

# Technical Assistance Memo

## Risk Rating Systems for Small Business Community Development Financial Institutions (CDFIs)

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### Introduction

An internal risk rating system (RR System) is a key component in the overall credit risk management of a small business loan portfolio. While RR Systems will differ significantly from one CDFI to another, the primary purpose of all RR Systems is to provide timely information to management regarding the risk within its small business portfolio. An effective system will enable efficient management of the portfolio, wherein managers can identify growing trends in the portfolio and lenders can identify which loans require a higher degree of attention.

This memo summarizes information regarding the development, validation, and uses of a RR System for a small business loan portfolio. It includes examples showing how two CDFIs—Tennessee-based Pathway Lending and Oregon/Washington state-based Craft3<sup>1</sup>-developed and use their RR Systems for monitoring risk within their small business loan portfolios and for assessing their loan loss reserves (LLR). Additionally, the memo discusses the Financial Accounting Standards Board's (FASB's) Accounting Standards Codification (ASC) literature on loss contingencies (ASC Subtopic 450-20, formerly known as FAS 5) and loan impairment (ASC Subtopic 310-10, formerly known as FAS 114).

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<sup>1</sup> Formerly known as Enterprise Cascadia.



## Overview

### *What Is a Risk Rating System?*

A RR System is the primary summary indicator of the individual loan risk within a CDFI's small business loan portfolio. In practice, a RR System allows a CDFI to quantify the risk in its small business loan portfolio by segmenting the loans into risk grades.<sup>2</sup> A RR System has two elements:

1. **Risk Rating Matrix:** The risk rating matrix segments the loan portfolio by level of risk. The risk grades, which usually range from four to eight, can be grouped into two categories: performing and nonperforming. An example is shown in Appendix A: Pathway Lending's risk rating matrix segments its small business portfolio into two categories--Pass (i.e., performing) and Classified (i.e., nonperforming)--with two risk grades in each category. The Pass risk grades are Pass 1 and Pass 2. The Classified risk grades are Substandard and Doubtful/Loss.
2. **Policy:** Equally as important as the risk rating matrix is a risk rating policy that outlines procedures and practices for the RR System. A quality policy will state who sets and validates the initial grade, under what conditions a loan can be upgraded or downgraded, and how grades are tested. For example, Pathway Lending's policy states that all loans will be in the Pass 1 risk grade when they are initially disbursed. If the loan is subsequently downgraded into the Pass 2 risk grade, it can only remain in the Pass 2 risk grade for 12 months. Within the 12 months, the loan must be upgraded to Pass 1 or downgraded to Substandard. Additionally, the policy will discuss loan loss provisioning amounts per risk grade. The danger of not having a clearly written risk rating policy is that the RR matrix will be interpreted in different ways and not provide a consistent view of the portfolio.

### *Benefits of Using a RR System*

The three key benefits to using a RR System are outlined below:

1. **Promotion of a CDFI's Credit Culture:** A RR System is a tool for promoting and maintaining a CDFI's credit culture, which can be defined as the 'sum of all the characteristics of an organization's unique behavior in its extension of credit.'<sup>3</sup> A CDFI's credit culture 'equation' includes not only its written policies and procedures but also its beliefs and actual practices regarding credit. A RR System establishes the standards of risk within a CDFI. For example, a CDFI's policy states that any new loan approved by the internal loan committee must be graded a minimum of 4-Acceptable and any new loans risk graded 5-Watch or lower must be approved by the board of directors. This policy clearly signals the quality of new loans that the board of directors expects the lending department to disburse.

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<sup>2</sup> Risk grades are also referred to as risk ratings.

<sup>3</sup> [http://www.philadelphiafed.org/bank-resources/publications/src-insights/2004/first-quarter/q1si2\\_04.cfm](http://www.philadelphiafed.org/bank-resources/publications/src-insights/2004/first-quarter/q1si2_04.cfm)



2. **Standardized Method of Measuring Risk:** Even though there is human judgment involved, a RR System provides a standardized method of measuring and monitoring the individual loan risk within a small business loan portfolio. A best practice is for the board of directors to establish performance benchmarks, which should be included in a credit policy, for the portfolio or groups of portfolios. By establishing benchmarks of acceptable percentage levels for each grade, a CDFI can establish its risk appetite. For example, a board of directors of a CDFI that accepts a higher amount of risk can state that the 'allowable' amount of loans in the Substandard risk grade is 5%-10% of total outstanding portfolio whereas a CDFI with a lower risk appetite may state that 0%-5% of total outstanding portfolio in the Substandard risk grade is acceptable. Each CDFI needs to establish its individual benchmarks based on its credit culture. The lending staff and management are then required to manage to the benchmarks. The board of directors should approve a process for responding when established benchmarks are exceeded.
3. **Assessment of Adequacy of a CDFI's Loan Loss Reserve (LLR):** The RR System is one method of assessing the adequacy of a CDFI's LLR. As discussed in further detail in this paper, the ASC provides guidelines on how risk grades can be developed and used to calculate the LLR.

#### *Risk Rating Systems for Small Business Loans versus Microenterprise Loans*

The RR System for a small business loan portfolio is different than what normally is used for a microenterprise loan portfolio because of the differences in loan size and types of collateral as outlined in Table 1.

**Table 1. Characteristics of Microenterprise and Small Business Loans**

	<b>Microenterprise</b>	<b>Small Business</b>
<b>Size of Loans</b>	Less than \$50,000	More than \$50,000
<b>Most Common Type of Collateral</b>	Personal guarantee or lien on vehicle	First or second mortgage

Microenterprise loans are typically compared to consumer loans when discussing risk because of the similarities in loan size and collateral, as most consumer loans are less than \$50,000 and collateralized with only a personal guarantee. The RR System for consumer loans is based on days late because many financial institutions have a substantial amount of statistical data proving that the number of days late is the most significant indicator of nonperformance and losses. Thus, days late categories<sup>4</sup> are tied directly to levels of nonperformance and loan loss provisioning grades. Because of the similarities with consumer loan portfolios, the risk grades for microenterprise loan portfolios may also be based on days late.<sup>5</sup> An example may be that all microenterprise loans are booked as 5-Acceptable credit; if a loan becomes over 31 days past due twice in 12 months, it will be downgraded to a 6-Watch; if it becomes over 61 days past due once, it will be downgraded to a 7-Problem Loan. Conversely, the loan may be upgraded by one level if no past due occurs in 8 months.

<sup>4</sup> Categories are normally defined as 0-15 days, 16-30 days, 31-60 days, 61-90 days, over 90 days.

<sup>5</sup> Some CDFIs making micro loans may have a risk grade system that is used when initially underwriting the loan but these grades are not changed during the life of the loan.



Number of days late is not a good indicator of default for a small business loan because both the financial institution, due to the loan size, and the borrower, because of the collateral at risk, are motivated to ensure the loan is repaid in full. Thus, temporarily modifying payment terms or restructuring a small business loan may be considered when the borrower shows the ability and willingness to pay whereas restructuring of loans or payment terms are uncommon for microenterprise loans.

Another difference between microenterprise and small business loan portfolios is that microenterprise loans are managed as a “pool of loans” while the small business loans are managed one-by-one. The pool concept means that the loans are rarely identified individually when analyzing the risk. With the small business loans on the other hand, lending staff reviews the files of each of the loans on a periodic basis.

### **Developing a Risk Rating System**

Two important factors about RR Systems that should be remembered are: a) there is no single system that is “correct;” and b) RR Systems will differ from one CDFI to another. The important element is that a CDFI develop a RR System that works for their particular organization to monitor the risk levels within a loan portfolio. The recommended steps in developing a RR System for a small business portfolio are:

- **Step One:** Develop a general segmentation methodology. The segmentation begins with the development of two general categories. In most CDFIs, the categories are Performing and Nonperforming loans or, as Pathway Lending calls them, Pass and Classified loans. The general categories allow for the CDFI to monitor its loan portfolio at a high level and understand any shifts between Performing/Pass and Nonperforming/Classified loans. The CDFI must develop general definitions of these categories.
- **Step Two:** Subdivide the general categories into granular grades. The number of grades under each category will be different from CDFI to CDFI. The two CDFIs in the examples, Pathway Lending and Craft3, both have four grades (see Appendix B for Craft3’s risk rating matrix). The definition of each risk grade will be unique to each CDFI. Craft3 uses seven criteria to assess a loan. The loan officer will rate each criterion and then use assigned weights to determine the final risk grade. As shown in Appendix A, Pathway Lending does not use specific criteria to assess a loan’s risk grade; rather, it uses general definitions for each risk grade. Management and a CDFI’s credit culture will dictate the use of general or specific grade definitions as both practices are appropriate, though general definitions should only be used by CDFIs that have a strong credit culture reinforced by their policies and procedures, and an ongoing system of validating risk grades. The granular risk grades allow a CDFI to monitor trends at an in-depth level.



- **Step Three:** Review the RR System annually and implement changes as needed. It is important to understand that even though RR Systems should remain consistent, adjustments may be needed. For example, Craft3 originally developed a RR System with 7 risk grades. Over time, however, Craft3 noticed that a majority of its Pass loans fell into risk grade 4 and very few loans fell into risk grades 1 - 3. Therefore, Craft3 changed its system to have only 4 risk grades, which it felt better represented its loan portfolio. Pathway Lending previously had a RR System with 9 risk grades but modified it to the current 4 grade system as it realized that the new system would be easier to manage and more representative of the risk within its portfolio.

A best practice is to include a Watch risk grade to allow for performing loans that may have an existing deficiency which the entrepreneur appears to be managing or a possible deficiency in the future. For example, a borrower may have indicated to a loan officer that it may have payment issues in the future due to the loss of its main retailer to a competitor. Or, a CDFI may downgrade all the borrowers to its Watch risk grade in a specific industry because the industry has experienced difficulties. An example of such a scenario is the problems experienced by small businesses providing parts to auto manufacturers during the current economic crisis. One CDFI downgraded all its auto part manufacturers into its Watch risk grade so that the loan officers would more closely monitor this segment of the portfolio. Pathway Lending's Watch risk grade is Pass 2. Craft3's Watch risk grade is 6. The Watch category allows management to quantify potential future problems.

### Uses of a Risk Rating System

The RR System can be used as a risk management tool as well as to calculate and assess the LLR amount for a small business portfolio.

#### *Risk Management Tool*

As discussed previously, a RR System helps ensure that a specific credit culture is maintained. Established RR Systems are especially important for large or geographically dispersed CDFIs where approval authority may be delegated. They are also particularly important at CDFIs with high growth goals as underwriting standards have a tendency to be lowered for the sake of increased disbursements. Three specific risk management uses are:

1. **Portfolio Level Monitoring:** An important monitoring tool for any CDFI is a monthly or quarterly report of risk ratings and aggregate outstandings within each risk grade. The report must include previous periods so that trends can be reviewed. As shown in Appendix C, Pathway Lending's dashboard report, provided to management and the board of directors on a quarterly basis, presents the following information for the prior 12 months:
  - Portfolio quality data including total outstanding, delinquencies, loans on watch list, and loans graded as classified.
  - Loan loss reserve calculation.
  - Percentage of loan portfolio in each risk grade (Pass1, Pass2, Substandard, Doubtful/Loss).



Craft3's portfolio quality report (see Appendix D), which is provided to management on a monthly basis and the board of directors on a quarterly basis, includes the following data:

- Data on trends within portfolio graded 6–Watch and 7–Problem Asset as of the two prior months, four prior quarters, and two prior fiscal year ends.
- Delinquent loans by days late.
- Specific information regarding each loan graded 6 or 7.
- Status of 10 largest loans in the portfolio.
- Trends of loan portfolio by risk grades over current month compared to previous two fiscal year ends.

These reports allow management as well as the board of directors to monitor the risk within the portfolio.

2. **Monitoring of Subcategories:** Many CDFIs will annually review risk grade trends by loan officer, branch office, industry, or year of disbursement. A risk analysis by these subcategories allows management to assess if there is one area or person that offers increased risk to the organization.
3. **Specific Loan Monitoring Requirements:** Another use of the RR System is to tie specific loan monitoring requirements to each risk grade. A standard practice is that all loans are reviewed at least annually upon receipt of the borrower's annual year-end financial statements, tax returns, and interim financial statements. For loans graded as Watch or Nonperforming/Classified, a monthly review should be completed. For loans graded Watch, a summary of the issues is provided for the portfolio report. For loans graded Nonperforming/Classified, the loan officer or credit analyst prepares a memo that provides a summary overview of issues, financial analysis including current debt service and collateral coverage ratios, and future actions to be undertaken by the borrower. Many CDFIs will require a new appraisal to be completed if the loan is graded Substandard or Doubtful. The monthly review of the nonperforming loans must be able to provide management with a concise overview of potential losses and a description of the actions that will be taken to resolve the issues, including liquidation of collateral.

### *Assessment of Loan Loss Reserve*

A RR System is one method that can be used to calculate the LLR as risk grades can dictate either general or specific loan loss provisioning. Integral to using a RR System to calculate the LLR is understanding the ASC, which addresses estimating losses for performing loans as well as specific provisioning methodologies for impaired loans wherein the amount is individually calculated for each loan.

Within a RR System for a small business portfolio, the performing risk grades can dictate a general provisioning amount, calculated as a loss percentage multiplied by total outstanding amount in the risk grade, whereas the nonperforming risk grades will allow for provision amounts for individual loans to be calculated based on one of three methodologies as described below. Craft3's LLR is calculated adding together a general provision for loans in risk grades 4



or 5 (the 2 Performing grades) and specific provisioned amounts calculated on each loan risk graded 6 or 7 (the 2 Nonperforming grades).

The ASC states that the general provisioning amount must be justified by historical losses. For example, Craft3 reviews its historical losses in the following two ways:

1. **Migration Analysis:** Craft3's most recent migration analysis took performing business loans' risk at FYE 2008 and reviewed the loss rates of this specific portfolio at FYEs 2009, 2010 and 2011. The analysis showed varying annual loss rates between 0% and 3% for the loan portfolio at January 1, 2009. Craft3 uses the three-year average calculated based on the migration analysis for each risk grade.
2. **Annual Losses:** Craft3 reviews the 3-year average loss rate as a percentage of total dollars outstanding calculated on a quarterly rolling basis.

The loss history that is used when reviewing provisioning amounts must be relevant. In most cases, relevancy means using recent data as earlier years of loss history may not be indicative of current credit culture and, thus, may not provide a realistic picture of the current and near future losses. A CDFI should also adjust loss history to exclude any discontinued loan products. For new loan products or portfolios for which no loss history is available, a CDFI may use the historical loss information of another similar financial institution as long as characteristics such as loan type and risk are reasonably comparable and the data are reliable.

The ASC provides guidance on LLR methodology as it pertains to impaired loans (loans where it is probable that the full amount outstanding will not be collected according to the terms of the loan documents). A CDFI will dictate which risk grade specifies an impaired loan: for Craft3 it is 6-Watch and for Pathway Lending it is Substandard. For a small business portfolio, it is a good practice to review impaired loans individually as provisioning amounts can vary widely depending on collateral coverage. For example, it is not uncommon that the provisioned amount for an impaired small business loan could be zero if the impairment analysis shows that liquidation value of the collateral is well in excess of the outstanding loan amount.

The preferred methodology for calculating the value of an impaired loan is the present value of cash flows based on the loan's effective interest rate. However, the following two methodologies are also acceptable:

- Liquidation Value of collateral based on appraisals, valuation assumptions.
- The loan's Market Price based on a potential sale price.

For nonperforming loans, a CDFI should complete a specific loan impairment memo and, by using one of the three valuation methods referenced above, justify an impairment amount. As discussed previously, the monthly review memo for each loan that is graded Substandard or Doubtful/Loss will provide a calculation of any potential loss amount.

Restructured loans, which include all loans for which the CDFI has made a concession including rate/payment reductions or forgiveness of principal due to the borrower's troubled financial



condition, are a subset of impaired loans that are required to be tracked separately.<sup>6</sup> A CDFI should have a clear definition of a restructured loan and clear policies on how it tracks these loans. The value of a restructured loan is required to be calculated at its present value of expected cash flows discounted at the loan's effective interest rate.

Lastly, the ASC recommends that an additional provision for LLR be added for environmental or other qualitative factors including a margin for imprecision, downward trends in general business or economic conditions, downward local and national trends, a recent significant increase in problem assets, or falling real estate values. Pathway Lending includes an additional .25% - 1% 'Unallocated/Economic reserve' to LLR depending on the loan pool to account for the impact of economic effects on those types of loans. The 'Unallocated/Economic reserve' percentage typically ranges from 10% to 30% of the reserve percentage for that loan pool type. An example would be if the LLR for accounts receivable loans is determined to be 4%, then the unallocated portion could be .40% to 1.20% for a total LLR ranging from 4.4% to 5.20% depending on the expectation of economic factors on that group of loans. Any additional provisioning should be well documented and revisited frequently because, as current and future experience become history, the historical losses will naturally adjust and mitigate the need for additional provisions.

In summary, the calculation of the LLR for a small business portfolio based on risk grades is as follows:

1. Calculate the general loan loss provisioning amount for the portfolio outstanding in Performing/Pass risk grades. General provisioning loss rates should be based on historical loss data.
2. Calculate specific provisioning amounts for all loans risk rated Nonperforming/Classified using one of the three methodologies recommended by the ASC.
3. Add an additional provisioning amount for economic or other qualitative factors, if needed.
4. Summarize the LLR calculation in a memo explaining the LLR methodology and include a summary of the reasons supporting the final LLR amount. A best practice is for the LLR memo to be composed quarterly and provided to management and the board of directors.

As noted above, loan loss provisioning based on a RR System is one methodology that can be used and reviewed to assess the adequacy of a CDFI's LLR. Examples of other methods include: trends in the percent of outstandings in each risk rating grade, percent change in the outstandings of nonperforming/classified loans, and percent charge-offs of the aggregate outstanding balance in the portfolio.

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<sup>6</sup> Restructured loans are discussed in ASC Subtopic 310-40: Accounting by Debtors and Creditors for Troubled Debt Restructurings (TDRs). The required disclosures include net balance of TDRs in relation to original loan amounts and the amount incurred in TDR losses for the year.



## Validation of a RR System

Validation of a RR System needs to occur at two levels: the individual loan level and the entire RR System.

### *Individual Loans*

Validation should begin when the small business loan is initially underwritten. When a loan officer, whose annual goals may be tied to level of disbursements, decides the initial risk grade, validation of the risk grade by a person who is not on the loan disbursement team is pertinent. In many cases, a credit officer either as an individual or part of the loan committee approves the risk grade. In other CDFIs, a credit risk officer who is not part of the lending department will assign the initial risk grade. The important factor is to have a person who is independent from the lending department validate the risk grade so that consistency is ensured.

After the initial grading, as discussed previously, the procedures for ongoing assessment of risk grades are different for performing loans as compared to nonperforming loans. For performing loans, annual reviews are completed with a focus on larger loans, which offer more risk to a CDFI. For example, one CDFI will have all loans with outstanding amounts of \$100,000 or more reviewed on an annual basis including a validation of the risk grade. Craft3's credit risk department reviews a sampling of both performing and nonperforming loans to test the validity of the individual risk grades on a quarterly basis. For each individual nonperforming loan, a monthly review is completed either by a credit or loan officer and reviewed by management. A quality RR policy will clearly define when risk grades should be reviewed and by whom.

### *Risk Rating System*

Validation of any RR System needs to occur on a regular basis to confirm consistency and accuracy of the system. Without this validation, management blindly trusts the RR System to measure and monitor the risk. Failure to make risk grade changes in a timely manner can result in the following issues:

1. **Slower Reaction to Issues:** Management will not know the amount of risk in the small business portfolio and will not react in sufficient time to the increased risk.
2. **Increased Variances in Financial Results:** As the RR System is one of the ways of assessing a CDFI's LLR, incorrect risk grading could result in inaccurate loan loss provisioning.

CDFIs use various methodologies to validate their RR Systems. The three most common ways are:

1. **Historical Loan Loss Analysis:** Actual loss rates are compared to the estimated losses forecasted by the RR System. The actual loss rates for a fiscal year should be near the estimate forecasted by the RR System at mid-year.



2. **Migration of Risk Grades:** Migration analysis is best when reviewed over a three or more year period. For example, in FY 2012, Craft3 completed a migration analysis of each individual loan within the small business loan portfolio at FYE 2008 over three years. The credit risk department presented data that showed the FYE 2008 amount within each loan grade that had been paid off, upgraded, placed on non-accrual, down graded, or charged off by the end of FYEs 2009, 2010 and 2011. The results were as expected, with 49% of the loans graded 7 at FYE 2008 being written off by FYE 2011. Of the loans graded 4 at FYE 2009, none were written off but 22% were downgraded. The migration analysis reassured Craft3 that their RR System was appropriate. If the migration analysis had shown a high percentage of loans graded 4 being written off or on non-accrual status, Craft3 would want to review its system to understand if loans are not getting downgraded in a timely manner or initial grades are inappropriate.
3. **Loan Review:** External loan review<sup>7</sup> is another way of maintaining the RR System's integrity. A CDFI will hire an outside loan review team to review a portion of their portfolio. If the loan review team recommends risk grade modifications for more than 10% of the portfolio reviewed, then the CDFI may not be grading loans appropriately or not modifying grades in a timely manner. This 10% benchmark is a commonly used indicator for a risk rating review.

Lastly, one of the best validation methods is common sense. For example, because many small businesses experienced cash flow problems during the recent economic crisis, it should be expected that a small business portfolio would see an increase in the amount of loans that were on watch or nonperforming status. If this did not occur, a CDFI should ask why and there should be a reasonable answer.

### **Modification of Loan Grades**

A pertinent element to an effective RR System is timely re-rating of loans. Re-rating should be clearly addressed in the RR policy. The main circumstances for modifying a risk grade are the following:

1. **Loans that Show Signs of Problems but May Not Be Late:** A loan officer that becomes privy to information that a borrower that is current on all payments is having difficulties may downgrade that borrower's performing loan into a watch grade.
2. **Late Loans:** Loans are downgraded when a loan payment is 30 days late. A loan may be downgraded earlier than 30 days late if there has been an indication from the borrower that the payment will not be received by the 30<sup>th</sup> day.
3. **Restructured Loans:** When a loan is restructured, it is a good practice for it to remain in a watch grade or nonperforming category until a number of payments have been received by the due date. For example, many CDFIs will upgrade a restructured loan to their watch grade for a minimum of 3-12 months. After the specific time period, the loan will be upgraded to a performing category when all payments are received by the due date and there are no indications of concern.

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<sup>7</sup> For more on Loan Review, see Opportunity Finance Network's Technical Assistance Memo "Loan Review: A Critical Element of Effective Portfolio Risk Management" at [www.opportunityfinance.net](http://www.opportunityfinance.net).



## **Pricing**

A question that arises often is whether pricing of loans should be tied to risk grades. The practice of tying loan pricing to risk grade can place stress on the RR System because lending staff may justify lower risk grades in order to get a better interest rate for their client. Therefore, tying pricing to specific risk grades is not recommended.

## **Summary**

A RR System is important because, when created and used effectively, it can monitor and measure the risk within a small business loan portfolio and promote a CDFI's credit culture throughout the organization. Additionally, the RR System can be used as one method to assess the accuracy of the LLR. The following are pertinent steps for formulating a high-quality RR System:

- Develop both a risk rating matrix with an appropriate number of risk grades and a clear policy that addresses when a loan should be re-rated.
- Establish allowable percentage benchmarks for each risk grade that reflect the CDFI's risk appetite.
- Create reports for management and the board of directors that concisely provide risk grade information and trends.
- Periodically test the RR System as well as individual loan grades to confirm appropriateness and consistency.



## Appendix A. Pathway Lending's Risk Rating Categories and Grades

### PASS

**Pass One** During the underwriting process, management will determine if a loan meets Pathway Lending's underwriting criteria. All approved loans will be assigned an initial risk rating of Pass One. If the borrower's repayment history and financial condition remain satisfactory, the risk rating will not change.

**Pass Two** Assets in this grade have most of the same characteristics as loans rated Pass One. However, the occurrence or potential occurrence of an event has been identified that would moderately increase the level of risk. Such events might include an adverse trend in financial performance or a specific event that has negatively impacted the borrower. Close supervision of these loans is required by the loan officer. Loans assigned to this risk rating must be upgraded or downgraded within 12 months.

### CLASSIFIED

**Substandard** Loans in this grade have well-defined weaknesses that jeopardize the collection of the debt and expose Pathway Lending to increased risk of loss. These loans are marginally protected by the repayment capacity of the borrower, guarantors, and collateral. These loans require special monitoring and management to mitigate increased losses.

**Doubtful/Loss** Assets in this grade exhibit serious risks that will likely hinder the collection of the full loan balance and result in a loss. These loans are severely unprotected by the repayment capacity of the borrower, guarantors, and collateral. Strict management attention is required.

## Appendix B: Craft3's Risk Rating Matrix

Source: Craft3

Each risk area (Operating Margins/Cash Flow, Balance Sheet, etc. is rated independently. Each risk area is then weighted and the sum of the weighted risk areas indicates the risk rating for the loan. The Loan Officer or Risk Manager should then consider any other risk factors present in the loan and/or borrower and assign the final Risk Rating. The loan shall be risk rated based on projections at the inception of the loan; when a loan has been in the portfolio for 12 months, the risk rating will be based on the interim and year-end financials (continued use of projections must be approved by the Risk Manager on a case by case basis).

**Note:** For those borrowers whose business and personal financials are co-mingled (e.g., business debt on personal credit cards), the calculation below should be global (personal and business combined). For "professionally" managed businesses or where the entrepreneur has not co-mingled assets or debts, the calculations may be completed on the business alone. The lender should explain in the body of the credit memo how the financial ratios are calculated.

	Weight	4	5	6	7
<b>Operating Margins/Cash Flow</b> Debt service coverage (DSC) calculations are based on 12 months of historical financial information or projections that include our loan using EBITDA and 12 months of full loan payments	20.0%	Historic DSC 1.1x to 1.29x. (Based on the most recent FYE)	Historic DSC 1.09x to .80x. (Based on either the most recent FYE or the projected, stabilized year)	Historic DSC .79x to .50x. (Based on either the most recent FYE or the projected, stabilized year)	DSC is .49x or less. (Based on either the most recent FYE or the projected, stabilized year)
		4	5	6	7
<b>Balance Sheet: Tangible Net Worth</b> (Based on the proforma after our loan closes)	12.5%	Equity to Assets .17 > .19 (Debt:Tangible Worth 5:1)	Equity to Assets .13 > .16 (Debt:Tangible Worth 7:1)	Equity to Assets .10 > .12 (Debt:Tangible Worth 9:1)	Equity to Assets less than .09 (Debt:Tangible Worth over 10:1) or negative equity
<b>Balance Sheet: Working Capital</b> (Based on the proforma after our loan closes)	12.5%	Current Ratio 1:1 to 1.49:1	Current Ratio .9:1 to .99:1	Current Ratio .75:1 to .89:1	Current Ratio .74:1 or lower
		4	5	6	7
<b>Management/Credit History- Highest Score of principal(s)</b>	10.0%	FICO 749 > 725	FICO 724 > 660	FICO 659 > 620	FICO < 619
<b>Management</b> (To choose rating – <u>all</u> of descriptor must be true)	15.0%	<ul style="list-style-type: none"> <li>Proven experience, but perhaps in a different business.</li> <li>The company provides employee training and benefits.</li> <li>CEO has good financials systems and can and does submit required financials, sometimes with prompting from us.</li> <li>Financial trends are stable.</li> </ul>	<ul style="list-style-type: none"> <li>CEO's ability to manage firms of this type is unproven.</li> <li>CEO has demonstrated he/she understands the need for good financial systems and required financials are submitted, but are <u>sometimes late</u>.</li> <li>Financial trends may be negative, but CEO has demonstrated that he/she understands what it takes to realize better financial results.</li> </ul>	<ul style="list-style-type: none"> <li>CEO has not demonstrated adequate knowledge or acquired adequate resources to help the company become more profitable or the company is a start up.</li> <li>CEO's financial systems are not adequate, financials not reliable or required financials are not submitted regularly.</li> </ul>	<ul style="list-style-type: none"> <li>Management struggling to demonstrate he/she has a viable business model.</li> <li>Management does not have financials systems in place and cannot produce reliable statements.</li> </ul>
		4	5	6	7
<b>Collateral/Secondary Source of Repayment Collateral analysis</b> Loan to Value (LTV) = Total loans (including our loan)/Collateral Value. Collateral Coverage Ratio (CCR) = Collateral Value/Total Loans (including our loan)	15.0%	LTV is 76% to 100% CCR 1.29 < 1.0	LTV is 100.1% to 120% CCR .9 < .8	LTV is 120.01% to 150% CCR .79 < .7	LTV is 150.01% or greater. CCR < .69 Loan is, for all practical purposes, unsecured.
		4	5	6	7
<b>Industry, Market, Competitive Advantage</b>	15.0%	Competitive industry but firms can control costs so can manage downturns in market.	Very tough competitors, reliance on commodity prices, difficult to control costs so downturns significantly impact bottom line.	Significant deterioration in market conditions; borrower struggling to manage changes in industry.	Deterioration in markets has manifested itself in severe weakness in the borrower.
<b>Financial Statements and Accounting Systems</b>	<b>The Credit Memo must discuss Borrower's ability to produce timely and reliable internal financial statements, including a budget, which can be analyzed post closing.</b> In the case of loans financing real estate where the source of repayment is rent or the sale of real estate, the borrower may submit rent rolls, and/or monthly updates on the status of the sale of real estate in lieu of interim financial statements.				

Appendix B: Craft3's Risk Rating Matrix (continued)

Scoring	<u>Rating</u>	<u>Weight</u>	<u>Weighted Rating</u>
1. Operating Margins and Cash Flow (2-7)		20.0%	
2a. Balance Sheet (2-7): Equity to Assets		12.5%	
2b. Balance Sheet (2-7): Working Capital		12.5%	
3a. Management - Personal Credit History (3-7)		10.0%	
3b. Management - Capacity (3-7)		15.0%	
4. Collateral and Secondary Source of Repayment (2-7)		15.0%	
5. Industry and Market and Competitive Advantage (3-7)		15.0%	
If the loan has not been past due in the previous 12 months and there is has been no modifications of their repayment terms or new loans to enhance cash flow			-0.50
<b>Combined Weighted Numerical Rating</b>			<b>0.00</b>
	<b>4</b>	3.5	>
	<b>5</b>	4.5	< > 5.4
	<b>6</b>	5.5	< > 6.4
	<b>7</b>	6.5	<
<b>Calculated Risk Rating</b>			

**Appendix C. Pathway Lending's Quarterly Dashboard Report**

Source: Pathway Lending

	Outstandings	Net Interest Margin	Total Delinquent	31 - 60 PD	31-60 %	>60 PD	>60 %	Non-Accrual	Non-Accrual %	Watchlist	Watchlist %	Classified	Classified %
12/31/2011													
January													
February													
March													
April													
May													
June													
July													
August													
September													
October													
November													
December													
Ave. Outst.	#DIV/0!			#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	

RESERVES													
Includes additional 1% of LLR on portfolio not including impaired loans													
	Business (5.75%)	RE (.75%)	Energy (3%)	Impaired	TOTAL \$	Percentage	Total Net Losses	Net Losses as % of Outstandings	P1 %	P2%	Substandard%	Doubtful/Loss%	Distressed ReWorks %
12/31/2011													
January													
February													
March													
April													
May													
June													
July													
August													
September													
October													
November													
December													
							\$ -	#DIV/0!					
							\$ -	#DIV/0!	Annualized Net Losses				
							\$ -	#DIV/0!	Total Annual Recoveries				
							\$ -	#DIV/0!	Annualized Net Losses minus Recoveries				

**Appendix D. Sample Portfolio Quality Report**  
**Source: Craft3 (Note: Numbers do not reflect Craft3's portfolio.)**

Loan Fund Name  
 Total Funds Under Management

Prepared by:

Portfolio Quality Summary	1/31/11	12/31/10	9/30/10	6/30/10	3/31/10	12/31/09	12/31/08
Total Problem Assets	\$213,626	\$248,655	\$251,884	\$256,237	\$264,524	\$270,641	\$100,234
Total Watch List Assets	\$262,849	\$332,774	\$369,295	\$367,424	\$295,149	\$269,452	\$195,647
Total O/S \$ in Portfolio	<b>\$3,700,202</b>	<b>\$3,509,778</b>	<b>\$3,420,812</b>	<b>\$3,390,779</b>	<b>\$3,036,379</b>	<b>\$2,776,266</b>	<b>\$2,850,891</b>
% of O/S as Problem Assets	5.77%	7.08%	7.36%	7.56%	8.71%	9.75%	3.52%
% of O/S as Watch List Assets	7.10%	9.48%	10.80%	10.84%	9.72%	9.71%	6.86%
Past Due	4.65%	5.12%	2.90%	6.23%	7.02%	6.78%	8.83%
<b>Total Criticized Assets</b>	<b>12.88%</b>	<b>16.57%</b>	<b>18.16%</b>	<b>18.39%</b>	<b>18.43%</b>	<b>19.45%</b>	<b>10.38%</b>
Total Non-Performing Assets							

Short Name	Loan Number	Loan Officer	Risk Rating	Past Due 1 - 30 Days	Past Due 31 - 60 Days	Past Due 61 - 90 Days	Past Due 91 - 120 Days	Past Due 121+ Days	Total Past Due	Past Due Days	Maturity Date	Last Payment Date	Last Payment Amount	Interest Paid Through Date	Principal Paid Through Date	Principal Balance	
Name	183		6	0	0	0	30,263	0	30,263	91	9/1/12	11/29/10	1,214.00	9/30/10	9/30/10	30,263.26	
Name	505		7	0	0	47,230	0	0	47,230	73	11/19/10	7/1/10	2,574.00	9/30/09	9/29/08	47,230.00	
Name	188		6	0	94,734	0	0	0	94,734	31	12/31/10	2/3/11	954.27	1/31/11	1/31/11	94,733.70	
Name	715		5	28,631	0	0	0	0	28,631	30	11/30/14	2/3/11	412.24	12/31/10	12/31/10	28,631.18	
				28,631	94,734	47,230	30,263	0								\$200,858.14	
										Past Due Over 30 Days =	\$172,227						
											4.65%						
<b>Matured Loans</b>																	
Name	509			217,849.33													1/31/11

**Problem and Watch List 01/31/11**

Name	Risk Rating Code	Non-Accrual / Default	Sector Codes*	Original Loan Amount	Total Principal	% Owned	Loan Fund's Principal	Relationship	Collateral	Total Exposure*	Type collateral	* adjusted for CDFI's exposure	
Name	7		400	\$47,230	\$47,230	100%	\$47,230	\$50,000	\$87,000	\$0	1st empty bldg, value represents underlying land value		
Name	7		400	\$2,770	\$2,770	100%	\$2,770	"	"	"	"		
Name	7	Non-Accrual	800	\$44,130	\$40,756	50%	\$20,378	\$40,756	\$0	\$20,378	Commercial R/E land contract		
Name	7	Non-Accrual	1100	\$99,289	\$99,289	100%	\$99,289	\$99,289	\$20,000	\$79,289	2nd mtg behind \$625m 1st (SBK)		
Name	7	Non-Accrual	500	\$51,050	\$30,263	50%	\$15,132	\$30,263	\$0	\$15,132	2nd mtg behind \$200m 1st (5th3rd)		
Name	7	Non-Accrual	900	\$69,208	\$57,655	50%	\$28,828	\$57,655	\$0	\$28,828	2nd on 1 residential R/E; inventory, fixtures		
					<b>\$277,964</b>		<b>\$213,626</b>						
Name	6		1100	\$43,346	\$42,250	100%	\$42,250	\$50,000	\$50,000	\$0	1st on investment residential properties (2 units, \$110m '08 AV)		
Name	6		1100	\$35,500	\$25,056	100%	\$25,056	\$35,500	\$275,000	\$0	1st R/E - \$275m PP, \$250m grant to fund purchase		
Name	6		1100	\$55,465	\$47,259	100%	\$47,259						
Name	6		800	\$74,984	\$66,225	50%	\$33,112	\$86,225	\$54,000	\$16,112	Vehicles, plus assignment of A/R - \$108,209 as of 11/2/09 @ 50%		
Name	6		800	\$14,486	\$20,000	50%	\$10,000	"	"	"	"		
Name	6		1100	\$10,096	\$10,096	100%	\$10,096	\$10,096	\$0	\$10,096	Assignment of contract		
Name	6		400	\$100,000	\$95,075	100%	\$95,075	\$95,075	\$525,000	\$0	3rd behind \$1MM		
<b>Total Classified Assets &amp; Total Exposure</b>					<b>\$305,961</b>		<b>\$262,849</b>						
					<b>\$583,925</b>		<b>\$476,475</b>			<b>\$169,835</b>			

Top 10 Borrowers				
Name	Commitment	Risk Rating	Sector Code	Outstanding
Name	\$650,000	5	R/E	\$81,566
Name	\$508,820	5	R/E	\$508,820
Name	\$400,000	5		\$354,785
Name	\$295,229	4	R/E	\$5,254
Name	\$291,891	5	R/E	\$291,891
Name	\$262,000	5	R/E	\$147,460
Name	\$252,645	5	R/E	\$252,645
Name	\$201,004	4		\$201,004
Name	\$200,000	5	R/E	\$168,500
Name	\$200,000	5		\$217,849
				\$3,261,588
<b>Percent of Outstanding all LOCs as if fully drawn</b>				<b>64%</b>

Grade Analysis 01/31/11 Loans outstanding Under Management					
Risk Rating	4	5	6	7	Total
#	8	31	7	6	52
\$	\$315,797	\$2,907,930	\$262,849	\$213,626	\$3,700,202
% of Portfolio	9%	79%	7%	6%	
Grade Analysis 12/31/10 Loans outstanding Under Management					
Risk Rating	4	5	6	7	Total
#	7	29	9	5	
\$	\$665,530	\$2,272,819	\$322,774	\$248,655	\$3,509,778
% of Portfolio	19%	65%	9%	7%	
Grade Analysis 12/31/09 Loans outstanding Under Management					
Risk Rating	4	5	6	7	Total
#	4	21	12	6	43
\$	\$30,959	\$1,905,214	\$269,452	\$270,641	\$2,776,266
% of Portfolio	12%	69%	10%	10%	