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The Impact of Consumer Credit Counseling on Distressed Mortgage Loan Losses

A White Paper Prepared by The STRATMOR Group

Synopsis: This White Paper analyzes the economic benefits for investors and servicers of providing distressed mortgage borrowers with credit counseling. To the extent that counseling enables borrowers to remain in their homes and avoid foreclosure, short sales or deed-in-lieu transfers of their home to the lender, lenders avoid substantial losses on their loans.

For borrowers receiving basic counseling, the losses avoided are estimated at \$3,894 per borrower (or 185 bps for a \$210,000 average loan balance). This benefit increases to \$5,754 to \$7,147 (274 bps to 340 bps) if borrowers receive “holistic” counseling that addresses not only mortgage debt but also credit card debt and modifications to personal spending patterns. Applied to a portfolio of 10,000 borrowers who receive counseling, the \$7,147 scalable benefit would translate into \$71.47 million in losses avoided.

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Contents

1.	Executive Summary	3
2.	Introduction	3
3.	What the Empirical Data Tells Us	7
3.1.	Introduction	7
3.2.	The National Foreclosure Mitigation Counseling Program Evaluation Study (Urban Institute)	8
4.	The Economic Benefit of Distressed Mortgage Counseling	13
4.1.	Conceptual Framework.....	13
4.2.	Economic Benefit Analysis – Base Case	14
4.3.	Sensitivity Analysis.....	16
4.4.	Supporting Analyses	18
5.	References	22

1. Executive Summary

Based on the best of recent research investigating the impact of providing counseling to distressed mortgage borrowers, this White Paper analyzes the incremental economic benefits, as measured by foreclosure, deed-in-lieu and short sale losses avoided, accruing to investors and servicers per counseled borrower versus non-counseled borrowers, without regard to the costs of counseling. Additional benefits from loss avoidance, including expected improved cash flows and portfolio value, liquidity, operational and legal cost savings, etc. are not considered.

For borrowers receiving basic credit counseling, our analysis projects an average benefit per borrower of \$3,894 (or 185 bps assuming an approximate current loan balance of \$210,000), without regard to whether or not the counseled obtained a loan modification. For counseled borrowers who obtain a modification, the incremental benefit increases to \$17,948 (855 bps).

When borrowers receive “holistic” counseling --- counseling that not only addresses mortgage monthly payment but also credit card payment as well as modifications that result in lower personal spending patterns --- the average benefit per borrower increases to \$5,754 to \$7,147 (274 bps to 340 bps) as a result of additional monthly cash flow made available to meet mortgage obligations. This freed up cash, as a result of the borrower debt payment/personal spending restructuring, and estimated at an additional \$300 per month, sharply lowers the redefault rate of borrowers who initially cure their loan through a loan modification.

2. Introduction

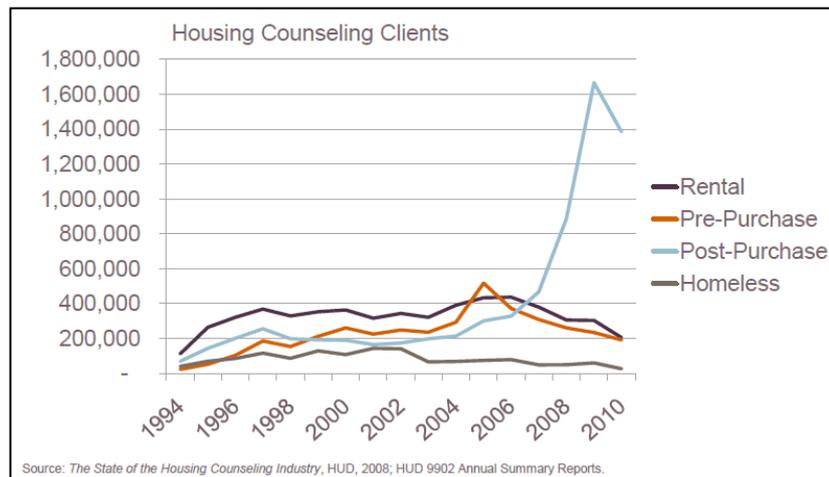
This White Paper (the “Paper”) analyzes the impact of “holistic” consumer credit counseling, which results in overall borrower reduced debt and spending, on the losses sustained by mortgage servicers and lenders/investors with regard to “distressed” mortgage loans --- loans that are delinquent, in default or in the process of foreclosure. The Paper has been sponsored by Outreach Financial Services (“OFS”), a “component” servicing company based in Jacksonville, FL that specializes in servicing “distressed” mortgages and, through its affiliation with the National Foundation for Credit Counseling (“NFCC”), providing credit counseling, loan modification and other loan mitigation services to other servicers.

The “meltdown” of the mortgage industry and the resulting tsunami of defaults and foreclosures has seen consumer counseling emerge as a major strategy both for “loss mitigation” and helping affected borrowers remain in their homes. Figure 1 below

The Impact of Consumer Credit Counseling on Distressed Mortgage Loan Losses

illustrates the tremendous increase in post-purchase counseling beginning with the onset of the mortgage default crisis in 2007.

Figure 1
Volume of Housing Counseling Clients by Housing Status



Both servicers and lenders/investors increasingly perceive foreclosure as a costly path to go down relative to loan modifications, short-sales, deed-in-lieu property transfers and other mechanisms that avoid foreclosure. In particular, when home prices are declining rapidly and inventories of “homes-for-sale” are growing, the foreclosure losses sustained by servicers and lenders/investors can be very large.

While home prices during 2010 seemed to have stabilized, 2011 has witnessed a renewed decline coupled with increasing pessimism about the near-term future given both domestic and international economic conditions. Indeed, many economists predict that things will get worse. Moreover, the recent widespread foreclosure processing fiascos have placed servicers and lenders in a very harsh light --- with many lawsuits either in process or on the horizon ---- and increased the pressure both to treat borrowers more fairly and intensify efforts to avoid the typically heart wrenching consequences of foreclosure. In this environment, therefore, consumer counseling is seen as a strategy for both keeping borrowers in their homes and mitigating financial losses. Nonetheless, structural barriers exist that pose disincentives for servicers to engage in loss mitigation activities. In particular, while servicers are often reimbursed by investors for missed payments and actions taken in pursuit of a foreclosure, they have not typically been reimbursed for costs associated with loss mitigation activities. In many instances, therefore, servicers actually have an economic disincentive to prevent a mortgage investor loss from foreclosure, short-sale or a deed-in-lieu transfer of the property.

Most competitors in the “distressed servicing” space of the mortgage industry either sub-service distressed loans serviced by other lenders or service loans owned by investors that have acquired portfolios of distressed loans, e.g., equity funds, hedge funds, etc. Typically, such competitors engage in a range of loss mitigation activities --- including loan modifications --- that seek to avoid foreclosure when it is economically beneficial to do so. In most cases, these competitors focus on mortgage debt and not on other financial obligations that a distressed borrower may have. Nor do such servicers typically concern themselves with counseling borrowers on behaviour and actions they can take that can help them avoid future financial difficulties.

By contrast, OFS’ distressed servicing operations are built around an approach whereby every new borrower gained for servicing will be immediately referred, under an exclusive affiliation to NFCC, the nation’s leading non-profit provider of consumer credit and debt counseling and financial literacy. At NFCC, referred borrowers will receive independent and impartial credit and debt counseling and assistance in the development and implementation of both a budget and action plan.

NFCC works on behalf of distressed borrowers to: (a) gain mortgage payment reduction through loan modifications; (b) reduce other debt payments, specifically credit card payments, through existing debt repayment plans with most card issuers that lower monthly payments; and (c) achieve lifestyle spending reductions. In combination, these reductions allow for borrowers to meet all of their monthly debt obligations while resulting in improvement stability and repayment capability.

One of the major challenges faced today by mortgage investors and servicers is the inability to contact distressed (past due) borrowers who do not want to talk to their lenders. These borrowers apparently prefer to wait out the lengthy foreclosure process while skipping their mortgage payments entirely, thereby realizing a year or two of free rent when, in fact, they could afford to make their scheduled or modified mortgage payment (“strategic defaulters”); or, they have given up trying to deal with their own personal crisis and are resisting all extensions of assistance from their mortgage owners or servicers.

Implicitly, borrowers engaging in such defaults apparently despair the possibility that credit counseling will enable them to stay in their homes on an affordable basis and those that refuse efforts of help are overwhelmed by and/or frustrated with their relationship with their servicer. Feedback and observations from NFCC, which served 3.1 million consumers and provided 475,000 foreclosure prevention counseling sessions in 2010, supports this conclusion.

NFCC counseling specifically includes the following steps:

- Accredited counselors provide in-person sessions and single point of contact

The Impact of Consumer Credit Counseling on Distressed Mortgage Loan Losses

- A diagnosis of a consumer's payment problems --- getting to the root cause of the problems and providing education to improve the likelihood of influencing behaviour change
- Securing of updated borrower status and financial information
- A review of income and expenditures resulting in the creation of a budget
- Prioritization of all debt
- Maximizing potential income by considering eligibility for public income assistance programs or utilization of other available services
- Developing repayment strategies, including mortgage modification or, if possible, sale of the home
- Establishing a "trust" relationship with the consumer
- Helping the consumer qualify for a mortgage modification through reduced overall consumer debt and lifestyle spending
- The creation and adherence to Action Plans and budgets to gain financial stability

By means of such "holistic" counseling and other related strategies, OFS hopes to dramatically increase the percentage of distressed borrowers that can avoid losing their home --- in effect, avoid foreclosure, short-sale or deed-in-lieu transactions --- by increasing their ability to meet mortgage obligations through a combination of loan modifications, modifications in other debt obligations, e.g., credit card debt, and modifications in spending behaviour that frees-up cash for mortgage and other debt payments.

While the subjective arguments in favor of credit counseling are appealing, OFS has recognized that it must be able to make a compelling case to both servicers and investors that leveraging NFCC's "holistic" credit counseling into their servicing platform will produce substantial incremental economic benefits over the more typical approaches to servicing distressed mortgages. It is with this thought in mind that OFS asked STRATMOR to conduct an independent and objective economic analysis of their approach.

STRATMOR is one of the mortgage industry's leading consulting firms. Its reputation is built upon providing clients with totally objective analysis driven by a combination of hard data and, where hard data is not available, educated guesses based on broad industry experience. This White Paper, therefore, has been prepared by STRATMOR for OFS under ground rules guaranteeing STRATMOR complete objectivity and the right to "call it as it sees it." Nonetheless, readers should be aware of the fact that STRATMOR has other consulting relationships with OFS. These relationships have not, however, influenced STRATMOR's objectivity in any way.

3. What the Empirical Data Tells Us

3.1. Introduction

In theory, credit counseling should reduce the number of distressed borrowers that lose their homes in two ways:

- First, we would expect that counseled borrowers would be more likely and willing to successfully “cure” their loan or enter into a loan modification agreement. To the extent that counseling results in: (a) reductions in credit card and other debt payments; (b) increased income from enrollment in income assistance programs; and (c) additional “freed-up” cash flow as a result of modifications in spending behavior, some borrowers may be able to get “current” with their mortgage. Where modification of loan terms appears necessary, counselors can analyze a borrower’s financial status and assess whether or not they are likely to qualify for various modification programs and assist them through the application and approval process.
- Second, we would expect that borrowers who undergo credit counseling should be less likely to re-default on a loan modification. As we discuss below, the reduction in monthly mortgage payments achieved by borrowers who are counseled before loan modification is substantially higher than for those who don’t. Coupled with reductions in other debt payments and improvements in personal financial management, counseled borrowers simply have more financial “staying power” to meet their mortgage obligations than un-counseled borrowers.

But how large are these anticipated effects?

Surprisingly, despite the sharp expansion of credit counseling to distressed borrowers since 2007, there has been relatively little research devoted to mortgage delinquency and default counseling. Since 2000, in fact, most research has been focused on the effects of prepurchase counseling and reflected what was, at the time, a national priority to increase homeownership among minority and lower income households.

More recently, the focus of research has understandably shifted to research on default counseling. Of all the research, one study stands out as most credible and relevant to this White Paper. In this study, which was sponsored by NeighborWorks® America, Mayer, Tatian, Temkin and Calhoun (2010)¹ of the Urban Institute published an updated preliminary

¹ National Foreclosure Mitigation Counseling Program Evaluation, Preliminary Analysis of Program Effects Update, The Urban Institute, Mayer N., Tatian P.A., Temkin K., Calhoun, C.A., September 2010

evaluation --- part of an ongoing evaluation program --- of the National Foreclosure Mitigation Counseling Program (NFMC).

Unfortunately, there are no studies of mortgage counseling that are being conducted using the kind of experimental design used, for example, to evaluate a new drug. In an experimental study design of mortgage counseling, homeowners seeking assistance would be randomly assigned to two groups. The first would receive mortgage counseling services; the second, would not. And, any resulting differences in outcomes over time between the two groups could then be attributed to counseling.

The Urban Institute Study --- as well as other recent statistical studies --- has therefore struggled with statistically separating the effects of default counseling with other factors that can affect outcomes. Included here are: (a) negative selection --- the fact that borrowers who seek or accept counseling tend to be the most distressed borrowers with the least ability to cure their loans; (b) the timing of counseling --- with most studies suggesting that the impact of counseling is greatest on borrowers who receive it when they are 30-60 days delinquent; (c) differences in the content and intensity of various counseling programs; and (d) a host of loan characteristics that may affect outcomes.

Notwithstanding these limitations, the Urban Institute Study is a solid piece of work and the best current analysis of the quantitative effects of mortgage counseling on various outcomes, in particular, avoidance of foreclosure or other related loss events.

3.2. The National Foreclosure Mitigation Counseling Program Evaluation Study (Urban Institute)

This study contained a multivariate statistical analysis based on a sample of roughly 180,000 NFMC and 155,000 non-NFMC loans tracked by LPS Applied Analytics (and had observable borrower characteristics that are similar to NFMC clients) and addressed the following questions about Program performance through December 2009: (a) Did the NFMC program help homeowners cure an existing foreclosure? (b) Did the NFMC program help homeowners receive loan modifications that resulted in lower monthly payments than they would have otherwise received without counseling? And (c) Did the NFMC program help homeowners who cured a serious delinquency or foreclosure to sustain the cure?

Table 1 below summarizes the key results of the Urban Institute's analysis of the NFMC Program. The table separates loan performance data into two classes: (a) loans for which the borrower has received NFMC counseling; and (b), loans for which the borrower has not undergone NFMC counseling (and is assumed not to have received counseling from another source). In this Table, the initial and sustained cure rates (Columns A and B respectively) are contained in the NFMC Evaluation Study whereas the implied re-default rate is a value calculated by STRATMOR. Importantly, the data covers distressed loans from January 1, 2008 through December 31, 2009; thus, both the sustained cure rates and implied default

rates cover loans over an average period of 12 months (and clearly, the implied re-default rates will continue to increase with time).

Table 1
 Percentage of Loans that Received/Sustained a Cure of a Serious Delinquency or Foreclosure by Loan Counseling and Modification Status

		% Loans in Sample	(A) Initial Cure Rate (%)	(B) Sustained Cure Rate (%)	(C) Implied Re-Default Rate
NFMC	Total	100.0%	34.3	17.1	50.1
	Pre-counseling modification	3.8%	28.0	2.2	92.1
	Post-counseling modification	20.9%	73.3	48.4	34.0
	No modification	75.3%	23.7	9.2	61.2
Non-NFMC	Total	100.0%	26.6	12.6	52.6
	Modification	17.7%	50.1	28.1	43.9
	No Modifications	82.3%	21.5	9.3	56.7

Table 1 makes clear that the impact of counseling on the sustained cure rate for borrowers who received a loan modification prior to obtaining counseling is extremely low. These borrowers are primarily those who experienced payment problems with their modified loan. While a respectable percentage (28%) of such borrowers were able to initially cure payment problems with their modified loan, 92.1% of them eventually re-defaulted.

This result strongly suggests that counseling of such borrowers is not cost effective. In Table 2, therefore, we have removed such borrowers --- who can be identified in advance --- from the analysis (3.8% of all NFMC loans). In effect, we are assuming that counseling would be offered only to distressed borrower who did not have a previously modified loan.

Table 2
 Percentage of Loans that Received/Sustained a Cure of a Serious Delinquency or Foreclosure by Loan Counseling and Modification Status (Excluding Loans that Have Been Previously Modified)

		% Loans in Sample	(A) Initial Cure Rate (%)	(B) Sustained Cure Rate (%)	(C) Implied Re-Default Rate (%)
NFMC	Total	100.0%	34.5	17.7	48.61
	Post-counseling modification	21.7%	73.3	48.4	33.97
	No modification	78.3%	23.7	9.2	61.18
Non-NFMC	Total	100.0%	26.6	12.6	52.63
	Modification	17.7%	50.1	28.1	43.91
	No Modifications	82.3%	21.5	9.3	56.74

Key observations based on these results include the following:

The Impact of Consumer Credit Counseling on Distressed Mortgage Loan Losses

- The proportion of borrowers that did not receive a loan modification is not significantly affected by whether or not they receive counseling. Further, both the initial and sustained cure rates for such borrowers also do not appear to depend on whether or not they have received counseling. This suggests that counseling does not and cannot help borrowers who are beyond help (which, according to Tables 1 and 2 accounts for around 80% of all distressed borrowers), i.e., that providing such borrowers with counseling was a waste of time and money. Whether or not holistic counseling of the type provided by NFCC would increase the proportion of counseled borrowers who qualify for loan modification is an open question. To the extent that holistic counseling reduces credit card debt payments and effects positive changes in spending habits, it is logical to assume that such borrowers would be more likely to qualify for a loan modification.
- Although the total impact of counseling on the initial cure rate was relatively low in absolute terms, i.e., 34.5% versus 26.6%, the impact for borrowers who were counseled first and subsequently received a loan modification was much larger, i.e., 73.3% versus 50.1%.
- While there is relatively small difference in the total re-default rates for NMFC and non-NMFC borrowers (i.e., 48.6% versus 52.6% respectively), NMFC borrowers who received a loan modification after receiving counseling have a much lower re-default rate (33.97%) than non-NMFC borrowers (43.91%). This results in a much higher sustained cure rate for such borrowers when compared to non-counseled borrowers who also received a loan modification --- 48.4% versus 28.1% ---- an overall improvement of 72%.
- Operationally, the preceding observations underscore the value of creating an upfront “triage” process that can screen out borrowers at low cost who are unlikely to qualify for a loan modification and therefore should not be offered more intensive and costly counseling.

For modified loans, the re-default rate results in Tables 1 and 2 are not differentiated by the amount of reduction in monthly payments resulting from the modification. In this regard, Tables 3, 4 and 5 below ² illustrate the significance of PITI payment reduction on re-default rates and hence sustainability.

^{2 2} OCC and OTS Mortgage Metrics Report, First Quarter 2011, June 2011

Table 3
 Redefault Rates of Loans Modified in 2008 by Change in Payment
 (60 or More Days Delinquent)

	3 Months After Modification	6 Months After Modification	9 Months After Modification	12 Months After Modification
Decreased by 20% or More	15.8%	26.0%	33.3%	39.5%
Decreased by 10% to Less Than 20%	20.9%	33.1%	41.5%	48.2%
Decreased by Less Than 10%	24.0%	40.7%	50.2%	55.9%
Unchanged	47.4%	56.8%	62.5%	65.9%
Increased	35.4%	54.7%	63.8%	69.0%
Total	31.6%	45.2%	53.0%	58.1%

Table 4
 Redefault Rates of Loans Modified in 2009 by Change in Payment
 (60 or More Days Delinquent)

	3 Months After Modification	6 Months After Modification	9 Months After Modification	12 Months After Modification
Decreased by 20% or More	9.7%	18.4%	24.4%	27.9%
Decreased by 10% to Less Than 20%	15.2%	29.2%	37.2%	41.7%
Decreased by Less Than 10%	17.5%	34.0%	42.7%	46.9%
Unchanged	46.8%	51.6%	56.8%	58.7%
Increased	26.6%	46.7%	56.0%	59.9%
Total	19.4%	31.9%	39.3%	42.9%

Table 5
 Redefault Rates of Loans Modified in 2010 by Change in Payment
 (60 or More Days Delinquent)

	3 Months After Modification	6 Months After Modification	9 Months After Modification	12 Months after Modification
Decreased by 20% or More	7.3%	12.0%	16.2%	18.3%
Decreased by 10% to Less Than 20%	10.0%	20.9%	28.5%	31.9%
Decreased by Less Than 10%	13.5%	27.2%	36.9%	40.2%
Unchanged	17.6%	21.5%	33.9%	39.9%
Increased	18.3%	34.7%	44.3%	49.3%
Total	10.0%	18.3%	24.7%	27.6%

Two key insights emerge from these Tables:

- Decreases in monthly mortgage payments greater than 20% result in sharply lower default rates over the 12 months following loan modification than smaller % decreases. It is intuitively obvious that larger % reductions in PITI payments resulting from a loan modification should decrease the likelihood of re-default.

The Impact of Consumer Credit Counseling on Distressed Mortgage Loan Losses

- For virtually any payment reduction, redefault rates have dropped significantly from 2008 to 2010. This suggests that the decision-making process by which loan modifications have been offered has improved significantly from 2008 to 2010; that servicers/lenders have gotten better at determining which borrowers will be able to sustain an initial cure resulting from a loan modification. Further, that borrowers who defaulted early during the industry meltdown were probably much more underwater --- having higher initial LTVs --- than more recent defaults; and, possibly, more vulnerable to the economic slowdown as well.

Importantly, the Urban Institute Study was able to quantify the relationship between the redefault rate and the reduction in PITI resulting from a loan modification. Specifically, the Study found that:

“.....a one percent reduction in payment yielded a 1.5 percent reduction in relative odds of redefault.”

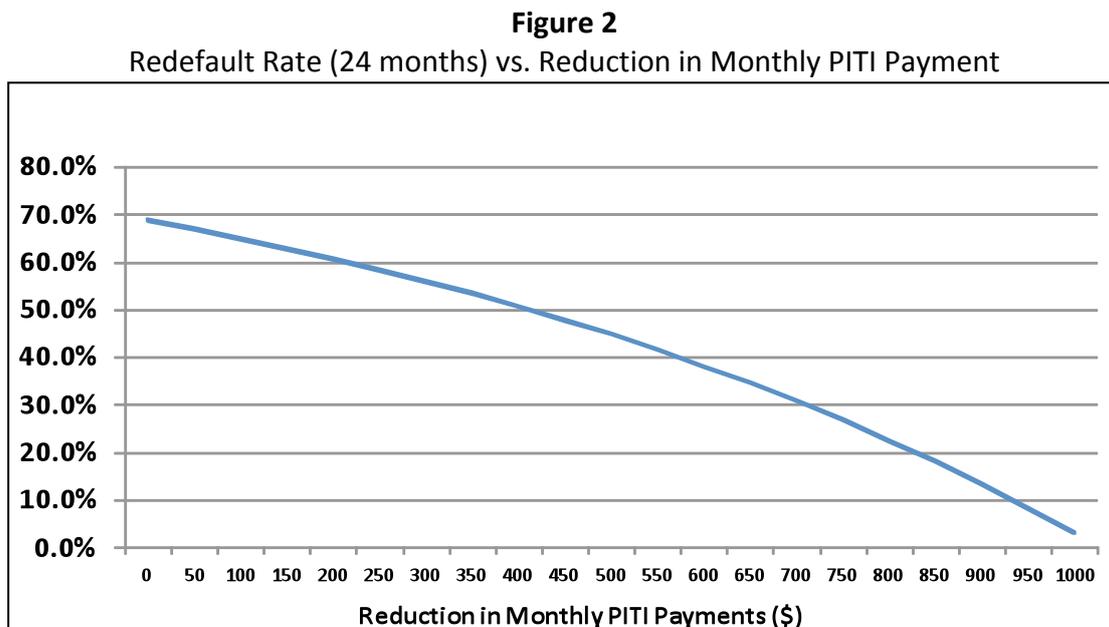
In quantitative terms, this finding can be expressed by the following equation:

$$\text{Monthly Rerefault \%} = R_0 - R_0 \times 1.5 \times (\text{Reduction in Monthly Payment/Initial PITI}) \quad (1)$$

where:

R_0 = Base monthly redefault % (with no monthly payment reduction)

Figure 2 below displays the cumulative redefault rate at two years out from loan modification using Equation 1 for the monthly default rate.



For this purpose, the unreduced PITI was set at \$1,542 per month, the average PITI for counseling clients of NFCC during the first half of 2010; and the base monthly default rate

was determined to be 4.5% per month --- a rate that provided a good fit to the data in Table 5.

Given the reduction in the monthly PITI for counseled borrowers who receive a loan modification and initially cure their loan, we can use Figure 2 to determine their redefault rate.

In this regard, the Urban Institute study observed that:

“The difference in the absolute size of the payment reduction for a counselor-assisted loan modification was nearly \$171 per loan. For a typical loan, the \$171 difference translated into a \$535 reduction in monthly payment for post-counseling modifications, compared to a \$364 payment reduction for other borrowers—an increase of almost 50 percent.”

The \$171 incremental reduction cited is an average reduction across the three levels of counseling intensity analyzed in the Urban Institute Study. For more intense counseling --- the level of counseling that would typically be delivered by the NFCC for OFS clients --- the Urban Institute’s estimate of the incremental reduction in the monthly payment achieved by a loan modification is \$270 per month, bringing the total monthly reduction up to \$634 per month.

From Table 2, we can see that a \$634 payment reduction projects to a two-year redefault rate of approximately 35%; whereas, at a \$364 reduction --- the payment reduction estimated for non-counseled borrowers receiving a loan modification --- the two year default rate is 53%, fully 18% higher than the redefault rate for the non-counseled borrower.

This result underscores the significantly positive impact that counseling can have on PITI payment reduction which, in turn, lowers the projected redefault rate. Obviously, distressed borrowers who get a bigger percentage break on their mortgage payments have a better chance at sustaining their loan than borrowers who get a smaller break.

Further, borrowers who receive comprehensive “holistic” counseling as provided by NFCC will have additional cash flow available to service their mortgage as a result of reductions in credit card payments and reductions in personal expenditures. From an analytic perspective, these additional sources of cash flow are identical to further decreases in PITI payments.

4. The Economic Benefit of Distressed Mortgage Counseling

4.1. Conceptual Framework

The Impact of Consumer Credit Counseling on Distressed Mortgage Loan Losses

The results of the Urban Institute Study coupled with other assumptions allow us to reasonably estimate the net economic benefit to investors/lenders of offering counseling to distressed borrowers.

As a general matter, the net benefits are determined by comparing the benefits of providing counseling versus not providing counseling. In each case, the benefits are determined by evaluating current success payment standards:

1. The losses avoided as a result of modifying loans that do not re-default. These losses are associated with:
 - a. short sales;
 - b. a deed-in-lieu of foreclosure (DIL) transfer of home ownership from the borrower to the lender/investor; and
 - c. Foreclosure of the property (**R**ead **E**state **O**wned) by the servicer on behalf of the investor/lender;

each of which results in the borrower having to vacate the home; plus

2. HAMP³-like payments to servicers consisting of:
 - a. \$1,000 servicing incentive fee paid to a servicer for each borrower who successfully completes the trial period and executes a Modification Agreement; and
 - b. Up to a \$1,000 annual “pay for success” incentive fee for up to three years for each borrower who remains in the program for that year;
3. Reduced by:
 - a. The loss in value of a loan that results from modification to its terms and conditions; and
 - b. The additional operating costs incurred by providing loan counseling into the distressed servicing process (which only applies where counseling is provided).

4.2. Economic Benefit Analysis – Base Case

Table 6 below presents the base case analysis of the economic benefits of distressed mortgage counseling versus non-counseling.

Table 6
Economic Benefits: Counseled vs. Non-Counseled Borrowers
Having a Distressed Mortgage

³ Home Affordable Modification Program – The federal program designed to enable borrowers that meet eligibility requirements to avoid foreclosure by modifying loans to a level that is affordable for borrowers and sustainable for the long-term.

Item/Metric	Counseled	Non-Counseled
# initial distressed files	10,000	10,000
% initial files resulting in a loan modification	21.70%	17.7%
# modifications	2,170	1,770
% modified files that are initially cured	73.30%	50.10%
# modified files that are initially cured	1,591	887
% modified initially cured files that redefault	41.5%	53.4%
# modified initially cured files that redefault	660	474
# modified files that have a sustained cure	931	413
% initial files that do not result in a loan modification	78.30%	82.30%
# initial files that do not result in a loan modification	7,830	8,230
% non-modified files that are initially cured	23.70%	21.5%
# non-modified files that are initially cured	1,856	1,769
% non-modified initially cured files that redefault	68.90%	68.9%
# non-modified initially cured files that redefault	1,279	1,219
# non-modified files that have a sustained cure	577	550
# Sustained Cures	1,508	963
Average Loss Avoided/Sustained Cure	\$ 73,657	\$ 73,657
Average Cost of Loan Modification for a Sustained Cure	\$ 3,555	\$ 2,262
Net Loss Avoided/Sustained Cure	\$ 70,101	\$ 71,394
Total Net Losses Avoided	\$ 105,695,234	\$68,781,061
\$1,000 per Loan Incentive Fee per Modification	\$ 2,170,000	\$ 1,770,000
\$3,000 "Pay For Success Fee" per Sustained Modification	\$ 4,523,242	\$ 2,890,193
Total Economic Benefits	\$ 112,388,475	\$73,441,254
Net Economic Benefits vs. No Counseling	\$ 38,947,221	
Avg Net Economic Benefits per Initial File	\$ 3,895	
Avg Net Economic Benefits per Initial File (bps)	185.46	
Avg Net Economic Benefits per Modified File	\$ 17,948	
Avg Net Economic Benefits per Modified File (bps)	854.67	

For both counseled and non-counseled cases, we assume that we start with 10,000 initial distressed loan files and then calculate the economic benefits that are generated, exclusive of any incremental costs associated with providing counseling and loan modification services. The analysis includes the following additional assumptions:

- For counseled loans, we have assumed initial cure rates consistent with the Urban Institute results in Table 2. With regard to redefault rates, we have used a 41.5% 2-year redefault rate for counseled borrowers. This assumes a \$550 PITI reduction for borrowers who receive basic mortgage counseling, an average PITI of \$1,542 and the projections in Table 2. We believe that these assumptions are more indicative of the current environment than the Urban Institute results which we based on loan modifications occurring during 2008 – 2009. For counseled borrowers whose loans are not modified, we have assumed a redefault rate of 68.9%, as if they were counseled but received no PITI reduction (see Figure 2).

The Impact of Consumer Credit Counseling on Distressed Mortgage Loan Losses

- Similarly, for non-counseled borrowers, we have used the Urban Institute Study results for the initial cure rates and Figure 2 for the redefault rates. For non-counseled borrowers receiving a loan modification, we have assumed a PITI reduction of \$350, resulting in a redefault rate using Figure 2 of 53.4%. For non-counseled borrowers that did not receive a loan modification, we again assumed a redefault rate of 68.9%, as if they were counseled but received no PITI.
- For each loan that results in a sustained cure, the economic benefit is estimated to be \$73,657 per loan. This benefit reflects the weighted average loss avoided by not having a short-sale, a deed-in-lieu transaction or a foreclosure (discussed further below).
- The cost of a sustained loan modification --- the cost associated with lower monthly payments received by the lender --- is estimated at \$3,555 for a borrower that has been counseled and \$2,262 for a non-counseled borrower. In each case, the cost is calculated as the net present value of the expected monthly payment reduction under reasonable assumptions as to both the discount rate and pre-payment speed. The difference between \$3,555 and \$2,262 reflects the larger reduction in monthly payments that counseled borrowers typically receive.
- A HAMP-like incentive of \$1,000 for each loan that is modified.
- A HAMP-like “pay for success” incentive of \$3,000 for each sustained cure loans consisting of \$1,000 per year for 3 years.

Under these assumptions, the total economic benefit for investors and servicers of providing counseling to 10,000 borrowers is estimated at \$112.39 million; for non-counseled loans, \$73.44 million. Thus, the net incremental benefit derived from counseling is \$38.95 million. This works out to be \$3,895 per initial loan file (185 bps); or, \$17,948 per modified loan (855 bps).

4.3. Sensitivity Analysis

Table 7 below illustrates the sensitivity of the Average Net Economic Benefits per Initial File calculated in Table 6 to variations in the initial cure rate and the re-default rate for counseled loans that are modified.⁴

Table 7
Average Net Economic Benefit per Initial File
Sensitivity Analysis

⁴ In calculating this table, we hold the initial cure and redefault rates constant for non-counseled borrowers who received a loan modification. Without “holistic” counseling, it is assumed that such borrowers cannot realize material reductions in credit card payments and freed-up cash from changes in spending patterns.

	Re-default Rate	Initial Cure Rate Resulting From Counseling				
		73.30%	74.30%	75.30%	76.30%	77.30%
\$550 PITI reduction	41.50%	3,894	3,987	4,079	4,172	4,265
	39.50%	4,126	4,222	4,318	4,414	4,510
	37.50%	4,359	4,458	4,557	4,656	4,756
	35.50%	4,592	4,694	4,796	4,898	5,001
	33.50%	4,824	4,930	5,035	5,141	5,246
	31.50%	5,057	5,165	5,274	5,383	5,491
	29.50%	5,289	5,401	5,513	5,625	5,737
	27.50%	5,522	5,637	5,752	5,867	5,982
\$550 PITI + \$200 credit card/spending reduction	25.50%	5,754	5,872	5,991	6,109	6,227
	23.50%	5,987	6,108	6,230	6,351	6,472
	21.50%	6,219	6,344	6,468	6,593	6,717
	19.50%	6,452	6,580	6,707	6,835	6,963
\$550 PITI + \$300 credit card/spending reduction	18.00%	6,626	6,756	6,887	7,017	7,147

The base case in Table 7, assumes: (a) a \$550 PITI reduction for counseled loans that are modified, that results in an estimated 41.50% redefault rate (see Figure 2); and, (b) an initial cure rate of 73.30%. These assumptions are identical to the assumptions in Table 6 and result in a \$3,894 benefit per initial file.

We then consider the impact of holistic, NFCC-type counseling. According to NFCC data, holistic counseling can be expected to increase available cash flow by \$200 to \$300 per month as a result of credit card payment reduction plus changes in personal expenditure patterns. At a \$200 increase in available cash --- which would increase the total effective payment reduction to \$750 per month, Figure 2 predicts that the redefault rate will drop from 41.5% to roughly 25.5%; at \$300, from 41.5% to about 18%. Assuming no change in the initial cure rate of 73.3%, increases in available cash flow ranging from \$200 to \$300 per month are estimated in Table 7 to increase the benefit per initial file to \$5,754 - \$6,626 respectively.

These estimates have held the initial cure rates constant at 73.30%. However, we believe it reasonable to expect that the increased cash flow coming from holistic counseling will also increase the initial cure rate beyond the 73.3% observed by the Urban Institute for counseled loans that subsequently were modified. While we are not aware of any data to substantiate this point, we considered in our sensitivity analysis the impact of increasing the initial cure rate from 73.3% to 77.3%, a relative increase of approximately 5%. As we can see from Table 7, at a total cash flow improvement of \$850 per month and an initial cure rate of 77.3%, the net economic benefit per initial loan file increases to \$7,147. In summary, applied to a portfolio of 10,000 borrowers who receive counseling, the \$7,147 scalable benefit would translate into \$71.47 million in losses avoided.

Table 8 below displays the sensitivity results of Table 7 in basis points rather than dollars.

Table 8
Average Net Economic Benefit per Initial File (bps)
Sensitivity Analysis

	Re-default Rate	Initial Cure Rate Resulting From Counseling				
		73.30%	74.30%	75.30%	76.30%	77.30%
\$550 PITI reduction	41.50%	185.42	189.84	194.26	198.68	203.10
	39.50%	196.50	201.07	205.64	210.21	214.78
	37.50%	207.57	212.29	217.01	221.73	226.46
	35.50%	218.64	223.52	228.39	233.26	238.13
	33.50%	229.72	234.74	239.76	244.79	249.81
	31.50%	240.79	245.97	251.14	256.32	261.49
	29.50%	251.87	257.19	262.52	267.84	273.17
	27.50%	262.94	268.42	273.89	279.37	284.85
\$550 PITI + \$200 credit card/spending reduction	25.50%	274.01	279.64	285.27	290.90	296.52
	23.50%	285.09	290.87	296.65	302.42	308.20
	21.50%	296.16	302.09	308.02	313.95	319.88
	19.50%	307.24	313.32	319.40	325.48	331.56
\$550 PITI + \$300 credit card/spending reduction	18.00%	315.54	321.74	327.93	334.12	340.32

4.4. Supporting Analyses

This section presents our analysis of two key assumptions in Table 6:

1. The average loss avoided through a sustained cure of a distressed loan (\$73,657);
2. The average cost of a loan modification for a sustained cure (\$3,555 and \$2,262 for counseled and non-counseled loans respectively);

In each case, we have attempted to develop estimates of these assumptions that pass the test of “reasonableness,” but do not rise to the level of “based on exhaustive research.”

Average Loss Avoided Through a Sustained Cure

When a distressed loan is cured --- either through a modification or some other means --- the borrower is able to remain in the house; and, the lender/investor avoids the losses associated with a short-sale, a deed-in-lieu of transfer or a foreclosure.

Table 9 below summarizes our analysis of the average loss avoided through a sustained cure.

Table 9
Average Loss Avoided by a Sustained Cure

	Average Loss	31-Mar-10	30-Jun-10	30-Sep-10	31-Dec-10	31-Mar-11	Average
Completed F/Cs	\$ 85,390	165,751	174,886	190,685	95,067	119,809	\$ 149,240
New Short Sales	\$ 40,000	41,031	55,443	56,040	49,052	50,109	\$ 50,335
New Deed in Lieu	\$ 40,000	1,202	1,753	1,722	2,085	1,700	\$ 1,692
Total		207,984	232,082	248,447	146,204	171,618	\$ 201,267
Completed F/Cs	\$ 85,390	79.7%	75.4%	76.8%	65.0%	69.8%	74.2%
New Short Sales	\$ 40,000	19.7%	23.9%	22.6%	33.6%	29.2%	25.0%
New Deed in Lieu	\$ 40,000	0.6%	0.8%	0.7%	1.4%	1.0%	0.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Average Loss		\$ 76,173	\$ 74,204	\$ 74,837	\$ 69,514	\$ 71,687	\$ 73,657

In this table, the quarterly number of completed foreclosures, new short sales and new deed-in lieu transactions, i.e., home forfeitures, comes from the first quarter 2011 OCC and OTS Mortgage Metrics Report issued in June 2011. Note that from the 1st through the 3rd quarter of 2010, the number of completed foreclosures grew from 166,000 to 191,000 and represented more than 75% of all outcomes for distressed borrowers who forfeited their home. This number, however, dropped precipitously --- by almost 50% --- in the 4th quarter as result of foreclosure moratoriums imposed upon lenders by various governmental authorities, class action lawsuits or voluntarily delays in foreclosure processing adopted by many lenders as improper foreclosure processes came to light. While many of these problems still persist, it would appear, based on 1st quarter 2011 data, that foreclosure processing is beginning to return to pre-moratorium levels.

For our purposes, the weighted average loss avoided by a sustained cure is calculated as the sum of the percentage of each type of forfeiture times its associated average loss. Thus, for example, for the first quarter of 2010: foreclosures represented 79.7% of all forfeitures and had an average cost to lenders/investors of \$85,390; short-sales represented 19.7% of forfeitures at an average cost of 40,000; and deed-in-lieu transactions representing the remaining 0.6% of forfeitures, also at an average cost of \$40,000. On a weighted average basis, the average loss to lenders/investors was \$76,173, which is also the average loss avoided by a sustained cure.

In Table 9 we have used the simple average forfeiture percentages over the 5 quarters beginning with 1st quarter 2010 in calculating the average loss, resulting in a weighted average loss or, conversely, loss avoided of \$73,657.

The method by which we estimated the average loss by forfeiture type is summarized in Table 10 below.

Table 10
Average Loss by Type of Forfeiture

Purchase Price (PP)	\$ 250,000
Mortgage LTV	84%
Mortgage	\$ 210,000
Current Loss % on PP	32%
Current Property Value (CV)	\$ 170,000
Bank Loss on SS/DIL	\$ 40,000
F/C Loss % from CV	27%
F/C Sale Price	\$ 124,610
Bank Loss on F/C	\$ 85,390

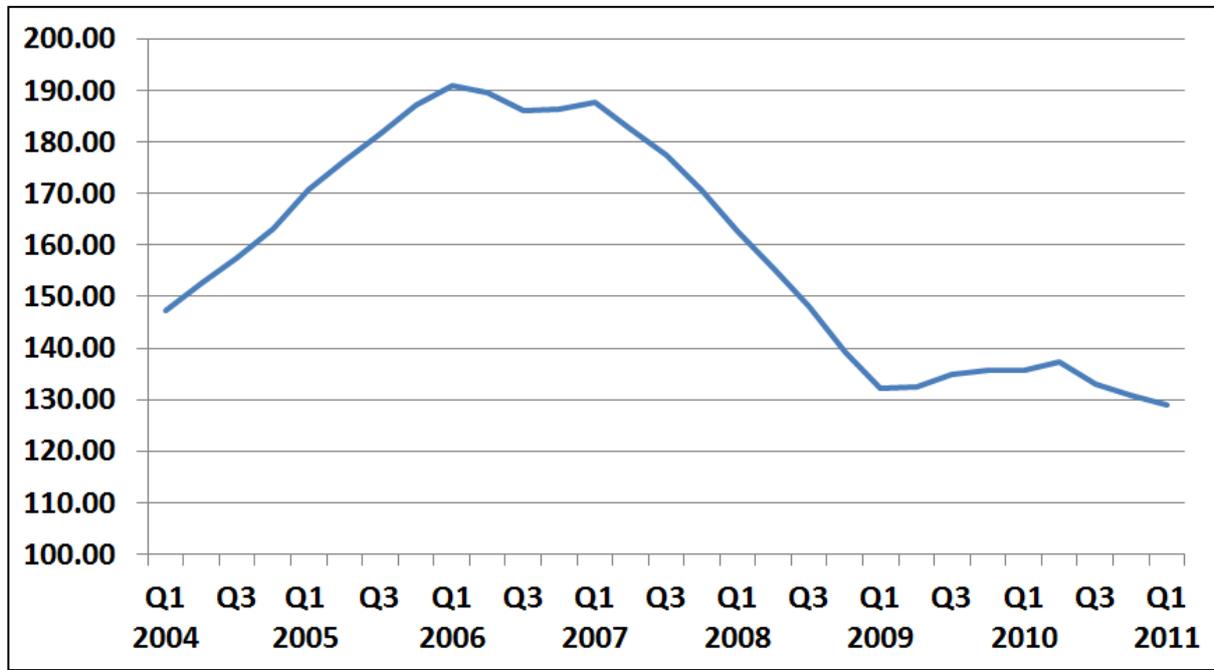
Although the national average mortgage loan balance is currently about \$175,000, we estimate --- but were not able to find a data source with which to verify this assumption --- that most currently distressed loans were originated during the 2004 – 2008 time-frame, for which the average loan balance was about \$210,000.

While the average Loan-to-Value (LTV) ratio throughout the last decade has hovered between 74% and 78%, it is intuitive that the average LTV for distressed loans would be substantially higher. Indeed, the availability of high LTV loans with low introductory interest rates was a major factor in allowing many lower income borrowers to acquire their first home, the very borrowers who have been hardest hit by the nation’s economic slowdown and high unemployment.

Further, research has shown that negative equity is a major driver of defaults; and higher LTV loans will clearly be the first to be “underwater” in any market. Therefore, we have assumed that the LTV for distressed loans is 84%, which, for an average loan balance of \$210,000, implies an average home purchase price of \$250,000.

The current market value index of US single-family homes is significantly off its peak, which based on the Case-Shiller US Home Price Index, topped out at 190.84 in the 1st quarter of 2006 (see Figure 3 below). The index level remained relatively unchanged for about a year and then fell precipitously to 132.29 by the 1st quarter of 2009, a 31% decline. Since then, the index has again remained relatively unchanged and currently stands at about 129, roughly a 32% decline from its 2006 peak.

Figure 3
Case-Shiller Seasonally Adjusted National Home Price Index
(1Q 2004 – 2Q 2011)



Assuming that most currently distressed loans were originated during 2004 – 2008, the average price index, un-weighted by origination volumes, is 158.12, suggesting an average price loss for such properties of about 20%. For those properties that result in a short-sale or bank sale following a deed-in-lieu transfer, market experience suggests that an additional 10% - 15% price drop is taken as servicers/investors price to move the property. In total, therefore, we have estimated that the price at which both short-sales and deed-in-lieu property sales occur is roughly 32% below the original purchase price. This implies a transaction price of \$170,000 which, for the lender, represents a loss of \$40,000 or the loss avoided assumption used in Table 9.

For foreclosure sales, a study published in 2009 by the Joint Center for Housing Studies at Harvard University found that foreclosure sales occurred at 27% below the comparable price at which short-sale transactions took place,^{5,6} equivalent to a foreclosure sale price of \$124,610. At this price, the lender’s loss or loss avoided in Table 9 is \$85,390 (which excludes the carrying costs associated with the property and any discounting of both the sales price and carrying costs back to the present --- which tend to offset each other).

⁵ Forced Sales and House Prices, Joint Center for Housing Studies, Pathak P., Campbell J.Y. and Giglio S., Harvard University, May 2009

⁶ Foreclosure reduces a home’s sale price by 27 percent on average, Science Blog, August 2010

5. References

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