



## Allowance for Loan and Lease Loss (ALLL) Analysis Case Study

Lighthouse Advisory Services completed a \$500 million commercial real estate portfolio valuation engagement, performing due diligence and advisory services in assisting a client with FAS 114 and FAS 5 Impairment Analysis.

### The Engagement

Lighthouse Advisory Services (“LAS”) was engaged by a west coast bank (the “Client”) to perform valuation and advisory services on a commercial mortgage loan portfolio. The portfolio consisted of 200 commercial and multifamily mortgage loans with an outstanding principal balance of approximately \$500 million (the “Portfolio”). The Client engaged LAS to perform an independent third party analysis of potential loan losses within the Portfolio in accordance with FAS 114 and FAS 5, to be completed within a 45-day period.

### Background

The Client’s commercial real estate lending program consists of originating full recourse commercial mortgage loans to new and existing bank customers for the acquisition of income producing properties or to refinance their existing debt and then syndicating a portion of the loan to a financial institution partner. The economic downturn during the past two years has caused deterioration in commercial real estate fundamentals and increased regulatory oversight. The downward pressure placed on the industry resulted in an increase in loan defaults within the Portfolio. The Client is proactively focusing on the credit metrics of each asset within the Portfolio and addressing the current performance of each loan to mitigate losses. Monitoring the loan loss reserves and impairments in accordance with the Allowance for Loan and Lease Losses (ALLL) and FAS 114 became crucial. Since the Client recently began this platform in 2005, the lack of historical loan loss data further complicated determining an appropriate ALLL for those loans reviewed under FAS 5. FAS 114 is directed at loans where impairment is probable and FAS 5 applies historical data and environmental factors to the remaining loans in the Portfolio for loan loss reserve estimates.

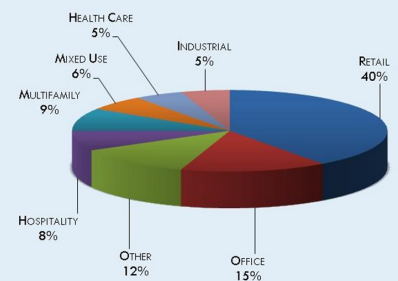
### Requirement

The Client required an independent assessment of their commercial real estate portfolio to (i) evaluate the ALLL under FAS 114 across the Portfolio and (ii) create a basis for ALLL calculations under FAS 5.

### Portfolio Overview

Each of the mortgage loans in the Portfolio is secured by a first mortgage lien on the fee and/or leasehold interest of the related borrower or another party in one or more commercial real estate properties. The Portfolio is secured by 225 commercial real estate properties across 34 states with the largest concentrations in California and Texas.

Property types include traditional commercial real estate properties such as retail (40%), office (15%), hospitality (8%), multifamily (9%), mixed use (6%), health care (5%) and industrial (5%), as well as non-traditional asset classes (12%) such as golf courses, fitness centers, marinas and day care centers.



Property Types

#### Portfolio Summary

Outstanding Balance	\$500MM
# Loans	200
Wtd. Avg. UW DSCR	1.32x
Wtd. Avg. NOI DSCR	1.48x
Wtd. Avg. Cur. LTV	77.5%
Wtd. Avg. Mat. LTV	70.5%
Wtd. Avg. Mort. Rate	6.785%
Wtd. Avg. Rem. Term	67 months



## Portfolio Overview contd.

The mortgage loans' outstanding principal balances as of September 2009 range from \$200 thousand to \$15 million with an average balance of \$2.4 million. Each of the mortgage loans currently accrues interest at an annual fixed rate, which rates range from 5.25% to 8.73%, with a weighted average of 6.78%. The mortgage loans generally have original terms to maturity between three and ten years and provide for an amortization schedule significantly longer than its remaining term to stated maturity with a substantial payment of principal due on its maturity date.

## The LAS Solution

LAS provided the ideal combination of commercial real estate, capital markets and accounting expertise in reviewing and understanding the risks of each credit within the Portfolio and quantifying the associated risks to estimate appropriate loan loss reserves. LAS designed a plan to address the Client's needs and catered its approach specifically to the composition of the Portfolio.

**Phase I:** LAS prepared a database by compiling quantitative and qualitative data for more than 90 characteristics for each asset in the Portfolio. This involved a detailed file review of loan, property and borrower information by examining legal documents, third party reports, rent rolls and leases, credit memos and loan servicing reports. Additionally, LAS performed approximately 30 financial calculations using the underlying data populated from the loan file review. Individual one-page reports rolling up the more than 120 data points were created for an efficient summary of the individual assets. A sample report is attached as an exhibit to this case study.

This database was placed in a proprietary financial model which computed portfolio level statistics and created various tables stratifying a number of loan and property characteristics such as property type, state diversification, mortgage rate, outstanding principal balance, debt service coverage ratio, loan-to-value ratio and remaining term to maturity. Combining the financial model outputs and LAS qualitative inputs, the Portfolio was segmented into two groups:

- (i) loans not currently impaired and
- (ii) loans with potential impairments requiring further analysis.

**Phase II:** For loans where potential impairment could not be reasonably estimated from information gathered through the Phase I review, LAS performed a comprehensive assessment to further segment loans into two categories:

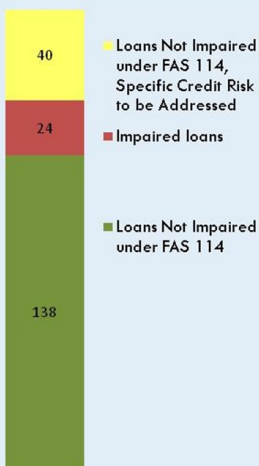
- (iia) probable impairment in accordance with FAS 114 and
- (iib) not currently impaired under FAS 114, but have specific credit risks requiring ongoing attention.

Loans in category (iia) were further evaluated and based on information gathered during Phase I, LAS applied one of two valuation methodologies in determining potential impairment in accordance with FAS 114: Fair Value of Collateral and Present Value of Future Cash Flows.

For loans currently in the foreclosure process or where foreclosure was the likely outcome, LAS applied the Fair Value of Collateral approach which consisted of compiling and reviewing market data, analyzing rent rolls and performing a re-underwriting and cash flow projection on the property to estimate fair value. LAS researched markets and spoke with local brokers to better understand market rents, vacancy and absorption figures and capitalization rates.

For loans where the original loan terms were modified and the loan was current on debt service payments or where the Client was in the process of modifying the loan terms, LAS used the Present Value of Future Cash Flows methodology. Applying this methodology consisted of discounting all future cash flows per the modified loan terms through the maturity date or extended maturity date, using the original interest rate as the discount rate.

LAS provided detailed reports for those loans found to be impaired under FAS 114 using either the Fair Value of Collateral or Present Value of Future Cash Flows methodologies, where applicable. For loans that were not impaired, including loans in Phase I, LAS segmented those assets for review under FAS 5.



Portfolio Breakup By Loan Count

## Client Benefits

The Client was able to achieve their specific objectives in a short time period and was provided with numerous tools to better understand the credit metrics of each asset within the Portfolio. LAS customized the process to match the Client's requirements and portfolio composition and provided a dedicated team of experienced professionals who were able to quickly complete the assignment.

- The Client obtained an independent third party assessment of their loan loss reserves. The FAS 114 and FAS 5 analysis performed by LAS resulted in a quantifiable and more transparent manner of estimating loan losses within the Portfolio than a "Silo" approach which treats all loans similarly despite major differences in the underlying collateral. The "Silo" approach typically results in a larger allowance for losses.
- The database of loan and property characteristics, stratification tables and statistics and asset summary reports were customized for the Client and the Portfolio to satisfy current risk management objectives, but also provide a basis for managing the Portfolio going forward. The detailed individual asset, FAS 114 and FAS 5 reports along with portfolio-level statistical analysis presents the Client with sufficient information for any external or internal reviews.
- LAS identified loans that, while currently performing, had certain future risk characteristics which required immediate attention. LAS provided the Client with asset specific issues and market factors to help prioritize its asset management functions.
- LAS created tools to enable the Client to begin an ongoing process of monitoring the migration of certain identified credit metrics within the Portfolio, thus allowing them to be more proactive with risk management activities. For example, understanding the credit migration of property types and geographic locations permits the Client to focus future lending efforts on specific asset types in markets with the strongest historical performance and to avoid lesser performing areas. Additionally, the financial modeling tool provides more than 120 data fields and calculations on the 200 loans within the Portfolio, supplying the Client with more than 24,000 readily available data points.

## About Lighthouse Advisory Services

Lighthouse Advisory Services is a commercial real estate valuation, advisory and due diligence services firm dedicated to bringing expertise, efficiency and reliability to its clients and the investment community. The members of LAS combine more than 45 years of commercial real estate finance and capital markets experience with the principles of loyalty, honesty and professionalism. LAS adopts a practical approach to its business platform, creating a first class level of service for financial institutions and individuals across the globe.

For more information on Lighthouse Advisory Services' ALLL Analysis platform please contact Walden W. Wong at (212) 398-8316 or [Walden.Wong@LighthouseAS.com](mailto:Walden.Wong@LighthouseAS.com).

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### LAS' Commercial Real Estate Finance Platform:

- Portfolio Valuation and Consulting
- Allowance for Loan and Lease Loss (ALLL) Analysis
- Due Diligence and Underwriting Services
- Loan Portfolio Sales and Advisory
- Defeasance Consulting



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## Exhibit : Sample Loan Summary

Property Name	CONFIDENTIAL	Client Loan #	CONFIDENTIAL
City	Houston	Note Date	CONFIDENTIAL
State	TX	Original Balance	10,300,000
Property Type	Office	Original Loan/Unit	44
Property SubType	Suburban	Current Balance	10,300,000
Total SF/Units	300,000	Current Balance/Unit	44
Occupancy (%)	64.3	Initial Pool Balance %	2.15%
Occupancy Date	7/31/2009	Client Initial Pool Balance %	1.09%
Year Built	1984	Interest Rate (%)	7.3300
Year Renovated	NAP	Amortization Type	Interest Only
Current Appraised Value	9,400,000	Maturity Date	6/1/2009
Current Appraised CapRate (%)	10.00	Remaining I/O Period	0
Current Appraised Value Date	9/1/2009	Remaining Term	0
UW EGI	2,027,223	Remaining Amort Term	NAP
UW Expenses	1,703,335	Title Type	Fee
UW NOI	323,888	Crossed Loan (Y/N)	No
UW NCF	111,670	Purpose	Acquisition
Most Recent EGI	1,766,710	Current LTV (%)	109.57
Most Recent Expenses	1,703,335	Maturity LTV (%)	109.57
Most Recent NOI	63,375	2nd Most Recent NOI DSCR	0.36x
Most Recent NOI Date	1/09-7/09 Annualized	Most Recent NOI DSCR	0.08x
2nd Most Recent NOI	273,221	UW DSCR	0.15x

**Summary 1**  
Loan has matured and borrower/lender are working on an extension and modification of the loan due to failure of borrower to pay loan off at maturity in June 2009. Originally a 3-year IO loan on an acquisition of 3 Houston office buildings with 68% occupancy at time of acquisition, borrower has failed to stabilize the asset for a number of reasons. Property is currently 64% occupied as of the July 2009 rent roll. There are many short term leases at the property and it appears that when one tenant signs a lease, there is another vacating the property or taking less space upon renewal.

**Summary 2**  
Comparing the September 2008 rent roll to the recent July 2009 rent roll shows many of the vacant suites that were vacant a year ago are still vacant. Market research also shows that the average lease in place at the subject is slightly below market which does present upside potential at the property. However, research also shows the Houston market vacancy rates continue to rise and may be reach 20% (Class B space) by Q42009 from their current rate of 15-18%. Also, historical occupancy at the subject property has lagged the market on average 15-20%.

**Summary 3**  
Recent Appraisal performed in May 2009 indicates stabilization of the asset in 2011. Market Value As Is of \$10.2MM and stabilized value of \$13.5MM. Both numbers are aggressive values assuming leases roll to market at \$16psf and stabilized occupancy reaches mid-80s which it has not done since borrower purchased the asset. The property has not been more than 70% occupied the past 3+ years. It will be difficult to obtain financing in this market to take out the current \$10.3MM outstanding balance unless occupancy reaches mid-80s with strong cash flow and solid leases in place.

**Summary 4**  
The sponsors have significant net worth as of 3/31/09 and approx. \$2MM in liquidity. Fair value valuation reflects current rents in place plus additional rental income to achieve an 80% stabilized occupancy. \$14 psf was used for the additional rental income (current 64% to 80% stabilized) based on the current asking rents at this property from market research. A 10% cap rate was applied based on other properties in the market of similar size and value. Loan has been extended - present value valuation assumes a 3-year extension of the loan at a reduced interest rate of 4.0%

### Borrower Information:

Principal Name	Confidential
Recourse (Yes/No)	Yes
Guarantor Net Worth / Current Balance	13.16x
Guarantor Liquidity / Annual Debt Service	2.62x
Guarantor Financials Date	3/31/2009

### Phase II Impairment:

Phase II (Yes/No)	Yes
LAS Value	\$9,378,822
LAS Impairment	\$921,178
LAS Impairment Technique	Present Value

### Tenant Information:

Tenant Name	Size	Tenant SF%	Lease Expiration
Largest Tenant	Unit Size	Largest Tenant SF%	Lease Expiration
Confidential	13,449	5.7%	4/30/2014
2nd Largest Tenant	2nd Unit Size	2nd Largest Tenant SF%	2nd Lease Expiration
Confidential	13,449	5.7%	3/1/2015
3rd Largest Tenant	3rd Unit Size	3rd Largest Tenant SF%	3rd Lease Expiration
Confidential	13,449	5.7%	12/31/2011

### Risk Rating Information:

Risk Rating as of Latest Review	Non-Pass Loss
Risk Rating Review Date	9/1/2009
Risk Rating from Tape	3
Risk Rating from Tape Description	Pass-Satisfactory

### Loan Syndication:

% Sold to Participants	90.00%
Current Sold Amount	\$9,270,000
% Owned by Client	10.00%
Amt Owned by Client	\$1,030,000