Better Buildings Residential Network Financing & Revenue Peer Exchange Call Series: *Using Loan Performance Data to Inform Program Implementation*

May 22, 2014

Call Slides and Discussion Summary

Agenda

- **Call Logistics and Introductions**
- **Residential Network and Peer Exchange Call Overview**
- **Featured Speakers**
  - Mary Templeton, Executive Director of Michigan Saves *(BBRN Member)*
  - Elise Reuschenberg Lambert, Deputy Director of Housing and Building Energy Programs at Maryland Department of Housing and Community Development *(BBRN Member)*
  - Peter Thompson, Principal Research Associate - Energy Efficiency Finance at Lawrence Berkeley National Lab
- **Discussion**
  - How are others tracking and analyzing loan performance data and what does that data show?
  - What is the relationship between loan performance and completed energy efficiency measures (e.g., program performance)?
  - How are home affordability, loan default rates, and decreasing energy costs related?
  - Other questions/issues related to loan performance?
- **Future Call Topics Poll**

Call Participants

- Cadmus Group
- City of Greensboro, NC (BetterBuildings Greensboro)
- Clean Energy Finance and Investment Authority (CEFIA)
- Craft3
- Elevate Energy (Energy Impact Illinois)
- The Energy Coalition
- EnergySmart (Boulder, CO)
- Empower Efficiency
- Harcourt Brown and Carey

- Lawrence Berkeley National Lab
- Michigan Saves
- Maryland Department of Housing and Urban Development (Be SMART Maryland)
- Southeast Energy Efficiency Alliance (SEEA)

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Better Buildings Residential Network

- **Better Buildings Residential Network**: Connects energy efficiency programs and partners to share best practices to increase the number of American homes that are energy efficient.

  - Membership: Open to organizations committed to accelerating the pace of existing residential upgrades. Commit to providing DOE with annual number of residential upgrades, and information about benefits associated with them.

  - Benefits:
    - Peer Exchange Calls
    - Tools, templates, & resources
    - Newsletter updates on trends
    - Recognition: Media, materials
    - Optional benchmarking
    - Residential Solution Center

For more information & to join, email bbresidentialnetwork@ee.doe.gov.

- **Better Buildings Residential Network Group on Home Energy Pros**
  Join to access:
  - Peer exchange call summaries and calendar
  - Discussion threads with energy efficiency programs and partners
  - Resources and documents for energy efficiency programs and partners

  http://homeenergypros.lbl.gov/group/better-buildings-residential-network

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Better Buildings Residential Network Group on Home Energy Pros Website

Peer Exchange Call Series

- There are currently 6 Peer Exchange call series:

  - Data & Evaluation
  - Financing & Revenue
  - Marketing & Outreach

  - Multifamily/ Low Income Housing
  - Program Sustainability
  - Workforce/ Business Partners

- Calls are held the 2nd and 4th Thursday of every month at 12:30 and 3:00 ET

- Upcoming calls:
  - June 12 ,12:30 – Program Sustainability: Collaborating with Utilities on Residential EE
  - June 12 , 3:00 – Workforce: Engaging Efficiency First Chapters and Other Trade Associations in EE Programs
  - June 26, 12:30 – Multifamily & Low-Income Housing: Cost-Effective Modeling and Savings Projections for Multifamily Projects
  - June 26, 3:00 – Marketing & Outreach: Stakeholder Mapping: Identifying Leaders, Target Audiences, and Gaps in Outreach

- Send call topic ideas or requests to be added to additional call series distribution lists to peerexchange@rossstrategic.com.

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Program Experience: Michigan

Michigan Saves:
Using Loan Performance Data to Inform Program Implementation

May 22, 2014

Mary Templeton

Executive Director

Michigan Saves

Michigan Saves Structure and Role

- Provide loss reserve for lenders

- Oversee authorized contractors

- Drive demand for energy efficiency through outreach and incentives

- Set program guidelines and provide quality control

State and Federal Governments

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Contractors

Lenders

Customers

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www.michigansaves.org

What data do we track?

More importantly, what do we do with the data we track?

Home Energy Loan Program to Date
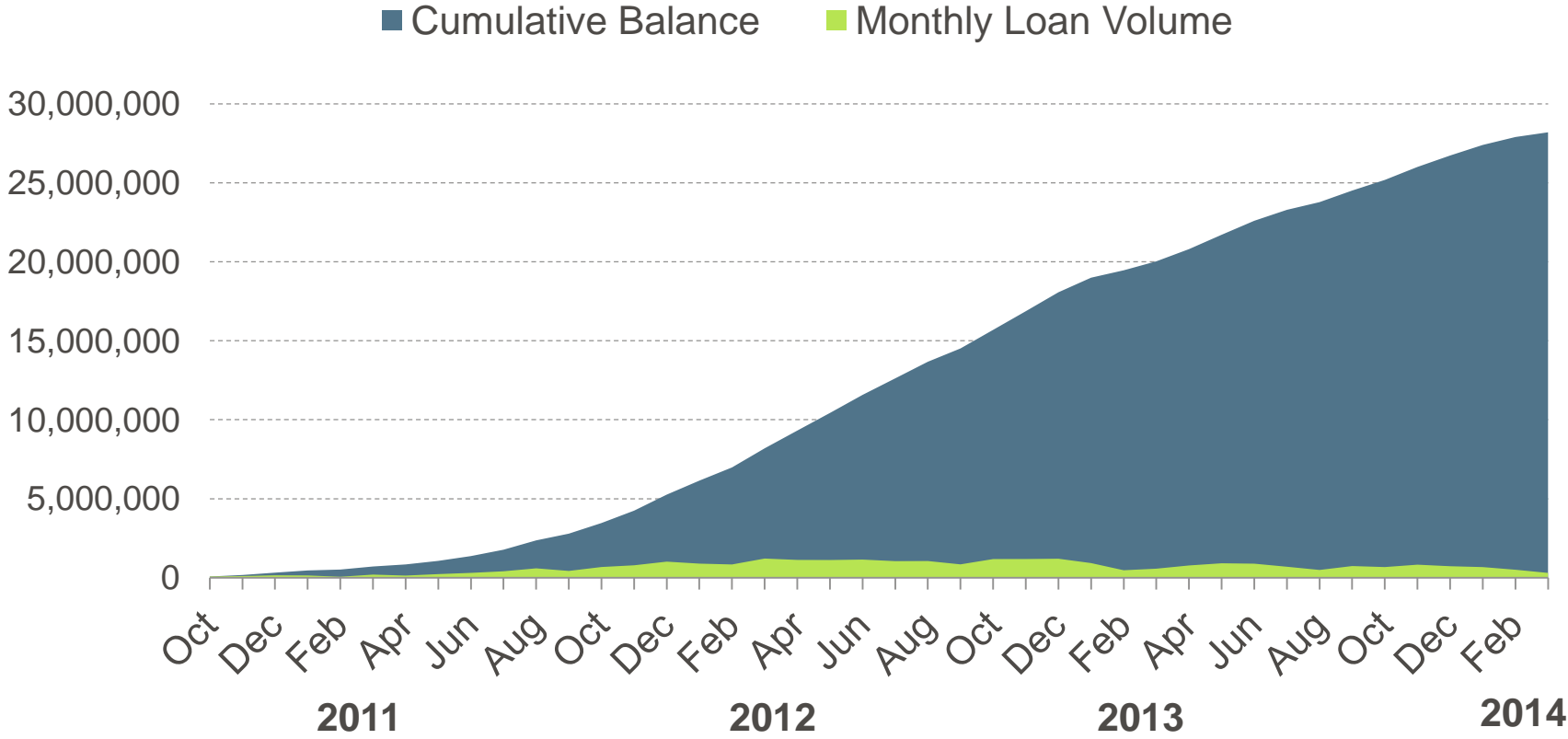
Losses paid: **51 (1.5%) through Feb**

Monitoring to perform better than national average of 3–4%

Monthly Loan Volume

Tracking performance to goals, seasonality, performance of incentives
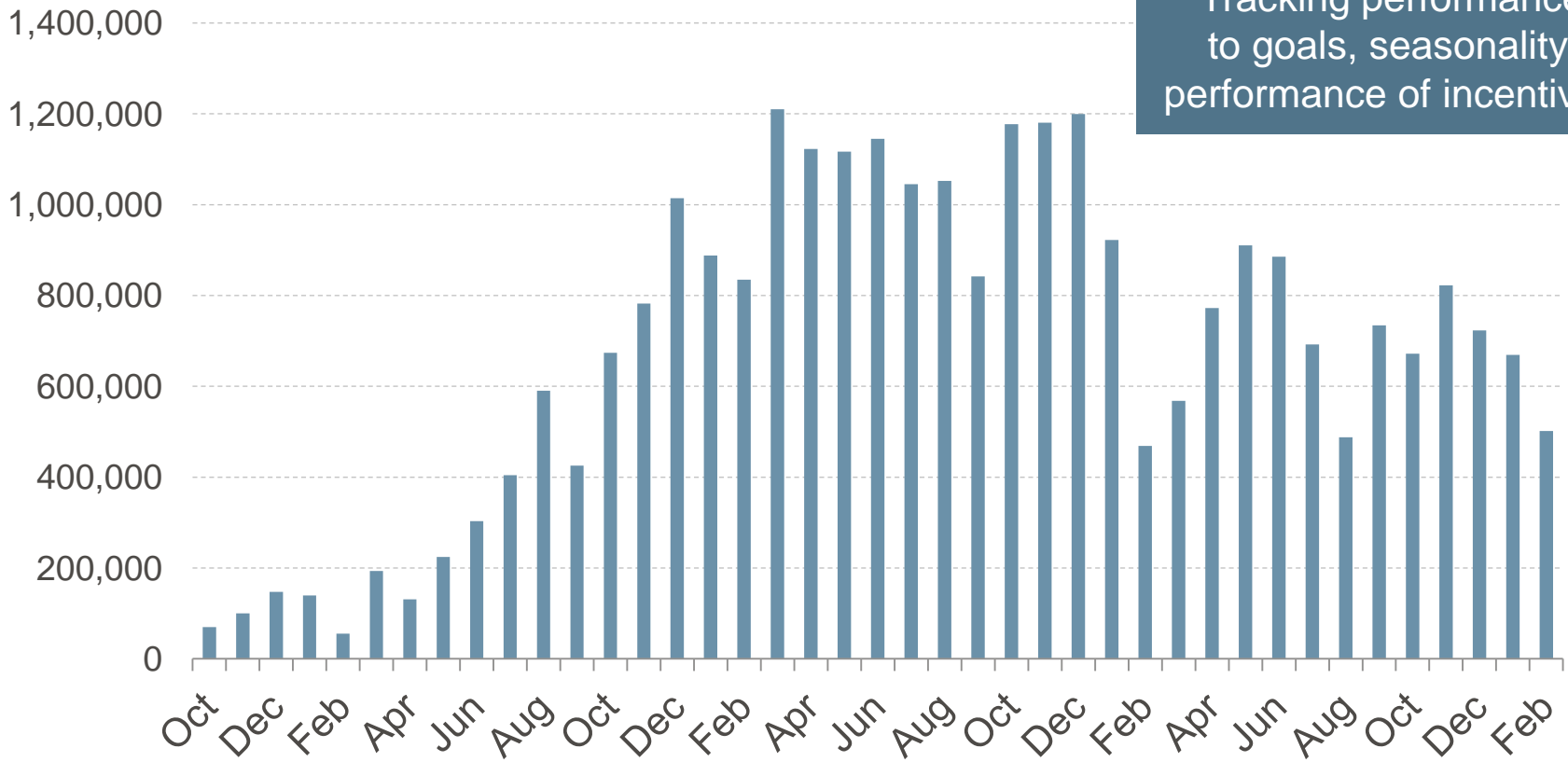
Approval Rates

Decision	Count	% of Total	Avg Income	Avg Credit Score
Approved	3,466	60.04%	$76,036.29	740
Denied	2,286	33.56%	$57,019.80	630
Pending	211	3.32%	$55,411.34	699
Recommend Denied	218	3.08%	$56,632.70	626
Grand Total	6,181	100.00%	$67,615.88	696

Loan Approvals (LSI Report)

Taking a deeper look at the last 6 months:

	Approved	Denied	% Approved
Oct	93	69	57%
Nov	77	58	57%
Dec	59	47	56%
Jan	61	61	50%
Feb	67	35	65%
Mar	76	38	66%

Reduced minimum credit score to 640 to drive more approvals

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HOME ENERGY LOAN PROGRAM

Customer Satisfaction:
Likes

- **Easy, fast process**
- Contractors
- Professionalism
- Customer service
- Home Improvement/new equipment
- Saving money

"It was a really good deal. And we love our new windows— they're a big improvement over what we had before."

— Steve McMullen

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SAVES℠

Customer Satisfaction:
Needs Improvement

- **Lower interest rates**
- More local lenders
- More marketing
- Contractor oversight
- Contractor education

"The difference was immediately noticeable ...

the **temperature is much more even** throughout the house."

— Brian Catlett

Leveraging Customer Feedback

- Build off of satisfied customers

- Utilizing contractor ratings in online database

- Seeking more local lenders in underserved areas

- Talking to current lenders about rates

Jobs that are **financed** …

are **230% larger**

have **29% more** measures

save **37% more** energy

… than cash jobs

Average project size of **financed** jobs:

$10,130

Average project size of **non-financed** jobs:

$4,365

Discussion: Michigan Saves Lessons Learned

- Michigan Saves tracks loan performance data to measure progress with the organization's goals and strategic plan.

- Created AvoidEnergyDrama.com to raise awareness of the benefits of energy efficiency improvements among homeowners.

- The program has sustainable funding through contractor fees (1.99% of the loan value) and interest on existing loans.

- Lenders don't require information on the energy savings that result from loans; only concerned that borrowers issued loans meet credit criteria.

- Contractors are the main driver of demand for the loan program.
    - Contractors can co-brand resources and case studies for customers about the loan program.
    - A contractor search engine allows borrowers to search for contractors by zip code, read customer reviews and see the number of loan-financed projects the contractor has completed.

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Program Experience: Maryland

The Be SMART Home Program:
Financing for Residential Energy Efficiency
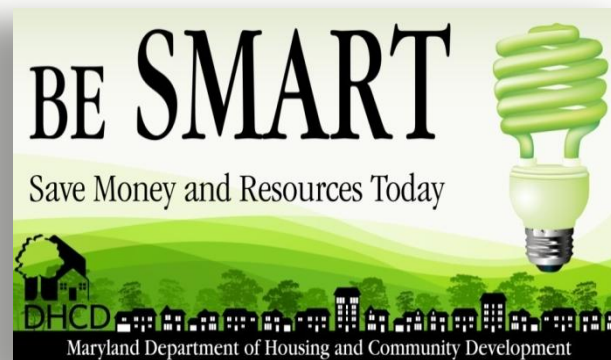
May 22, 2014

MARTIN O'MALLEY, *Governor*
ANTHONY G. BROWN, *Lt. Governor*
RAYMOND A. SKINNER, *Secretary*
CLARENCE J. SNUGGS, *Deputy Secretary*

DHCD and Energy Efficiency

Background:

- DHCD is Maryland's Housing Finance Agency for affordable housing;

- Energy efficiency is key to housing affordability;

- DHCD's energy efficiency programs: Better Buildings program, ratepayer low income weatherization, DOE weatherization, other utility programs, RGGI.

- Be SMART Program components include residential lending, commercial lending and multifamily lending, as well as rebates and subgrants to community based organizations and subgrants for public school and agriculture sector energy efficiency improvements.

Be SMART Home Loan

Be SMART Home Loan

- Rate Structure: 6.99%/4.99%   →   4.99% (Post-grant period)
- A resource, not the only resource. (HELOC or contractor financing are also utilized by our customer base.)
- Terms: 3 yr., 5 yr., or 10 yr.
- 66% loan approval rate;
- Roughly $1,000,000 loaned to date;
- Two loans repaid in full (before term);
- 66% loan approval rate.

Be SMART Home Loan Product

Be SMART Home Loan

- Portfolio management:
Be SMART Program Staff → DHCD Asset Management Team → Servicer

- Delinquency Rate – 14%
- Customer Demographics:
    - Avg. Credit Score: 710
    - Avg. DTI: 36%
    - Avg. Loan Amount: $13,000 (range of $3000 to $28,000)
    - Avg. Term: 117 months (most opt for 10 yr. term)
    - Avg. Monthly Payment: $146
    - Energy Savings – 23% (3% to >50%)

Be SMART Pilot Initiative – Energy Efficiency for REOs

- Theory: REO properties will return to the market more quickly *and* provide improved affordability for buyers if we improve their energy efficiency and market them to potential buyers/realtors as energy efficient properties.

- 52 properties received comprehensive energy audits; 42 received upgrades.

- Avg. of $10,000 invested per home on weatherization measures, heating systems and appliances based on audit; required minimum energy savings of 15% and minimum Savings to Investment Ratio of 1:1.1.

- Days on the market compared with non-pilot REOs – significantly less. (40 days avg. versus 188 days most recently, not accounting for other factors).


One challenge of the pilot…
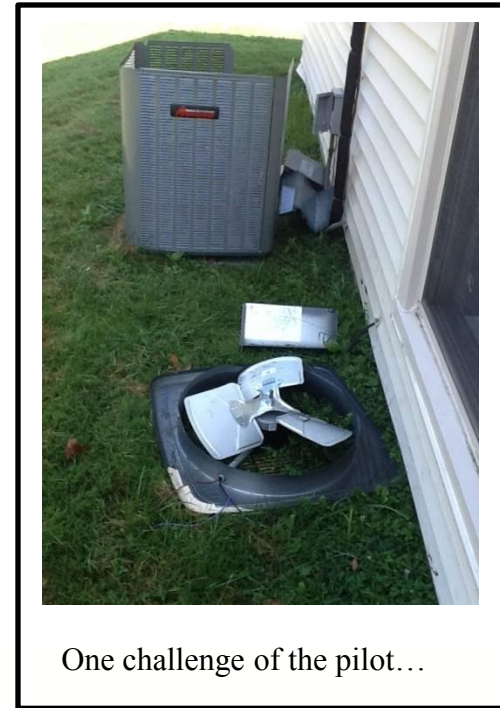
Be SMART Pilot Initiative – Energy Efficiency for REOs

Efficient REO Initiative - Installed Measures		
Types of Improvements	**# of Retrofits**	**%**
Furnace Upgrade	6	14%
Boiler Upgrade	3	7%
Heat Pump Upgrade	15	36%
Ventilation System Upgrade	1	2%
Water Heater Upgrade	7	17%
Attic Insulation	37	88%
Duct Insulation	1	2%
Wall Insulation	23	55%
Floor Insulation	3	7%
Air Sealing	35	83%
Duct Sealing	16	38%
Refrigerator Upgrade	25	60%

Projected Cost and Energy Savings for Be SMART Efficient REO Properties

Legend:
- ◆ Expected Annual Savings for Installed Measures (kWh)
- ▲ Estimated Annual Cost Savings ($)
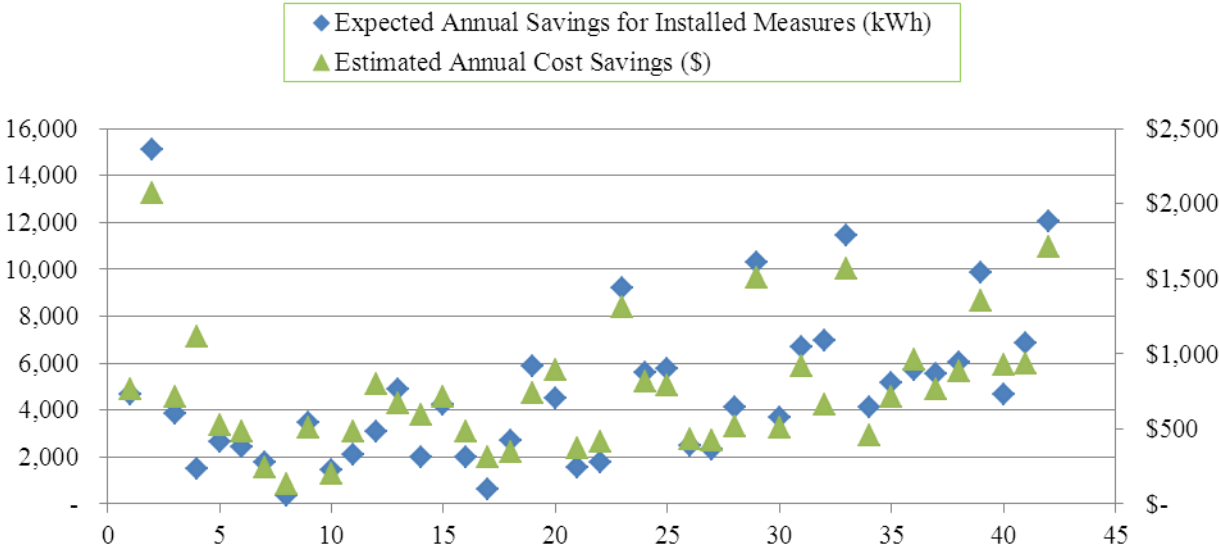
Discussion: Maryland Lessons Learned

- Maryland Department of Urban Development is a housing finance agency for the state of Maryland.

- Customer service is the strength of the Be SMART Maryland energy efficiency loan program.

  - A small loan portfolio allows the team to develop a relationship with each borrower.

  - The team works with delinquent borrowers to avoid default; no defaults to date as a result.

- Initiated a real estate pilot project in real estate owned (REO) homes.

  - DOE funded $10,000 in improvements in each home.

  - The agent remarks included a list of the EE upgrades, they were advertised in a banner on the listing image, and potential buyers received a certificate and a summary of the energy audit.

  - Average listing time was only 40 days for EE homes compared to a 188 day average for non-EE homes; a more direct comparison of similar listings is not yet available.

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Key Findings: Lawrence Berkeley National Lab (LBNL)

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Energy Efficiency Finance Programs:
Use case analysis to define data needs and guidelines

Peter Thompson
Peter Larsen, Chris Kramer, Charles Goldman
Lawrence Berkeley National Laboratory

May 22, 2014

Report Motivation, Objectives and Approach

- **Motivation**
  - More than 200 EE loan programs; significant variation in program design and implementation practices
  - Need for more consistent data collection?
- **Objective:**
  - A foundational step towards establishment of common data collection practices across EE finance programs
- **Approach:**
  - Summarize current data collection and reporting practices utilized in several large existing EE financing programs
  - Worked with SEE Action Financing Solutions Working Group to develop approach & identify key stakeholders for interview
  - Held discussions with 15 stakeholders to identify high priority data needs, characterize potential uses for finance program data, which informed use cases

Report Overview: Use Cases

Based on feedback from stakeholders, activities have been summarized into six broad use cases

Program / Loan Lifetime

1. Program Design

2. Underwriting

3. Loan Book and Cash Flow Management

4. Refinance of Loan

5. Securitization

6. Program Evaluation
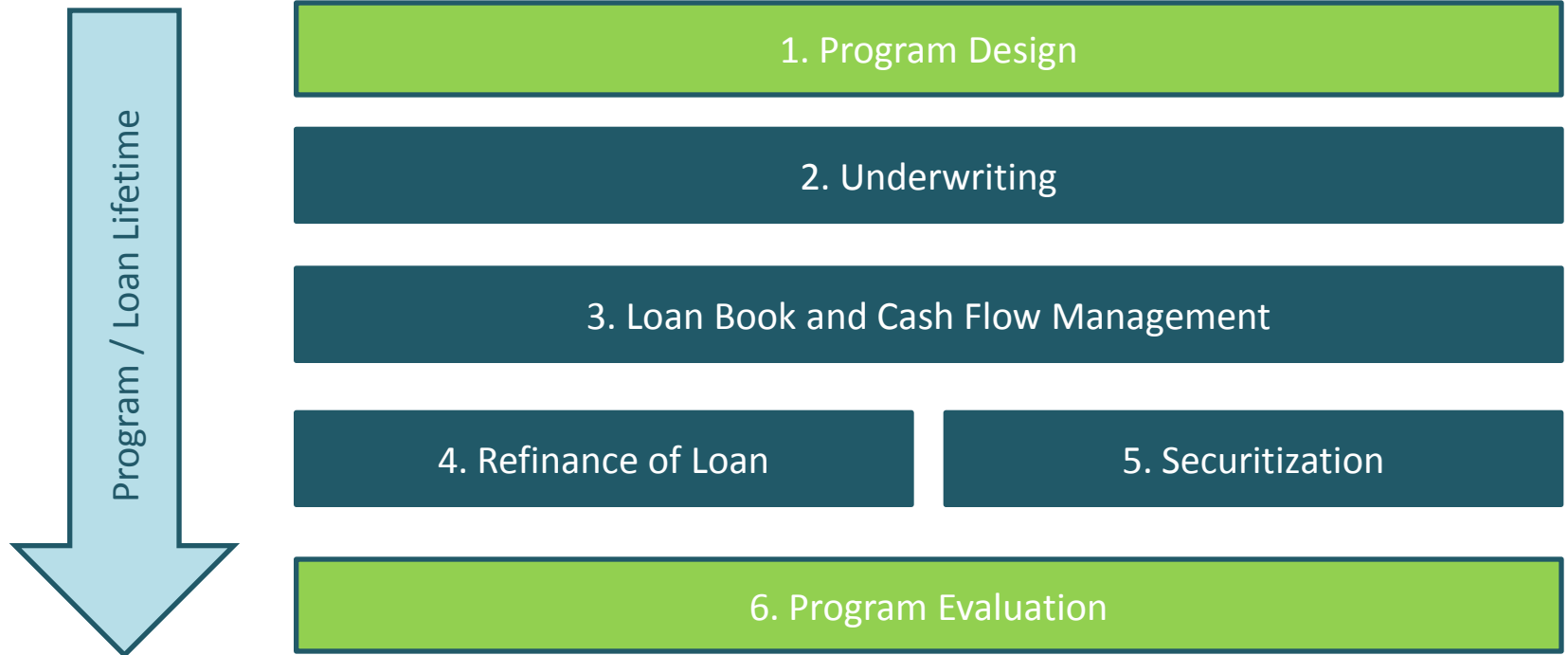
Stakeholder Roles in Use Cases

Actor	Use Case					
	1 Program Design	**2** Underwriting	**3** Loan+Cash Management	**4** Loan Refinance	**5** Securitization	**6** Program Evaluation
Program Administrators	↑	↗	→		→	↗
Policymakers/ Evaluator	↗					↑
Primary Lender	↗	↑	↑	↗	↗	↗
Secondary Lender		↗	↑			
Rating Agency					↑	
Bond Investor					↑	

Each use case contains:
- A summary of the activity
- A description of the goals and action of the participating stakeholders
- A summary of the data needed for those goals and actions

Actors	
Primary Actor	↑
Secondary Actor	↗
Limited Actor	→

EE Finance Program Data: Issues and Challenges

- Concerns about data security and privacy

- Lack of data comparability and aggregation

- Inconsistent data needs and quality across stakeholders

- Issues around the perceived value of data to justify alternative lending criteria and need for credit enhancements

Lessons Learned: Growing loan programs and impact through data

- Use loan data to compare actual performance to program goals, track seasonal variation and evaluate the success of incentive programs.

  - Key performance measures: monthly loan volume, cumulative balance, delinquency rate, number of defaults.

- Data on approval rates and average credit scores can inform decision-making on growth and lowering requirements for qualification.

  - Key performance measures: demographics of borrowers (i.e., percent savings per month, debt to income ratio).

- Drive demand by tracking customer satisfaction.

  - Key performance measures: customer service, contractor ratings, energy savings, customer referrals and recommendations.

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Lessons Learned: Loan performance data and contractors

- Data tracking can strengthen contractor relationships.

  - Contractors drive demand to the loan program and contractor fees can provide EE program funding.

- Michigan Saves collected customer feedback data to provide review scores and quality ratings in the program's contractor search engine.

  - The system rewarded contractors who were good partners and set a high performance standard.

- Program data can help inform contractors on the value of financing to their business (i.e., size of financed projects vs. cash projects).

  - Financing for energy efficiency improvements often increases the depth and scope of the work.

  - Both Maryland and Michigan Saves observed approximately 25% more energy savings for financed projects compared to those without loans.

- Contractors want to see better marketing of loan programs.

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Discussion Questions

- How are others tracking and analyzing loan performance data and what does that data show?

- What is the relationship between loan performance and completed energy efficiency measures (e.g., program performance)?

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Discussion: Tracking loan performance effectively

- Tricky metrics:

    - <u>Early loan pay-offs</u>: difficult to analyze why loans are paid off early. The borrower may have obtained a loan for a project they could have paid for in cash, or the loan was paid to move it to a another property.

    - <u>Project size and financing</u>**:** the relationship isn't causal, but it doesn't exist independently—larger projects are more likely to require loan financing and they result in greater energy savings.

- Energy efficiency programs vary widely in program design and the metrics tracked.

- Contractors have trouble keeping track of the different metrics across loan programs, and lenders can't fund a loan if the metrics aren't recorded properly.

- Overall, minimize the number of data fields; fewer metrics result in better data quality.

- <u>Resource</u>: Efficiency.org compiles aggregated energy and loan performance data at http://www.eeperformance.org/open-data.html

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Future Call Topics Poll

- Which of the following topics, if any, are of interest for future Financing calls? *(Pick all that apply)*
  - Effective loan program design and integration with contractors—**88%**
  - Packaged loan sales—**63%**
  - Expanding PACE to commercial, industrial, and multifamily sectors—**50%**
  - Strategies to improve project approval and payment timelines—**38%**
  - Crowd funding: enabling small investors to help fund loans for upgrades—**25%**

If you would like to share your experiences on a call or have other ideas for a call topic, contact peerexchange@rossstrategic.com