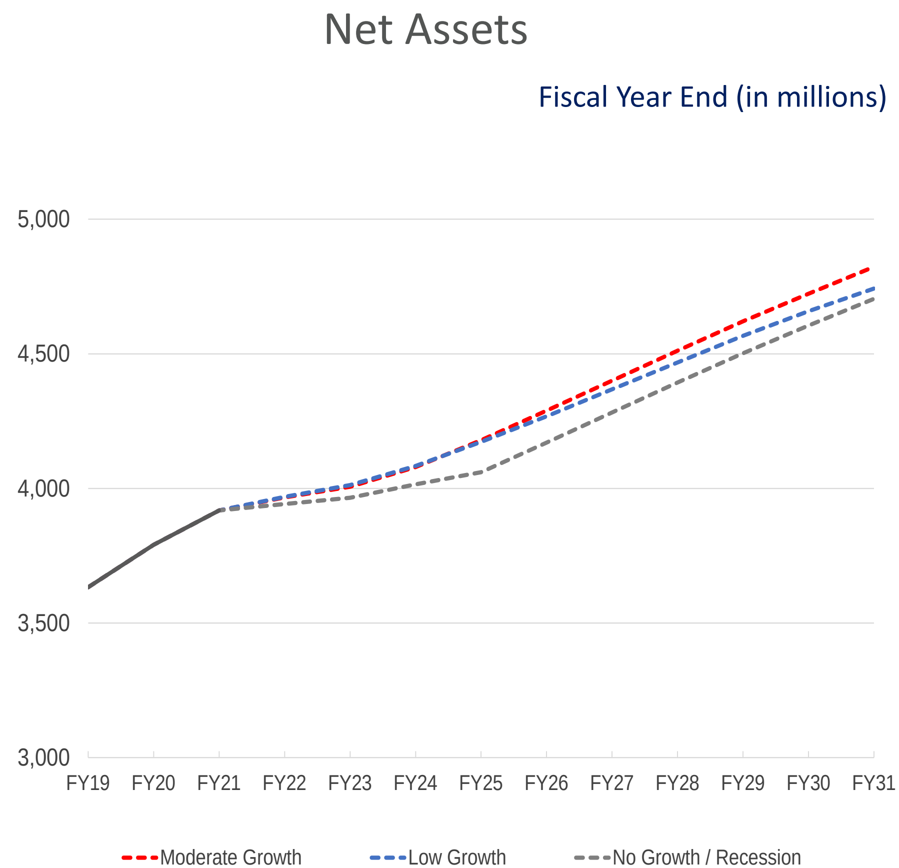
**Net assets continue to grow strongly, by over $1 billion, while:**

- *REACH allocations drop compared to recent years*
- *REACH allocations as a % of net-income before grants decline substantially*

<u>Reason:</u>
The growth in net assets reflects two factors:

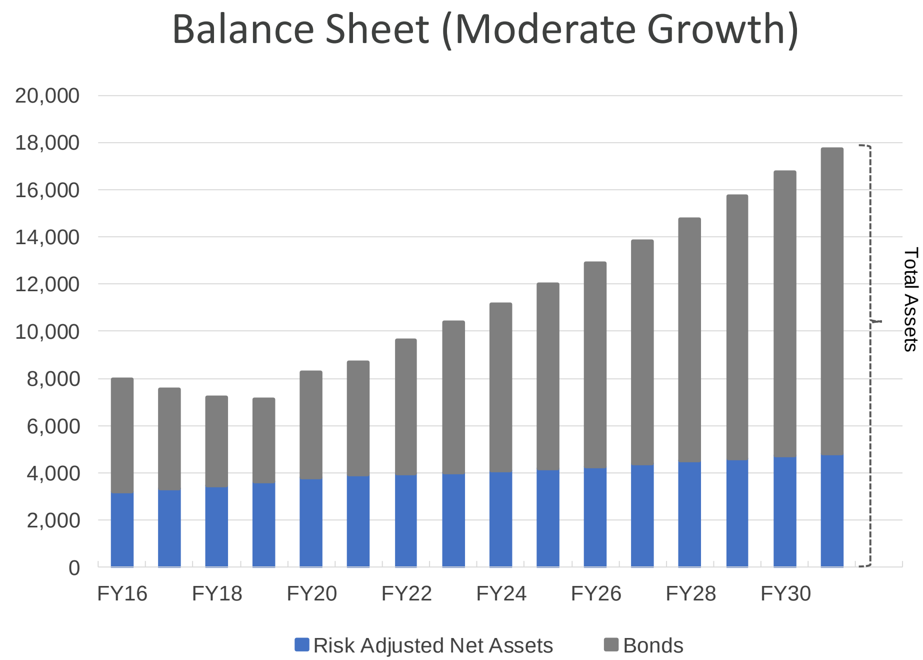
- REACH % is 60% (e.g. a portion of net income directly builds agency wealth), and
- REACH grants themselves reduce what is allocated for REACH

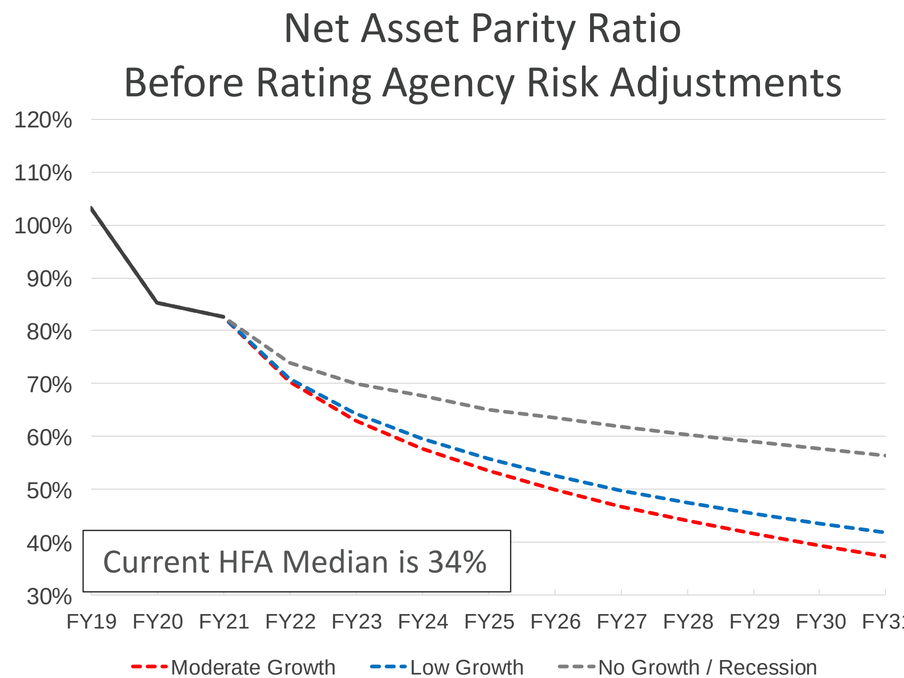
Alternative REACH formulas can result in a different balance between REACH and net asset growth



# Projections Under Current REACH Formula

## Production Decisions, rather than REACH, Drive Virginia Housing's Future Balance Sheet and Net Asset Parity Ratio




- The parity ratio declines because so much new production (esp. mixed-use/mixed-income multi-family production) is being added to the balance sheet
- Net assets grow, but not nearly as much as balance sheet grows from very high levels of production
- Virginia Housing's net asset parity ratio (net assets to debt) still remains at or above current HFA median

# VI. Impact of Alternative REACH Formula(s)

# Alternative REACH Formulas

## What is the Impact on REACH and Virginia Housing's Financial Position If the REACH Formula Is Changed?

We have therefore tested the impact on Virginia Housing's overall financial position of two alternatives:

1. Alternative A: **60% of net income before grants**
   (e.g. without regard to, and thus without reducing future REACH allocations by, the amounts of grants made from past REACH allocations)

2. Alernative B: **75% of net income before grants**

To fully reflect all the possible costs of such change, we have:

- Assumed in the projections that such change goes fully into effect in the REACH allocation starting in FY 22 (e.g. recomputed the annual calculations included in the 5-year rolling average)
- Taken into account the reduction in future interest income from the 1/3 of extra REACH allocations that are used for interest subsidies on rental loans

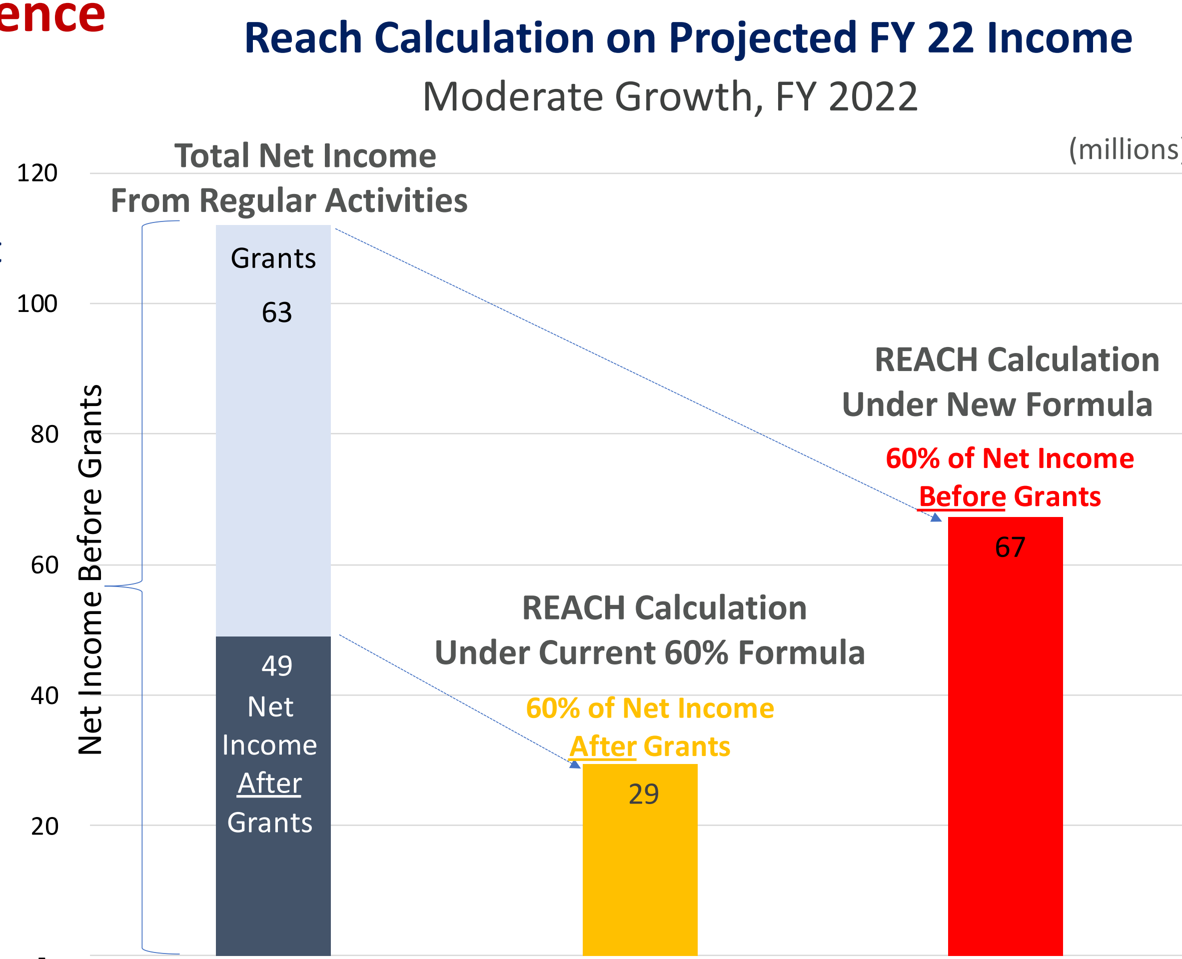
# Alternative REACH Formulas

## FY 22 Illustrates How Basing REACH on Net Income Before Grants Makes a Major Difference

- Virginia Housing is projected to earn $112 mill. in FY 22 from regular activities (e.g. net income before grants)

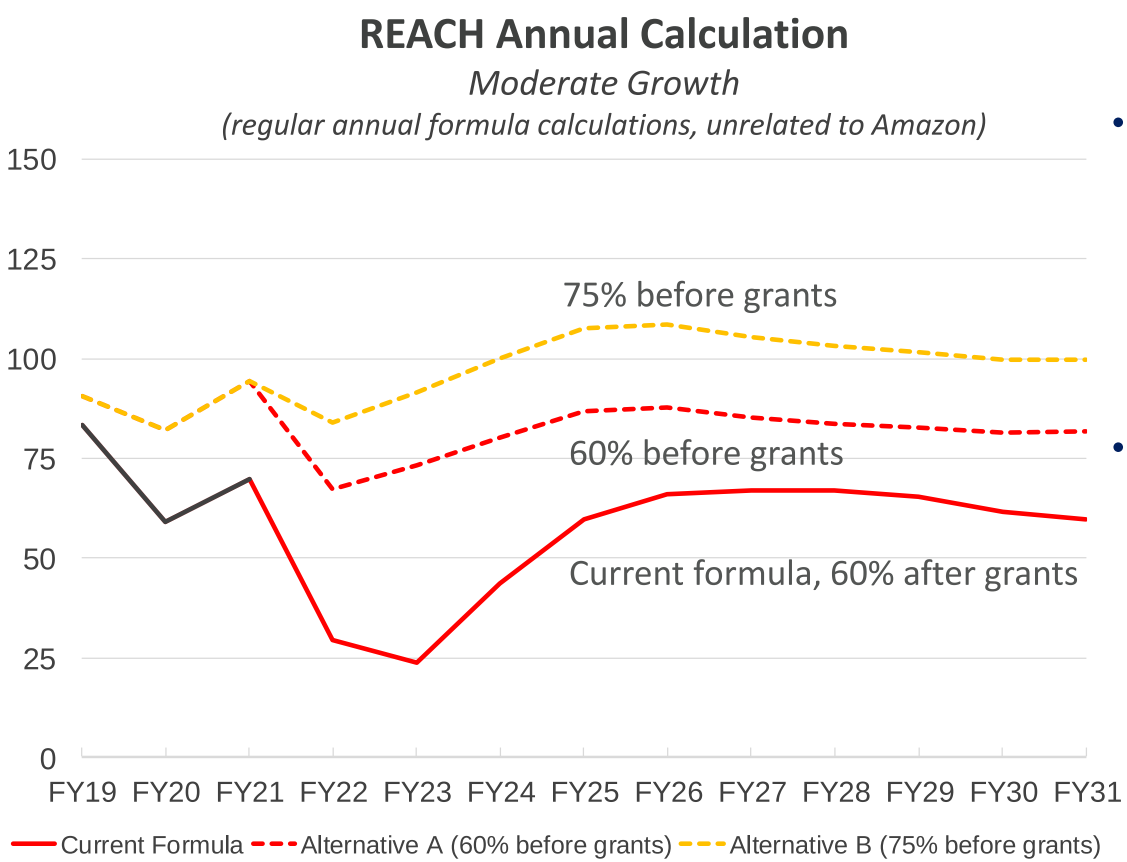
- **Under current formula**:
  - **$29 million** would be included in the rolling average
    *(26% of $112 m.)*

- **If REACH was based on Net Income after grants**:
  - **$67 million** would be included in the rolling average
    *(60% of $112 m.)*



# Impact of Alternative Formulas on REACH

## Income Available for REACH Would Be Stabler Under Alternative Formulas




- **Unlike current formula, amount calculated for REACH from each year's income would remain relatively stable**
  Reason: projected net income before grants is stable and alternative formulas reflect that

- **In current formula, REACH drops dramatically**
  Reason: projected net income <u>before</u> grants is stable, but REACH is reduced by grants from past allocations

  Increase for FY 19 - FY 21 comes from adjusting those years' calculations in the current rolling average formula

# Impact of Alternative Formulas on REACH

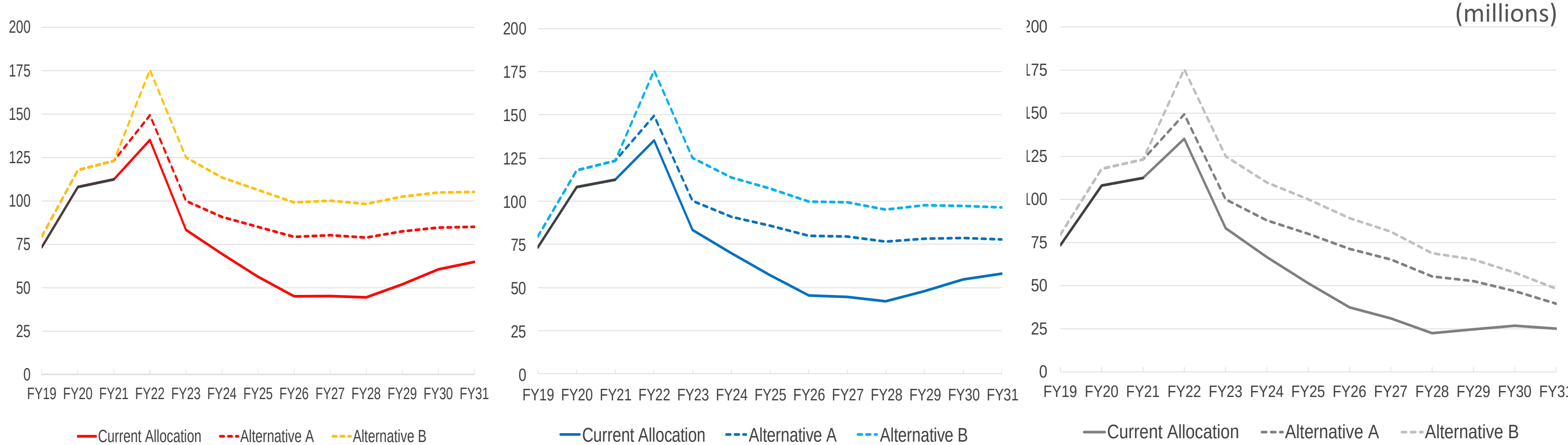
## REACH Allocations Would Drop Much Less and Be Larger Under All Scenarios

### Projected REACH Allocations

(including Amazon-related commitments)

*Moderate Growth* *Low Growth* *No Growth / Recession*

(millions)

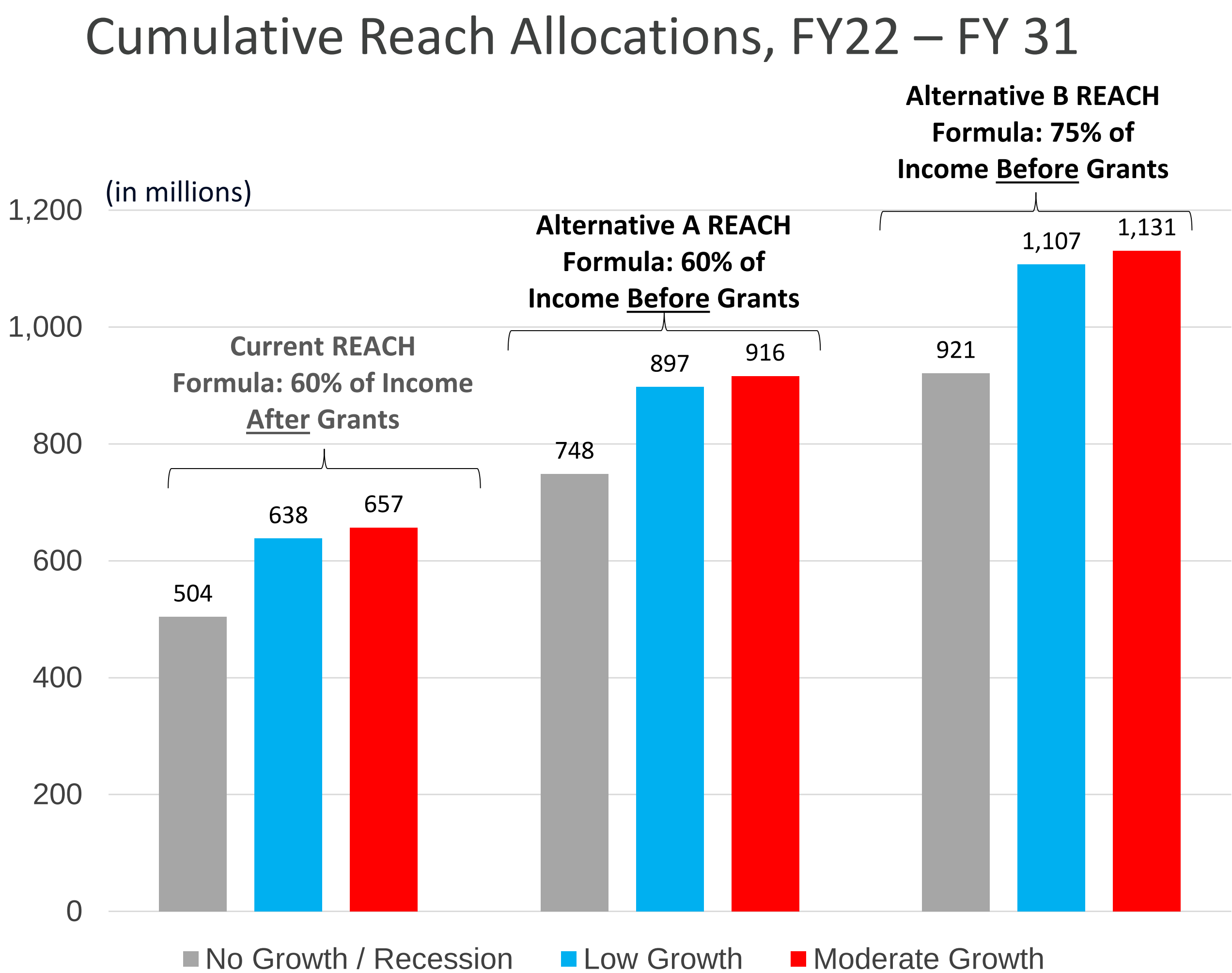



These alternative formulas would:

1. Provide more stability to REACH over time,
2. More precisely track Virginia Housing's income from its regular activities, and
3. Reduce the sharp decline in REACH in FY23 and beyond

# Impact of Alternative Formulas on REACH

## Total REACH Allocations Would Increase Significantly



# Impact of Alternative Formulas on REACH

## Excluding Grants From the Formula Would Increase REACH Allocations by 40% Over the Next 10 Years

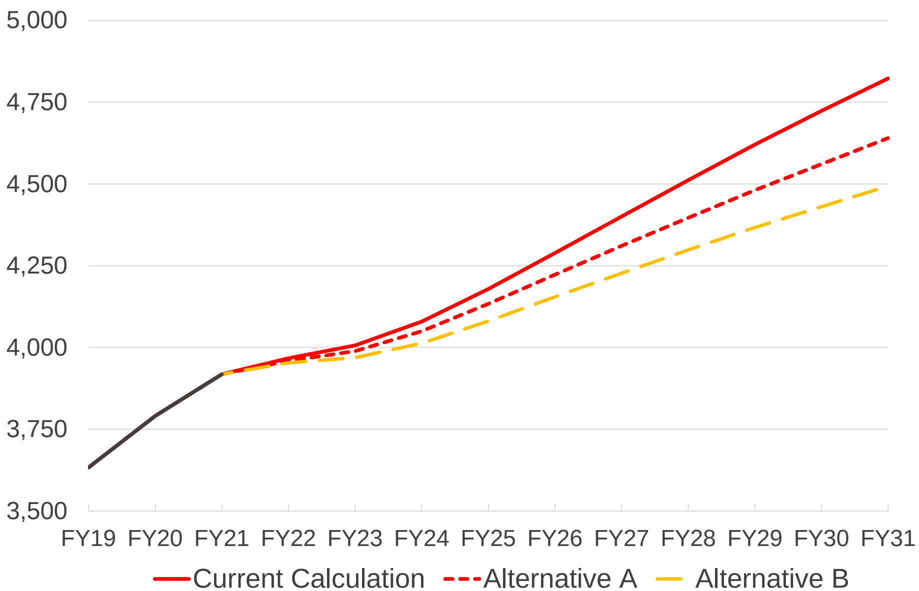
| Total Projected REACH Allocations FY 22 – FY 31 | Moderate Growth | Low Growth | No Growth |
|---|---|---|---|
| With Current Formula:  60% after grants | $ 657 m. | $ 638 m. | $ 504 m. |
| | | | |
| **With 60% before grants** | **916 m.** | **897 m.** | **748 m.** |
| increase over current formula | 259 m. | 259 m. | 244 m. |
| % change | **39%** | **41%** | **48%** |
| | | | |
| **With 75% before grants** | **1,131 m.** | **1,107 m.** | **921 m.** |
| increase over current formula | 474 m. | 469 m. | 417 m. |
| % change | **72%** | **74%** | **83%** |
| | | | |
| **With 60% before grants for 2 years, then 75% before grants** | **1,082 m.** | **1,058 m.** | **872 m.** |
| increase over current formula | 425 m. | 420 m. | 368 m. |
| % change | **65%** | **66%** | **73%** |

**This reflects the approach used by other state HFA affordability funds**

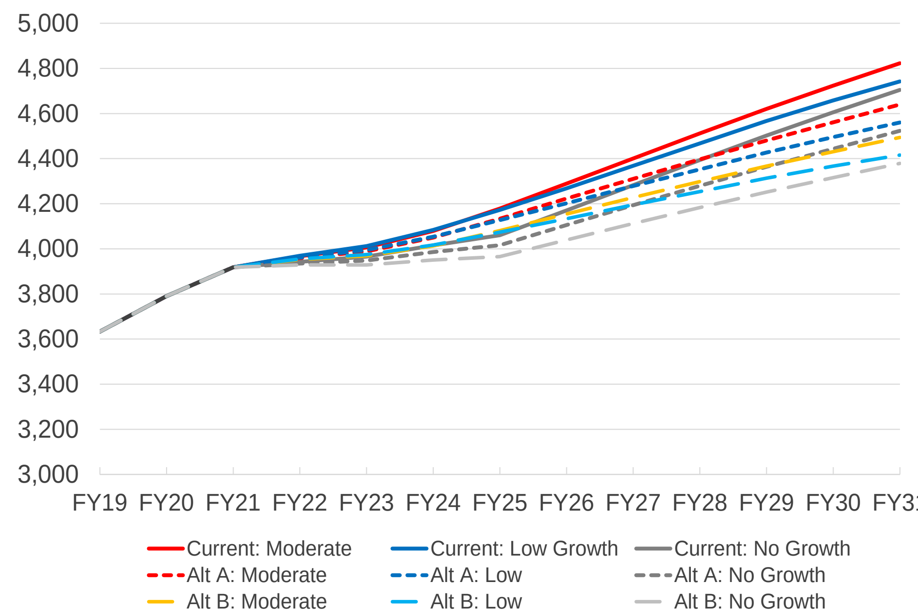
# Impact of Alternative Formulas on Net Assets

## Net Assets Continue to Grow Under All REACH Formulas and Economic Scenarios

Net Assets
*Moderate Growth*




Net Assets
*All scenarios*

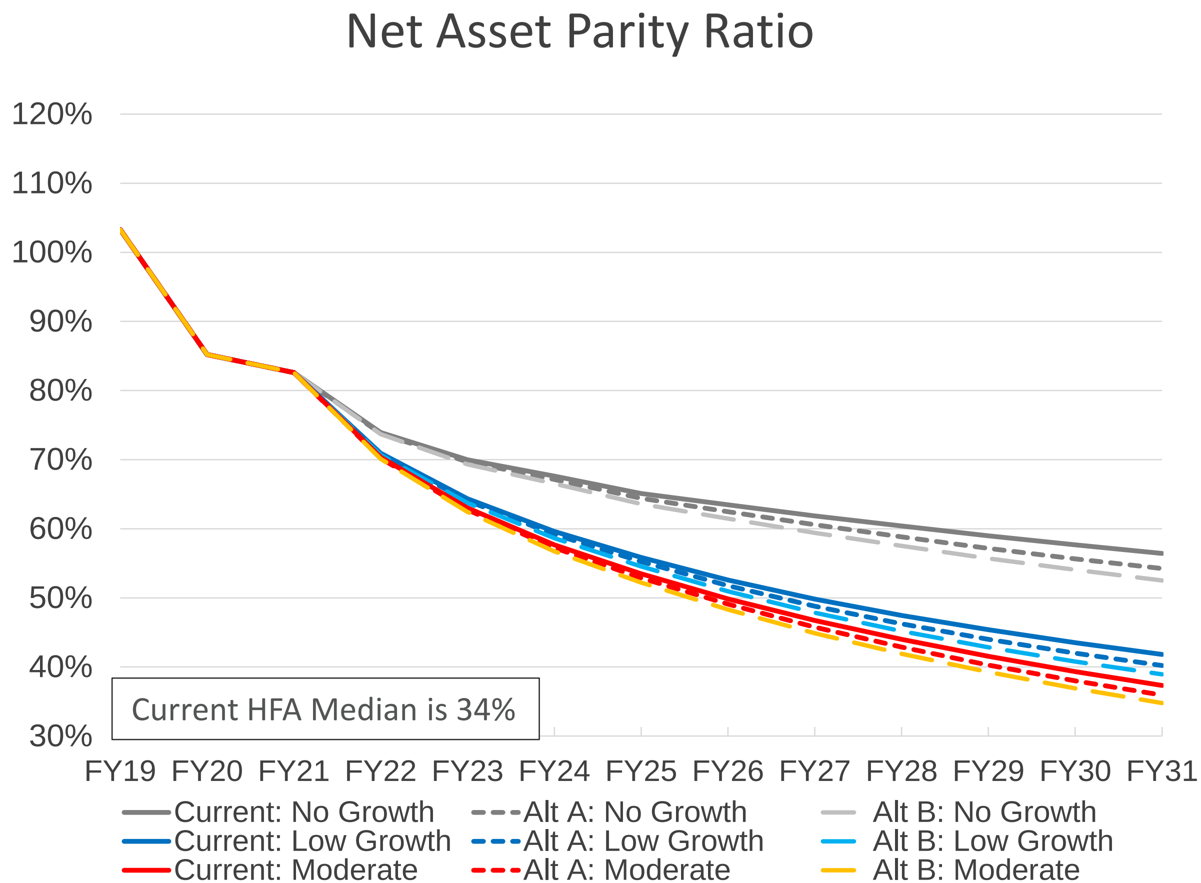



- **Net asset growth is slightly less under alternative REACH formulas, but still substantial**
  - Reason: only a portion of net income is allocated to REACH
- These alternative REACH formulas still enable Virginia Housing's financial position and net assets to keep improving

# Impact of Alternative Formulas on Parity Ratio

## Net Asset Parity Ratio Drops Due to Higher Production, With or Without Changes in REACH Formula

- REACH formula makes a limited impact on the parity ratio
- Production has a much larger impact on parity ratio than REACH Formula, as shown by No Growth case
- **Production decisions drive Virginia Housing's future parity ratio**



# VII. Sustainability, Risks and Rating Agency Requirements

# Risk-Adjusted Net Assets

## Current Multi-Family Production is Dramatically Increasing Moody's Risks

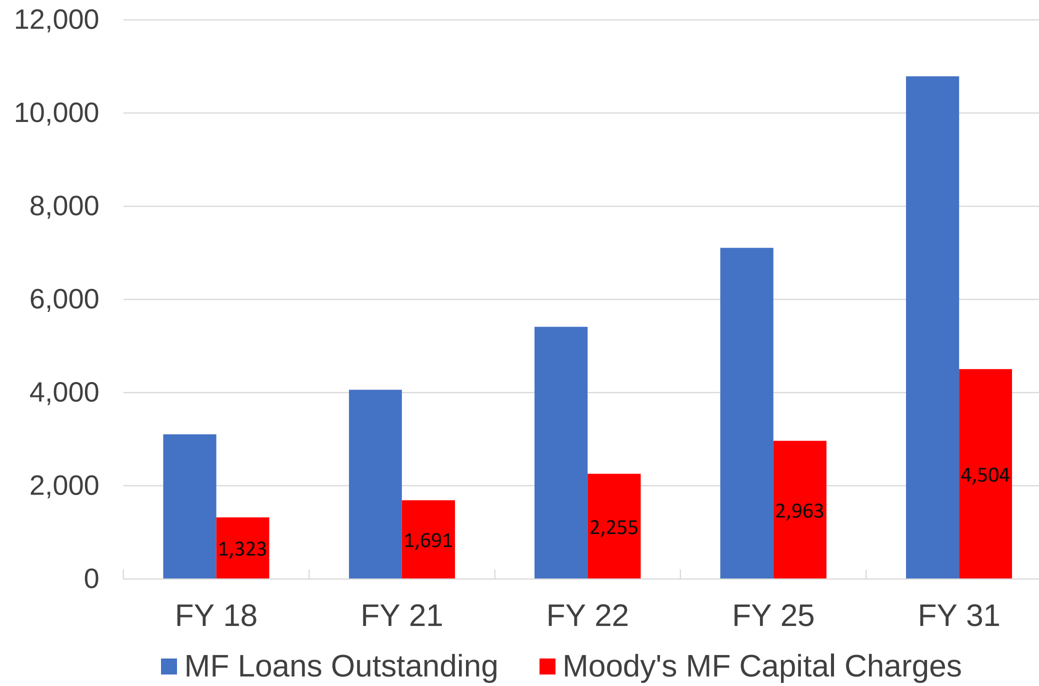
**After reviewing basic projections with Virginia Housing staff, continuing current type and leve of production, esp. multi-family, will create future problems in Moody's risk adjustments**

This is the case regardless of the REACH formula

- Key reason: Moody's **assigns a 43% risk adjustment on each new uninsured MF loan underwritten at 1.15 to 1 debt service coverage** (the standard for affordable mf lending by Virginia Housing, most HFAs and private lenders)
- (S&P's risk adjustments for Virginia Housing's MF portfolio are much less severe)
- Result: If Virginia Housing were to continue to make $800 mill. of new uninsured MF loans per year, then Moody's risk-adjustments on MF portfolio alone would grow by approx. $3 billion over 10 years
- As a comparison, Virginia Housing's entire risk-adjusted net assets per Moody's was only approx. half that ($1.6 billion) at FYE 19

Multifamily Loans and Capital Charges

*Moderate Growth*



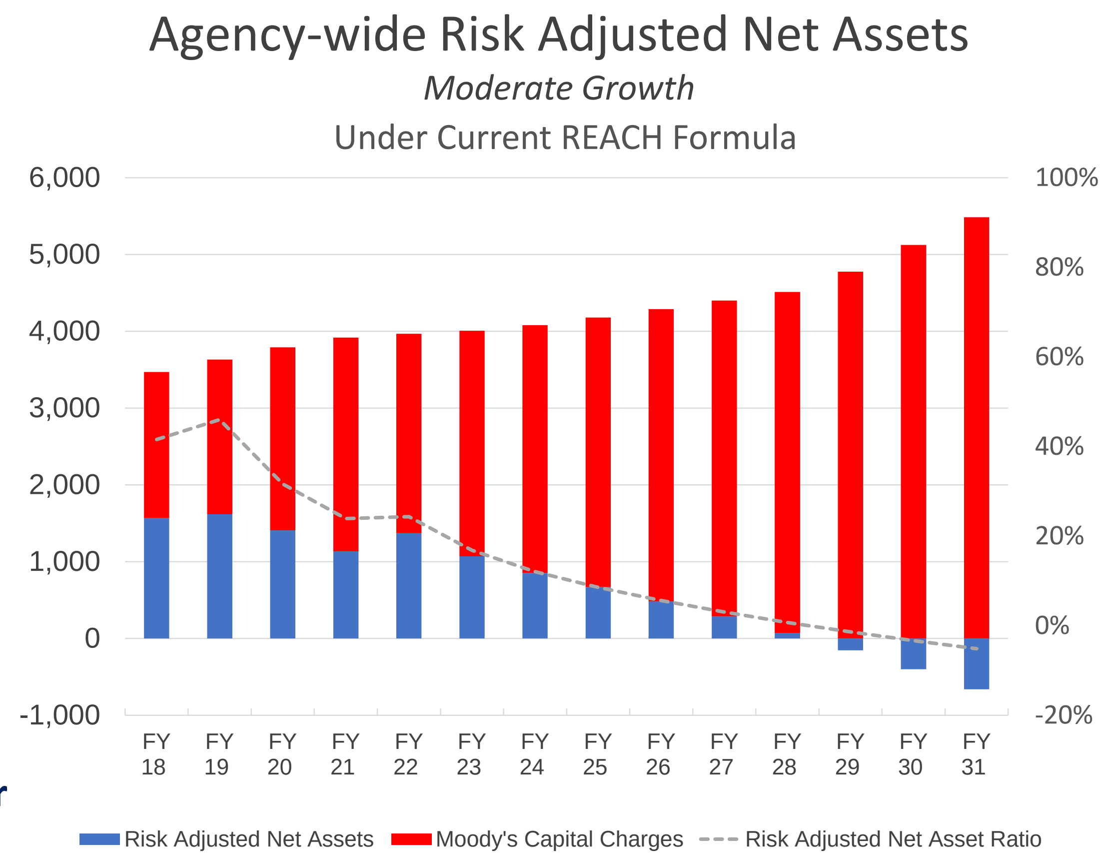
# Risk-Adjusted Net Assets

## Scale of Current MF Production, If Continued, Would Greatly Reduce Moody's Calculated Risk-adjusted Net Assets

Each year's multi-family production:

- *would modestly increase net assets* (earning about $4 mill. of additional annual interest income on each year's production after servicing costs)
- but the *risk adjustments* on those same loans would go up by approx. $344 mill. for that year's production

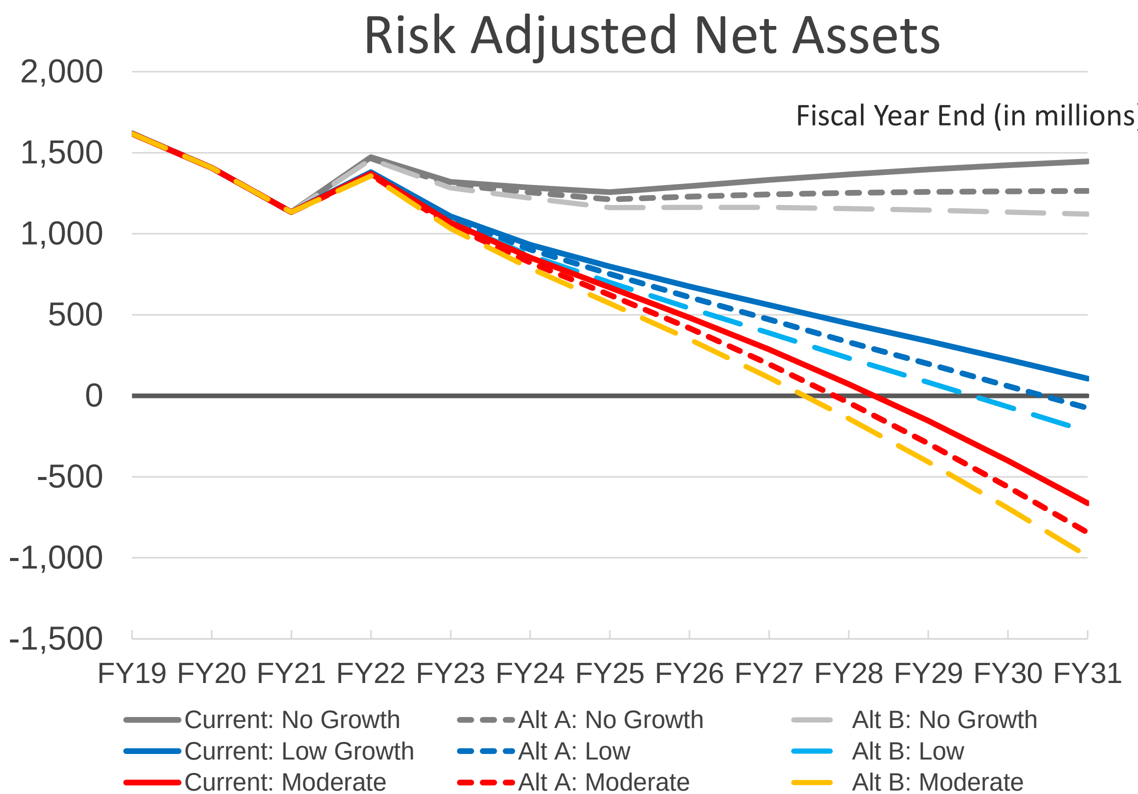
**This combined effect would, within several years, drop Virginia Housing below expected standards for AA rated HFAs**



# Risk-Adjusted Net Assets

## This Reduction in Risk-Adjusted Net Assets, as Calculated by Moody's, is Directly Related to Scale of Future Production

- In No Growth scenario, Moody's risk-adjusted net assets remain high
- In Growth scenarios, risk-adjusted net assets drop dramatically
- They fall below zero in Moderate Growth scenario
- **These results are due to level of (and Moody's risk assessments on) new production**




** Assumes all repurchase investments are migrated to a counterparty rated by both Moody's and S&P, therefore receiving 100% credit from Moody's starting in FY 2022.*

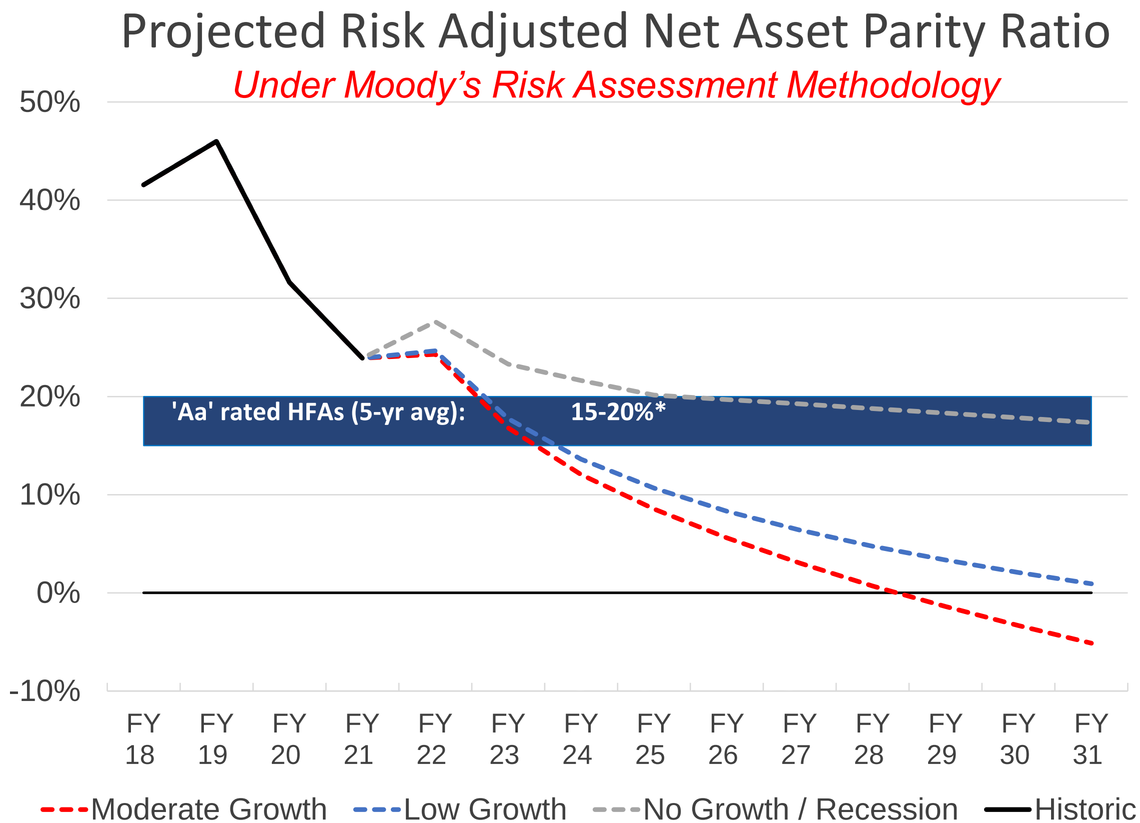
# Risk-Adjusted Net Asset Parity Ratio

## Continuing These Levels and Types of Production Would Create a Key Challenge for Virginia Housing's Moody's Rating

- To help protect the parity ratio, easy first step Virginia Housing could do immediately is to shift $825 million in repurchase agreements to counterparties rated by Moody's

  - Chart assumes this shift in repurchase agreements

- **Even with this shift, the risk-adjusted net asset ratio is likely to fall into and below the range for agencies rated Aa by Moody's**



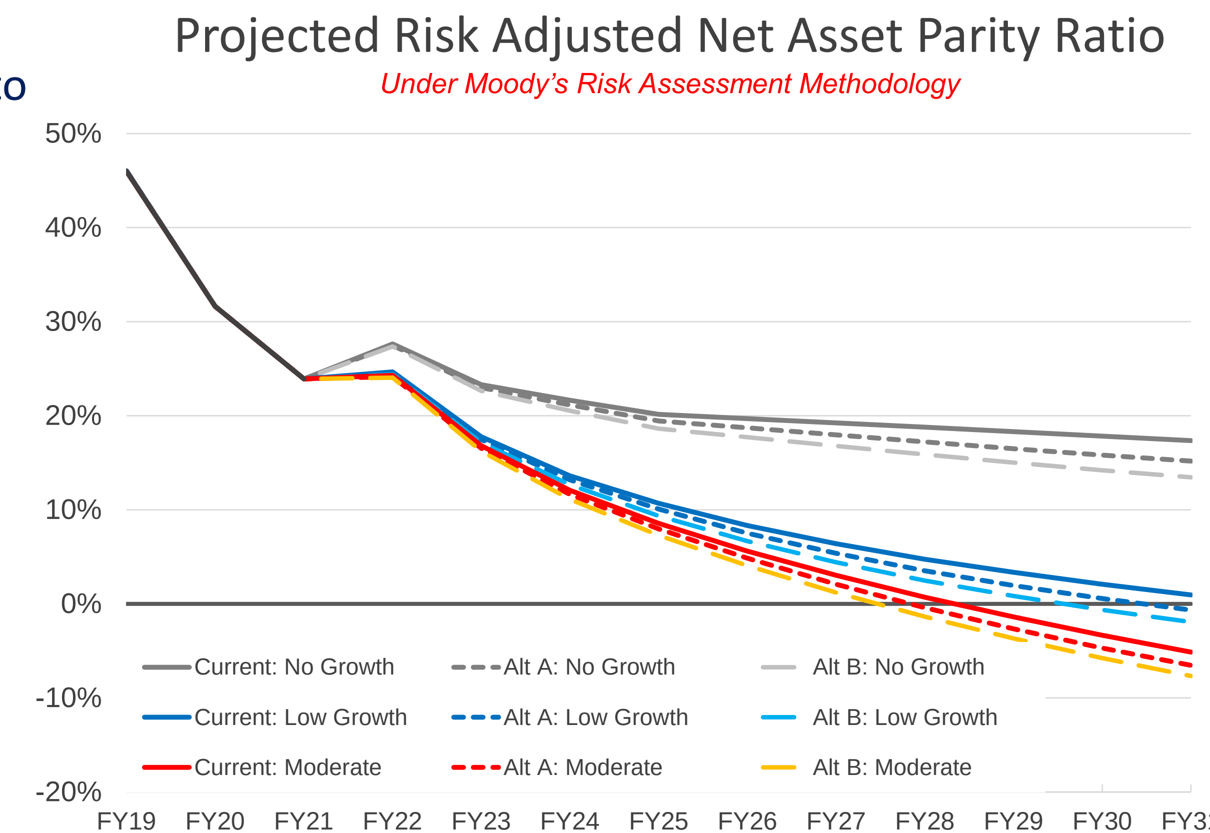

- *Assumes all repurchase investments are migrated to an investment grade counterparty, therefore receiving 100% credit from Moody's starting in FY 2022.*

*** Net asset projections based on current REACH formula*

# Risk-Adjusted Net Asset Parity Ratio

## Moody’s Rating Challenge Would Occur Regardless of the REACH Formula

- Potential problem is due to risk-adjustments on the large scale of projected uninsured multi-family production
- Issue occurs regardless of REACH formula




*Assumes all repurchase investments are shifted to an investment grade counterparty, receiving 100% credit from Moody’s, starting in FY 2022.*

# Risk-Adjusted Net Asset Parity Ratio

## This Is a New Potential Challenge only Emerging Now because:

1. ***Virginia Housing's risk-adjusted net assets and parity ratio have historically been far above Moody's requirements***
2. ***Moody's risk adjustments are in arrears*** (most recent was for FY 19)
3. **Risk adjustments only occur *after* the loans are approved, made, and then become permanent loans**, often 3 to 4 years after first approved
4. ***Dramatic increase in amount of MF production*** has only occurred recently
5. *No inherent limit* on how much new MF lending Virginia Housing can consider
   - lending for 9% and 4% projects is limited by Federal tax credit & bond volume regulations and thus remains approx. the same each year,
   - but potential mixed-used/mixed-income lending is not constrained by Federal limits
6. ***The rating agencies only look backwards***, not at current production, so there hasn't been a cause for concern

- Conducting a long-term projection of the agency's future balance sheet and potential risk assessments helps identify and quantify the problem

**Fortunately, Virginia Housing has time, resources and options to take action now**

# Strategy for Risk-Adjusted Net Asset Parity Ratio

## Virginia Housing Can Take Steps to Address This Future Concern

**Virginia Housing can avoid falling below the general Moody's standard of 15-20% risk-adjusted net asset ratio (VA Hsg was at 43% in FYE 19)**

1. Virginia Housing is already planning to **shift its repurchase investments** secured by Federal securities from firms not rated by Moody's to those which are rated
   *would reduce risk adjustments by $825 mill., and is already reflected in our model*

2. **MF loans for 9% and 4% tax credit projects are eligible for FHA risk-share insurance, which Virginia Housing has used in the last few years.**
   *50-50 insurance could reduce risk adjustments on such new loans by approx. $150 mill. per year*

3. **If future mixed-use / mixed-income lending could be reduced** from $500 mill. to $150 mill. per year
   *would reduce risk adjustments by approx. $150 mill. per year*
   *there is no limit on (or impact from) conduit debt credit enhanced by other parties*

4. **Virginia Housing can utilize guarantees by Fannie Mae / Freddie Mac to reduce its risk exposure on a portion of its new single-family lending**
   *would potentially reduce risk adjustments by $260 mill. to $390 mill. by FY 2031*

5. **By providing detailed historical information on outstanding single-family downpayment assistance second mortgages**, Virginia Housing is likely to obtain rating credit for 50% of such loans rather than 0%
   *could reduce haircuts by $80 mill. in FY 2022, and $125 mill. to $230 mill. by FY 2031*

# Impact of Steps to Reduce Moody's Risk Adjustments

## Such an Illustrative Risk Reduction Strategy Can Enhance Long-Term Financial Sustainability

1. **Balance sheet would not grow as dramatically**
   - Total assets and outstanding debt would be approx. $3 bill. smaller at FYE 31 than under current production assumptions
2. **Increases in net income and net assets would be slightly less**
   - In Moderate Growth case under current REACH formula, net assets at FYE 2031 would be $4.677 bill. v. $4.822 bill., a reduction of $150 mill. (or about $15 mill. per year)
3. **Net asset to debt ratio would be much stronger**
   - Net assets to debt ratio would be 49% rather than 37% under current production plans
4. **Moody's risk adjustments would be cut almost in half**
   - Projected Moody's risk adjustments at FYE 2031 in Moderate Growth case would be $3 bill. rather than $5.5 bill.
5. **Moody's risk-adjusted net asset parity ratio would be much stronger**
   - The ratio at FYE 2031 would be 18% compared to -5%, thus remaining well within Moody's standards for AA rated agencies

# Impact of Steps to Reduce Moody's Risk Adjustments

## Such a Strategy Would Help Assure Virginia Housing Meets Moody's Standards

- Risk adjustments would increase by 25% rather than 130%
- Risk-adjusted net assets would be larger than today, rather than negative
- Outstanding debt would double rather than triple
- Risk-adjusted net asset parity ratio would be significantly positive

### Impact of Reduced Risk Strategy Under Current REACH Formula

| FYE 2031 - Moderate Growth | FYE 20* | FYE 31 Mod. Growth Current Model | FYE 31 Mod. Growth Reduced Risk |
|---|---|---|---|
| **Combined Net Assets** | **3,790.5 m.** | **$ 4,822.8 m.** | **$ 4,676.7 m.** |
| *Moody's Risk Adjustments:* | | | |
| Multi-family | 1510.3 m. | 4,504.0 m. | 2,495.3 m. |
| Single family | 273.3 m. | 981.1 m. | 502.9 m. |
| Repurchase Agreements | 600.0 m. | -- | -- |
| **Total Risk Adjustments** | 2,383.6 m. | 5,485.1 m. | 2,998.1 m. |
| | | | |
| **Moody's Risk-Adjusted Net Assets** | **1,406.9 m.** | **($662.3) m.** | **$1,678.6 m.** |
| Outstanding Debt | 4,448.8 m. | 12,917.7 m. | 9,482.2 m. |
| **Moody's Risk-Adjusted Net Asset Parity Ratio** | **32%** | **(5%)** | **18%** |

** Moody's risk charge ratios for FYE 19 applied to FYE 20 balances*

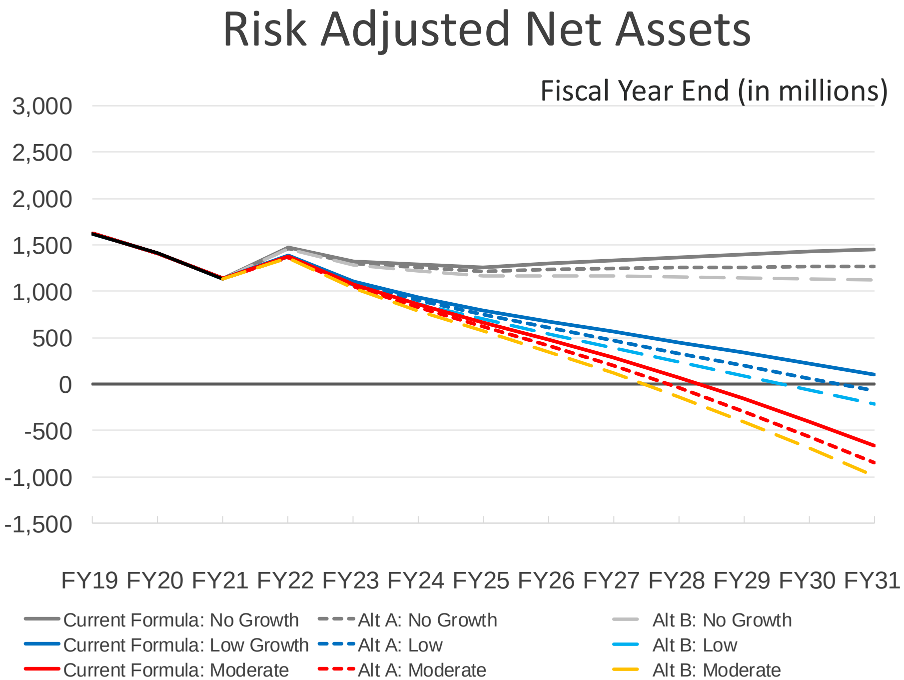
# Risk Strategy and REACH

## Such Strategic Steps Are Needed Regardless of Any Change to the REACH formula

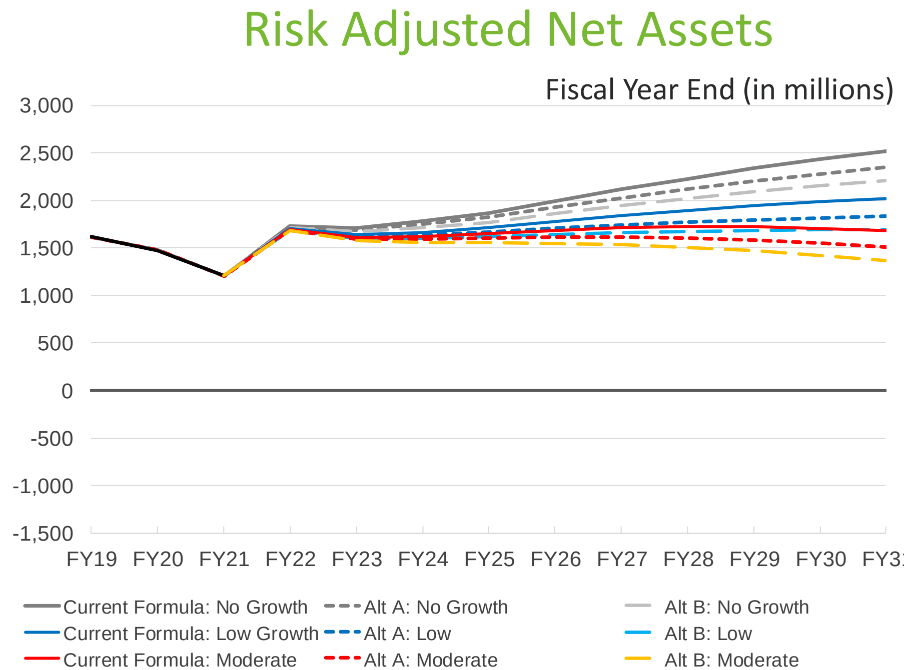
- Since these steps are needed in any case, we have assumed that, as Virginia Housing has done in the past, it would appropriately adjust production to address long-term rating agency requirements

- While these steps will slightly reduce annual net income in the Moderate and Low Growth cases, **they would not affect the feasibility of either the current REACH formula or the alternative REACH formulas**

## Risk-Adjusted Net Assets Would Remain Strongly Positive Under All REACH Formulas




*Reduced Risk Strategy*




** Assumes all repurchase investments are migrated to a counterparty rated by both Moody's and S&P, therefore receiving 100% credit from Moody's starting in FY 2022.*

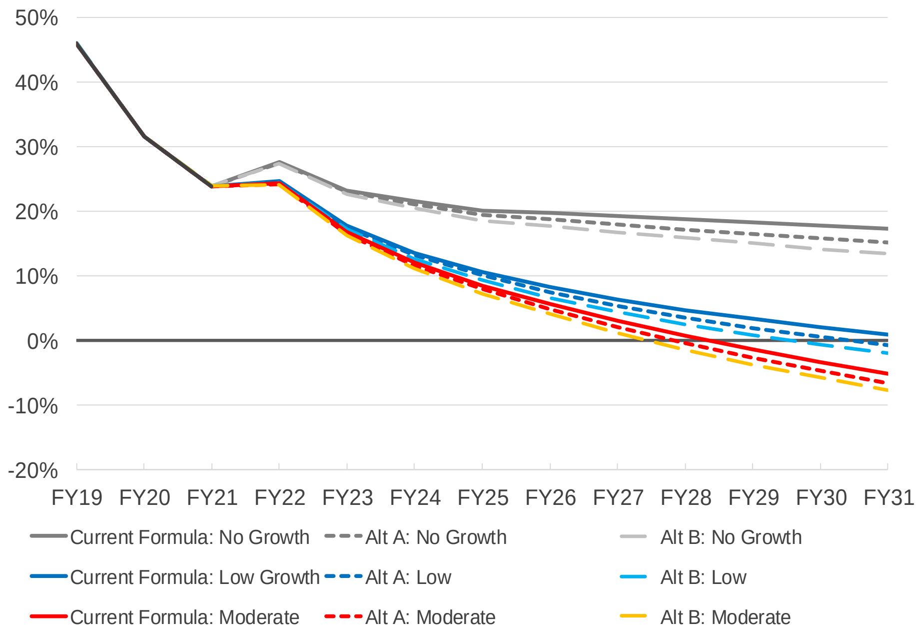
- The reduced risk strategy is designed to and would dramatically lower Moody's risk adjustments
- Risk-adjusted net assets would thus be far greater

# Risk Strategy and REACH

## Moody's Risk-Adjusted Net Asset Parity Ratio Would Remain Positive Under All REACH Formulas

Agency-wide Risk Adjusted Net Assets

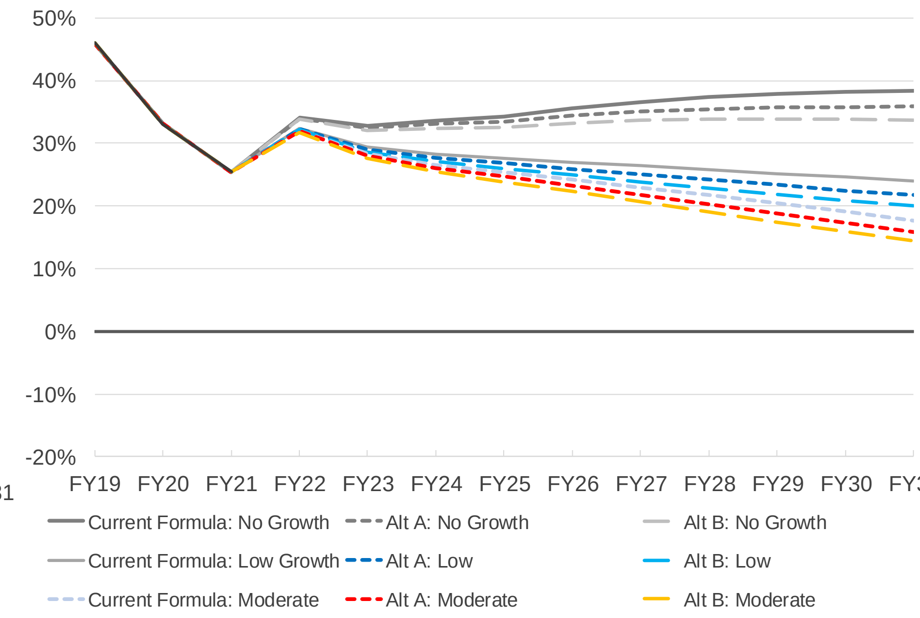
*Moody's Calculations*




***Reduced Risk Strategy***

Agency-wide Risk Adjusted Net Assets

*Moody's Calculations*




*Assumes all repurchase investments are shifted to an investment grade counterparty, receiving 100% credit from Moody's, starting in FY 2022.*

# Risk Strategy and REACH

## Proposed REACH Formula and Such a Risk Strategy Enable Virginia Housing to Meet Moody's Standards In All Scenarios

- **Using such a reduced risk strategy**, and **hybrid REACH formula of 60/75% before grants**, Virginia Housing meets Moody's ratio standards in all scenarios

| FYE 2031 – Less Risk Hybrid: 60% for 2 Years Then 75% | Moderate Growth Scenario | Low Growth Scenario | No Growth Scenario |
|---|---|---|---|
| **Combined Net Assets** | **$4,402.0 m.** | **$4,357.0 m.** | **$4,308.1 m.** |
| *Risk Adjustments:* | | | |
| Multi-family | 2,495.3 m. | 2,299.4 m. | 1,883.8 m. |
| Single family | 502.9 m. | 328.1 m. | 172.7 m. |
| Repurchase Agreements | -- | -- | -- |
| **Total Risk Adjustments** | 2,998.1 m. | 2,627.5 m. | 2,056.4 m. |
| | | | |
| **Risk-Adjusted Net Assets** | **$1,403.8 m.** | **$1,729.5 m.** | **$2,251.7 m.** |
| Outstanding Debt | 9,482.2 m. | 8,435.8 m. | 6,559.2 m. |
| **Risk-Adjusted Net Asset Parity Ratio** | **15%** | **21%** | **34%** |

# VIII. Ability to Make Additional One-Time REACH Allocation from Existing Fund Balance or Increase REACH Allocation to 100%

# Feasibility of Major One-Time Allocation to REACH

## REACH Allocations Should Be Based on Annual Income from Virginia Housing's Activities

- Given the need to manage the risk-adjusted net worth and parity ratio, **we would not propose making a one-time allocation**

- **Future annual allocations should continue to be based on the rolling average of annual income,**

- **But the formula can be changed to provide more for REACH while still increasing Virginia Housing's net assets, and consistent with and in conjunction with Virginia Housing's overall financial strategy**

# Feasibility of REACH Formula of 100%

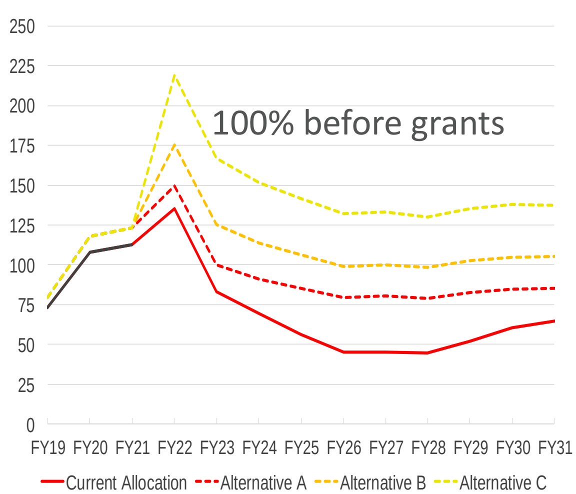
## Changing to 100% Before Grants Would Produce Far More for REACH

### Projected REACH Allocations

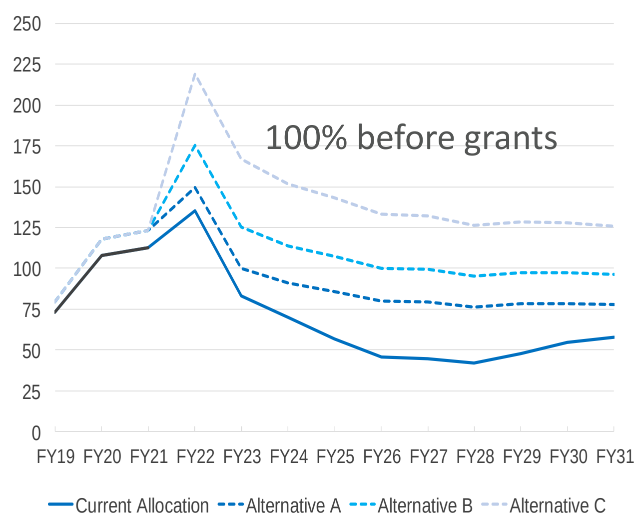
(including Amazon-related commitments)

(millions)

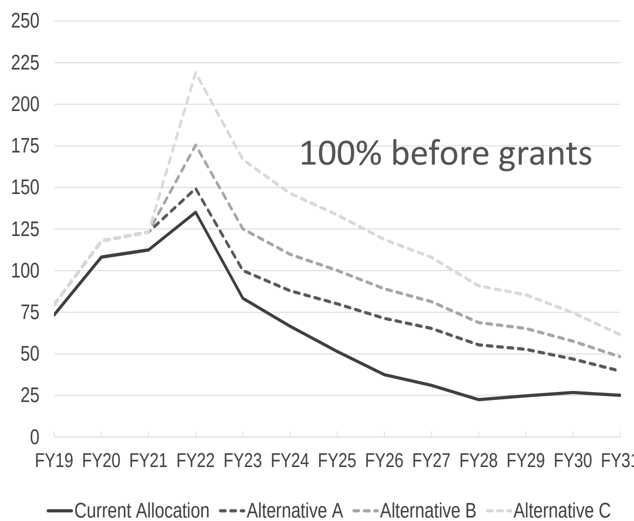
*Moderate Growth*




*Low Growth*




*No Growth / Recession*




The 100% formula would provide $400 million more for REACH over the next 10 years than the proposed 60% before grants for two years and 75% thereafter

# Feasibility of REACH Formula of 100%

## However, 100% Before Grants Has Several Key Disadvantages

1. **Even with the reduced risk strategy, the Moody's risk-adjusted net asset parity ratio would fall below Moody's requirements for AA rated agencies**

- While this may not directly affect VA Housing's ratings,
- It would limit flexibility of long-term decision-making and adjusting its programs to meet market conditions

| FYE 2031 – Less Risk / Moderate Growth | Current REACH: 60% After Grants | Hybrid: 60% for 2 Years Then 75% | 100% Before Grants |
|---|---|---|---|
| **Combined Net Assets** | **$4,676.7 m.** | **$4,402.0 m.** | **$4,126.5 m.** |
| *Risk Adjustments:* | | | |
| Multi-family | 2,495.3 m. | 2,495.3 m. | 2,495.3 m. |
| Single family | 502.9 m. | 502.9 m. | 502.9 m. |
| Repurchase Agreements | -- | -- | -- |
| Other Risk Adjustments | -- | -- | -- |
| **Total Risk Adjustments** | 2,998.1 m. | 2,998.1 m. | 2,998.1 m. |
| | | | |
| **Risk-Adjusted Net Assets** | **$1,678.6 m.** | **$1,403.8 m.** | **$1,128.4 m.** |
| Outstanding Debt | 9,482.2 m. | 9,482.2 m. | 9,482.2 m. |
| **Risk-Adjusted Net Asset Parity Ratio** | **18%** | **15%** | **12%** |

# Feasibility of REACH Formula of 100%

## However, 100% Before Grants Has Several Key Disadvantages (cont.)

2. **Virginia Housing's rolling average makes allocating 100% for REACH problematic**
   Allocating 100% of net income from prior years provides less of a cushion if income subsequently declines in future years

3. **There are advantages for HFAs in having shared incentives, with net income both expanding affordability and directly increasing resources for the agency as a whole**

   Shared incentives spur HFA efforts to design efficient, income-producing programs that provide funds for both purposes

   Where all income will always be allocated to affordability activities, there is less inherent need for the financial efficiency and innovation in regular programs that has helped Virginia Housing become financially strong

# Feasibility of REACH Formula of 100%

## However, 100% Before Grants Has Several Key Disadvantages (cont.)

**4. It is highly unusual for state HFAs to allocate 100% of net income for an affordability fund**

The one example we know of, Minnesota Housing, is different in several key respects from Virginia Housing

- It is much less subject to impacts of an economic downturn since it:
  - has very modest loan and real estate risk, compared to Virginia Housing's uninsured loan risk
  - out-sources single family servicing and is not affected by higher servicing costs in a recession
  - derives very little of its annual income from single-family loan sales, the profitability of which can fluctuate dramatically depending on market pricing
- Since Minnesota Housing's balance sheet is quite stable and only expanding through 100% federally guaranteed mortgage-backed securities, it does not need future increases in net assets to maintain its current risk-adjusted net asset parity ratio
- This makes it far more possible for Minnesota Housing to allocate 100% of its net income for its affordability fund without adversely impacting future financial stability

**5. The proposed 60% for 2 years / 75% thereafter, is thus more sustainable long-term for Virginia Housing**

# IX. Summary and Recommendations

# Planning for REACH

## REACH Is a Key Tool for Meeting Affordability Needs

- **Virginia Housing has used REACH to create an extraordinary set of resources to assist affordable housing in Virginia**
- **The amounts allocated, like the Agency's overall financial position and annual income, are all exceptional among HFAs**

# Planning for REACH

## Standardizing What Virginia Housing Can Allocate for REACH Can Be Valuable for Both Virginia Housing and Stakeholders

Indeed, the strength of Virginia Housing's financial position and the ongoing financial performance of its programs has:

- Enabled it to make decisions to allocate more for REACH activities – both through increasing the % and making additional (Amazon-related) allocations beyond the formula itself

However,

- **the relationship between the REACH formula and the agency's financial performance and position has changed significantly in recent years, and**

- **grants from past REACH allocations are sharply changing what would be allocated in the future**

# Planning for REACH

## This is a Key Time for Re-evaluating the REACH Formula

- When REACH was 15 or 20% of net income, and annual allocations and grants were modest, it made little difference in total dollars whether the formula measured income before or after grants

  - But increases in the REACH %, Amazon-related commitments and overhang of grants still to be funded from past allocations have made the formula's details far more important
  For example, under the current formula, the $75 mill. Amazon commitment is reducing future REACH allocations by $30 million

- **The impact of these recent changes is that, under the current formula, the annual calculations and ultimate REACH allocations will be dramatically reduced,**
  ***unrelated*** **to the financial performance of Virginia Housing's non-REACH programs.**

- **If future net income before grants remains exactly the same, REACH would be reduced from recent years**

- **Such potentially unintended outcomes are in many ways the opposite of the purpose of Virginia Housing's overall approach to REACH, of using a rolling average to help provide stability and predictability that Virginia Housing and stakeholders can count on**

# REACH Formula

## The Current Formula Reduces Future REACH Allocations Because of Grants Made from Past REACH Allocations

This formula:

- Results in a much smaller allocation than if Virginia Housing was transferring those same monies to a separate fund,
- Results in instability and fluctuations in future allocations,
- In upcoming fiscal years, dramatically reduces amounts for REACH activities, and
- **Over the next 10 years, reduces by $400 million what would be available for REACH if the same 60% percentage were simply used to transfer monies to a separate affordability fund**

# REACH Formula

## The REACH Formula Can Be Changed in a Simple Way to Avoid Grants from Past REACH Allocations Reducing Future REACH Allocations

**To correct these consequences, Virginia Housing could simply change the formula to 60% of <u>before</u> grant income, e.g. what Virginia Housing earns on all its regular activities**

*What Virginia Housing makes available from future years for REACH would no longer be reduced by the grants it made from past REACH allocations*

*Virginia Housing's net assets, already more than double that of any other state HFA, would still continue to grow substantially in all the range of scenarios analyzed*

**Using this approach of measuring before grant income, Virginia Housing could potentially increase the % from 60% to 75%.**

*Again, Virginia Housing's net assets would continue to grow each year, even while allocating a larger portion to REACH*

# Recommendations

## 1. Change the REACH Formula in Two Steps

Given the various changes involved, the following approach may make sense:

1. ***Change the formula now to 60% of income <u>before</u> grants***

- Adjust all calculations in the current rolling average for determining allocations

2. ***Starting with the stand-alone calculation two years from now, the calculation % would increase to 75% of income before grants***

This two-step approach:

- Provides a gradual way of introducing these changes,
- Avoids a larger sudden bump in REACH allocations, and thus
- Provides time for planning the most effective potential uses for expanded REACH resources in the future

# Recommendations

## 2. Shift the Rolling Average REACH Calculation to 3 Years

**A 3-year rolling average would:**

- Continue to smoothe fluctuations in year-to-year income (from accounting items and other variations)
- While better relating REACH allocations to Virginia Housing's recent performance than a lagged 5-year rolling average, which looks back 7 years into the past

**This would help reduce the impact on future REACH allocations of conditions that no longer affect Virginia Housing's current performance**, such as:

- a long-past recession,
- the agency's current income being far lower than it was in the past

# Recommendations

## 3. Do Not Make A One-Time Allocation for REACH

- Given the need for Virginia Housing to address rating agency risk adjustments, we would **not recommend considering any one-time additional allocation from Virginia Housing's current net assets**
- **It is safer and more reliable to base REACH allocations on the agency's regular financial performance**

# Recommendations

## 4. Recycle Principal Repayments from any Future REACH Direct Loans

- REACH can potentially be used directly to fund loans as opposed to grants

- This has been an option in the past, for providing 'grants' or 'loans', and many HFAs use such direct loans, generally at 0%, only paid from residual receipts (in the case of MF gap loans) or upon resale of the property
  - Can be useful for gap loans on tax credit properties where debt increases basis
  - Can also be used for larger second mortgages for lower-income homebuyers

- If Virginia Housing were to ever consider using REACH for such direct loans:
  - Repayment of principal does not affect net income, and thus has *no impact on the REACH formula* (either the current REACH formula or the alternatives proposed)
  - But such repayment does provide important resources that can support affordability

- **Repayments of principal of such loans would be recycled into such program (or other REACH direct loan program)**

- The impact will simply be to continue the REACH activity that Virginia Housing previously created

# Recommendations

## 5. Address Future Projected Moody's Risk Assessments, Regardless of the REACH Formula

**While not directly affecting REACH recommendations, it is important for Virginia Housing for all its programs to develop and implement strategies that enable it to:**

- Meet its mission
- While keeping its future expected risk-adjusted net asset parity ratio at or above rating agency standards for Virginia Housing's ratings

**Approaches to doing this can include:**

1. **Shift repurchase agreements to rated counterparties,**
2. **Utilize FHA risk-share insurance** for rental loans for 9% and 4% tax credit projects
3. **Reduce production targets for mixed-use mixed-income rental lending**,
4. **Use guarantees by Fannie Mae/Freddie Mac to reduce risk-exposure on a portion of its new single-family lending**
5. **Provide the rating agencies with detailed historical information on outstanding single-family downpayment assistance second mortgages**, to obtain partial rating agency credit

To the extent these approaches modestly change Virginia Housing's net annual income in future years, that would be reflected under the REACH formula itself,

Thus, helping assure that REACH allocations *remain aligned* with the net income before grants that Virginia Housing earns – e,g. the financial resources generated by all its regular programs

# Purpose of Recommendations

## To Better Link Virginia Housing's Capability to Increase Affordability using REACH with Virginia Housing's Long-Term Sustainability

**This analysis is designed to provide a more consistent, systematic way of assisting REACH activities while maintaining Virginia Housing's long-term financial sustainability**

**The recommendations are intended to provide an ongoing approach that:**

- More clearly links REACH allocations to performance of Virginia Housing's regular activities, and how much they can they can contribute to affordability,
- Does not reduce REACH allocations by the grants made from past REACH allocations,
- Helps stabilize REACH allocations in a more consistent way going forward, without relying on special actions or minimum amounts unrelated to recent agency performance,
- Enables Virginia Housing, if it makes direct loans with REACH, to recycle prepayments to continue REACH activities,
- Enables Virginia Housing to continue to maintain and build its overall net assets, in which it remains an industry leader, and
- Enables Virginia Housing to take into account many years in advance how the agency's production decisions can affect its future financial flexibility overall as well as funding for affordability activities

JLARC
JOINT LEGISLATIVE AUDIT & REVIEW COMMISSION

# APPENDIX

CSG | advisors

# REACH and Other HFA Affordability Funds

| HFA | Virginia Housing | Minnesota Housing | MassHousing | Connecticut HFA |
|---|---|---|---|---|
| Name | REACH | Pool 3 | Mission Fund | Opportunity Fund |
| Relation to HFA's rated corpus | Tracks REACH-related activities within the rated corpus | Outside | Outside | Outside |
| Are monies transferred to it | No | Yes | Yes | Yes |
| Are repayments of loans recycled for future activities | n/a (not used for direct loans) | Yes | Yes | Yes |
| Initial one-time allocation | n/a | n/a | $100 million | n/a |
| Annual allocation formula | 60% of net income of rated corpus | 100% of net income of rated corpus | 50% of net increase in general fund within rated corpus | 50% of net income of rated corpus |
| Do expenditures affect subsequent allocation | Yes<br>Net income after REACH grants | No | No | No |
| Net income method | Modified GAAP (excluding changes in value of securities) | Cash net income | Cash net income | Cash net income |
| Allocation based on | Lagged rolling average of 5 prior years | Immediate prior fiscal year | Immediate prior fiscal year | Immediate prior fiscal year |

# REACH and Other HFA Affordability Funds

| HFA | Virginia Housing | Minnesota Housing | MassHousing | Connecticut HFA |
|---|---|---|---|---|
| Issuer Credit Rating | Aa1 / AA+ | Aa1 / AA+ | Aa3/AA- | Aaa/AAA on indenture |
| Total Adjusted Combined Assets FYE 19 (a) | $ 7.24 billion | $ 3.99 billion | $ 4.93 billion | $ 6.46 billion |
| Bonds Outstanding FYE 19 (b) | $ 3.52 billion | $ 3.07 billion | $ 3.42 billion | $ 4.81 billion |
| Net Assets FYE 19 (c) | $ 3.72 billion | $ 0.92 billion | $ 1.51 billion | $ 1.65 billion |
| Net Asset Parity Ratio FYE 19 (d) | 103.3% | 25.4% | 38.8% | 29.7% |
| Cash and Investments FYE 19 (e) | $1.51 billion | $ 0.52 billion | $ 2.12 billion | $ 2.26 billion |
| Total Adjusted Net Operating Revenue FYE 19 (f) | $ 151 million | $ 38 million | $ 57 million | $ 27 million |

a) Moody's, "State Housing Finance Agencies Medians", Sept. 30, 2020
b) Ibid.
c) Ibid., interpolated
d) Ibid., interpolated
e) Ibid., interpolated
f) Ibid.

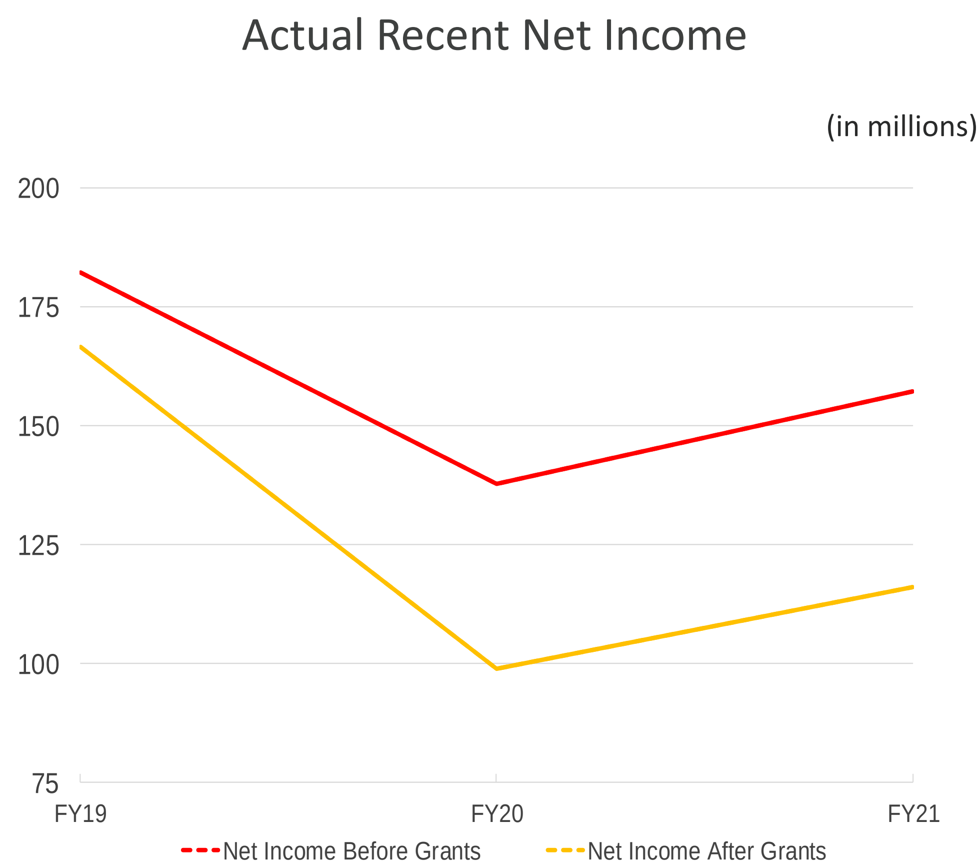
# What Drives Virginia Housing's Net Income

## FY 21 Net income Rebounded from FY 20

- Before making future projections, we reviewed key factors that have affected Virginia Housing's net income in recent years:

  - Drop in FY 20 primarily due to one-time $40 mill. loss reserve provision during pandemic

- Since REACH grants are an important factor in income and the current REACH formula, ***we have analyzed net income both before and after grants***



# What Drives Virginia Housing's Net Income

## Key Factors in Net Income

| | FY 2021 |
|---|---|
| **Revenue Sources:** | |
| Net interest income (excluding servicing) (1) | 179 million |
| Servicing fee income | 33 million |
| Gain/loss on single-family mortgage loan sales | 48 million |
| Ancillary fees (2) | 27 million (3) |
| **Total Revenue:** | **288 million** |
| | |
| **Major Expenses excluding REACH Grants:** | |
| Programmatic Expenses (4) | 46 million |
| Administrative Expenses (5) | 85 million |
| **Total excluding REACH Grants:** | **130 million** |
| | |
| **Net Income:** | |
| **Excluding REACH** | **158 million** |
| **REACH grants** | **41 million** |
| **After REACH Grants** | **117 million** |

Notes:

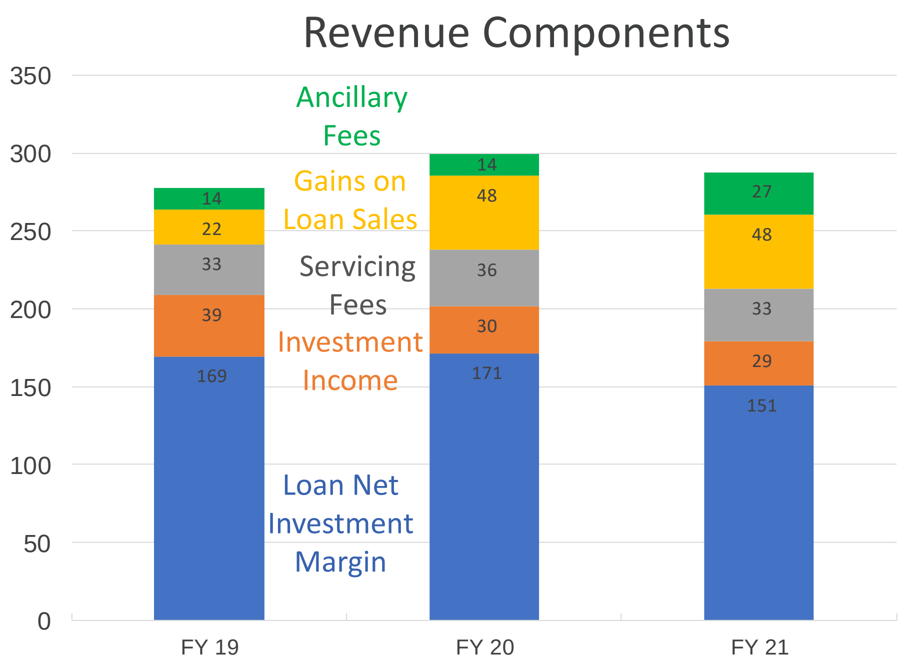
1. Income from loans and investments less interest expense on debt
2. Ancillary fees include tax credit, compliance and loan origination fees;
3. FY 21 figure includes one-time amounts; Virginia Housing projects $11 million in FY 22
4. Includes loss reserve; programs & partners, mortgage servicing & pooling; depreciation
5. Includes staffing, facilities & equipment, projects & technology., professional development/travel, services/insurance

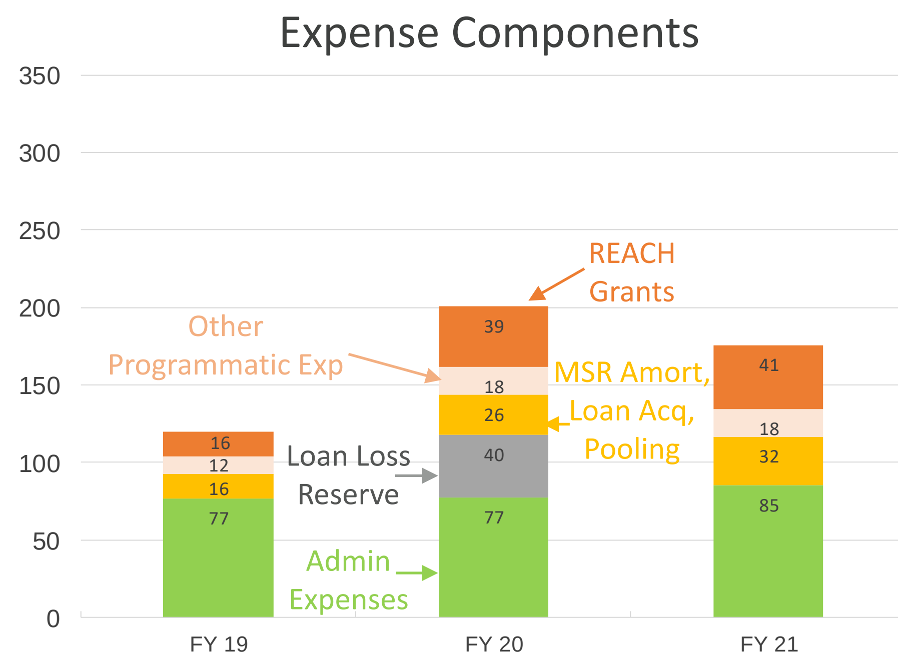
# What Drives Virginia Housing's Net Income

## Revenue and Expense Components, FY 19 to 21

**Biggest Changes from FY 19 to FY 21:**

- Loan Loss Reserve Expense (added to in FY 20)
- REACH Grants



# Range of Scenarios

**Annual Production, Interest Rate and Administrative Cost Assumptions** ($ in millions)

| | Recent: | Moderate Growth | Low Growth | No Growth / Recession |
|---|---|---|---|---|
| **Single Family Production:** | FY 2021 | FY 2022 and after | | |
| MBS Sales | *$1,780 m.* | $1,580 m. | $1,580 m. | $1,185 m. |
| Conventional Whole Loan Pass-Thru Bonds | - | $380 m. | $380 m. | $285 m. |
| Second Mortgage DPA Loans | *approx $40 m.* | $40 m. | $40 m. | $30 m. |
| Annual Production Growth Rates | | incr. 4% per yr | incr. 0.5% per yr | decreasing by 10% in FY23 and FY24 |
| Prepayment Speed Assumptions | *varies by rate* | 175% PSA | 225% PSA | 300% PSA |
| **Multifamily Production:** | | | | |
| *($ Amount of Bonds Issued)* | | | | |
| Tax-Exempt 4% LIHTC | *$194.9 m.* | $200 m. | $200 m. | $200 m. |
| Taxable 9% LIHTC | *approx $100 m.* | $100 m. | $100 m. | $100 m. |
| Mixed Use / Mixed Income Properties | *approx $588 m.* | $500 m. | $500 m. | $500 m. |
| Annual Production Growth Rates | | incr. 4% per yr | incr. 0.5% per yr | decreasing by 10% in FY23 and FY24 |
| Prepayment Speed Assumptions | *varies* | None until lockout date. 50% PSA once past lockout/balloon date | | |
| **Interest Rate Assumptions:** | | | | |
| LIBOR/equiv index proj. rate by Jan '24 | *0.03 - 0.04%* | 1.50% | 0.75% | 0.25% |
| Effective Cash/ST Reinvest Rate, Jan '24 | *0.01 - 0.12%* | 1.125% | 0.56% | 0.23% |
| **Oper & Admin Exp Assumptions:** | | | | |
| Annual increase in FY 22 | *10% increase in FY21 actual* | 11% | 11% | 11% |
| FY 23 | | 6% | 6% | 6% |
| FY 24 on: General | | 6% | 5% | 3% |
| FY 24 on: Project & Technology | | 6% | 2% | 0% |

** VA Housing budgeted amount for FY 2022*

# Additional Assumptions for Projections

| | Forecast Assumptions |
|---|---|
| **Interest and Investments** | - Excludes any potential mark to market / fair market value adjustments on MBS & investments |
| **Interest Income** | - Based on changes in future loan balances resulting from new production assumptions |
| **Investment Income (Loss)** | - Based on historic mix of longer-term, higher yielding investments vs short-term investments, all based on interest rate assumptions for each scenario |
| **Net GNMA/FNMA Servicing Fee** | - Based on changes in loan balances resulting from new production assumptions |
| **Interest Expense on Bonds & Notes** | - Based on changes in future loan balances resulting from new production assumptions |
| **G/L on SF Mtg Loan Sales** | - Assumed same margins as FY22. Amount ($) of gains based on new production assumptions |
| **Ancillary Fees** | - Assumed that MF tax credit monitoring fees (waived in FY22) return in FY23 and |
| **Grants** | - Assumed that grants make up 67% of the annual REACH contribution amount |

# Additional Assumptions for Projections

| | |
|---|---|
| <u>**Programmatic Expenses**</u> | |
| **Loan Loss Provision & Expenses** | <u>Moderate Growth and Low Growth Scenarios</u>: assumed loan loss provision returns to pre-COVID levels as a % of loan balances.<br><u>No Growth / Recession Scenario</u>: Assumed increasing loan loss provision %s due to worsening economic environment. |
| **Financing (Cost of Issuance)** | - Based on amount of bonds issued in each scenario (see New Production assumptions). |
| **MSR Amort, Loan Acq & Pooling** | - Based on new single family production assumptions, as well as outstanding balance of SF loan portfolio (speed of future prepayments; see prepayment assumptions). |
| **Programs & Partners** | - Assumed similar annual growth rates as in recent actual years; somewhat lower growth rate in Low and No Growth scenarios |
| **Depreciation** | - Assumed similar annual growth rates as in recent actual years; somewhat lower growth rate in Low and No Growth scenarios |
| <u>**Administrative Expenses**</u><br>**(Staffing Costs, Facilities & Equip, Projects & Technology, Prof Dev & Bus Travel, Services, Ins, Other)** | <u>Moderate Growth Scenario</u>: 6% annual growth rate. <u>Low Growth Scenario:</u> reduced to 5% annual growth rate starting in FY24 (only 2% for Projects&Tech).<br><u>No Growth / Recession Scenario</u>: reduced to 3% annual growth rate starting in FY24 (0% growth for Projects&Tech). |