#### Introduction

Examination of the preparation, results, and uses of the FHLBank's strategic plan is essential to: (a) gauge the future financial performance of the FHLBank; (b) assess the future change in the value in FHLBank stock; (c) review the likelihood of the FHLBank achieving its future dividend and retained earnings targets; (d) assess the future changes in the market, credit, and operational risk of the FHLBank necessary to achieve its financial objectives; and (e) understand the commitment of management and board of directors to the strategic planning process. Key insights that can be reached with respect to examining the planning process of an FHLBank include, among others things:

- 1) Future FHLBank performance given its operating strategy and its operations, market, and credit risk.
- 2) Future performance of business lines such as advances, investments, and mortgages, and how they contribute to overall profitability.
- 3) The likelihood of an FHLBank attaining its future financial objectives.
- 4) Whether dividend rates paid by the FHLBank are sustainable and whether retained earnings targets are attainable.
- 5) Quality of management. Use of the strategic plan to benchmark FHLBank financial performance and in corporate governance generally.

## **Methodology of Analysis**

There are three primary steps to complete the analysis of an FHLBank's strategic planning process.

- 1) Off-site data collection and analysis. Most analysis of an FHLBank's strategic planning process including document review, data collection and analysis, and coordination with the examiner-in-charge and FHLBank staff can and should be completed off-site. This "groundwork" ought to comprise the bulk of the examiner's time and is essential to formulating initial conclusions regarding the strategic plan of the FHLBank. As detailed later, the examiner should use sufficient judgment to distill the primary issues driving the future performance of the FHLBank.
- 2) Testing initial conclusions on-site. Once the offsite financial analysis has been completed and initial conclusions reached, the examiner should use the time on-site at the FHLBank to ask questions, enter into more detailed discussions, and formalize conclusions regarding the FHLBank's strategic plan. Key areas to review in this stage include: (a) the strategic planning process including the development, assessment, and implementation processes used by management to create the strategic plan, and (b) the use of the strategic plan by the FHLBank's management and board

of directors.

3) Preparation of memorandum for report of examination. Once the off-site and onsite analysis is complete, the examiner should prepare a formal memorandum outlining the strategic planning process of the FHLBank for the report of examination. This memorandum should reflect the key issues regarding the strategic planning process including the rigor of the analysis, reasonableness of the assumptions and the content of the narrative.

In judging the strategic planning process of an FHLBank, there are no clear or absolute metrics. Rather, the FHLBank's future performance needs to be compared with its own past performance and the performance of other FHLBanks with similar operating The examiner should give more weight in the evaluation to future performance measures that are either low or declining. A sample of potential "warning signs" that could indicate problems at an FHLBank is listed below. An examiner must use caution in reading too much into a particular statistic or analyses; rather, the examiner should use a variety of analyses to test a particular initial conclusion.

#### **Issue**

#### **Indication of Analysis**

## **Process**

- 1. Commitment to Planning Lack of evidence of board of directors' involvement in process, such as the strategic planning process does not reflect the board's overall philosophy and vision for the FHLBank's future as discussed at board meetings and/or planning retreat.
  - Strategic plan not updated as needed and discussed with board of directors.
  - Actual results not benchmarked regularly against plan and reported to board of directors.
  - Narrative accompanying financials not detailed enough to understand plan

## 2. Lack of Rigor

- No integrated balance sheet and income statement
- Financial statements in the strategic plan not prepared in accordance with Generally Accepted Accounting Principles (GAAP)
- Annual or quarterly figures not based on monthly data
- Effective date of plan does not match interest rate curve used
- Forecasted performance varies significantly from historical performance with inadequate explanation of change

FHFB Office of Supervision

- \_\_\_\_\_
  - Banding of sensitivities vs. base case too wide

• Limited/no operational or interest-rate sensitivities

• Key financial assumptions not well supported

#### 3. Communication of Plan

- Financial assumptions are not well documented or supported.
- Key financial ratios are not provided during projection period
- Risk factors of plan not well documented
- The adopted plan is not widely disseminated throughout the Bank

#### 4. Reasonableness

- Trend of projected financial ratios differs significantly from historical performance
- Banding of sensitivities vs. base case too wide and/or not well supported
- Implied spreads on business lines vary significantly from historical performance with inadequate explanation of change
- Assumptions predicated on the actions of one or a small number of members

#### **Regulatory Environment**

The primary authorities governing, or relevant to, FHLBank strategic planning are set forth below. The discussion does not address the application of authorities other than the FHLBank Act and the regulations, interpretations and issuances of the Finance Board to the FHLBanks. The examiner should ensure that the application of such authorities to an FHLBank has been considered by the FHLBank and its legal counsel.

# 1) Rules and Regulations of the Federal Housing Finance Board, which include the following parts and sections relevant to strategic planning:

Part 917 of the Finance Board regulations addresses powers and responsibilities of FHLBank boards of directors and senior management. In particular, Section 917.3, Risk Management, Section 917.4 Bank Member Products Policy, and Section 917.6, Internal Control System, are pertinent.

Section 917.5 requires each FHLBank board of directors to have in effect at all times a strategic business plan that describes how the business activities of the institution will achieve its mission consistent with Part 940, Core Mission Activities, of the

\_\_\_\_\_

Finance Board's regulations. Specific requirements are as follows:

a) Enumerate operating goals and objectives for each major business activity and new business activity;

- b) Discuss how the FHLBank will address credit needs and market opportunities identified through ongoing market research and consultations with members, associates and public and private organizations and notify members and associates of relevant programs and initiatives;
- c) Establish quantitative performance goals for FHLBank products related to multifamily housing, small business, small farm and small agri-business lending;
- d) Describe any new business activities or enhancements of existing activities; and
- e) Be supported by appropriate and timely research and analysis of relevant market developments and member demand for FHLBank products and services.

Section 917.5 requires the board of directors to: (a) review the strategic business plan at least annually; (b) amend the plan as appropriate; (c) readopt the plan at least every three years; and (d) establish management reporting requirements and monitor implementation of the strategic business plan and the operating goals and objectives contained in it. In addition, Section 917.5 requires the FHLBank to submit annually to the Finance Board a report and describing the FHLBank's performance in achieving the goals related to multi-family housing, small business activities, small farm and small agri-business lending.

Part 940, Core Mission Activities – As part of its statutory duty to ensure that the FHLBanks carry out their housing finance mission, the Finance Board adopted a regulatory requirement, set forth in section 917.5 of its regulations, that each FHLBank's board of directors have in effect at all times a strategic business plan that describes how the FHLBank's business activities will achieve the mission of the FHLBank consistent with part 940 of the Finance Board's regulations. Section 940.2 of the regulation states the mission of the FHLBanks in its broadest terms and, by way of cross-reference, gives meaning to the strategic business plan requirement of section 917.5 of the regulations. Section 940.3 of the regulation enumerates the specific FHLBank activities that qualify as core mission activities.

Part 980, New Business Activities – requires the FHLBanks not to undertake any new business activities, as defined in the regulation, except in accordance with the procedures set forth in this part of the Finance Board's regulations.

2) Advisory Bulletins of the Federal Housing Finance Board that provide supervisory guidance relating to the topic of strategic planning are the following:

Advisory Bulletin 02-2, dated February 13, 2002, which offers guidance regarding the annual report analyzing and describing the FHLBank's performance in achieving the quantitative performance goals established in the FHLBank's strategic business plan for products related to multi-family housing, small business, small farm and small agri-business lending. (Section 917.5(c)). FHLBanks should submit that report to the Finance Board no later than March 31 of the year following the performance year.

Advisory Bulletin 03-08, dated August 18, 2003, which requires the board of directors to adopt a retained earnings policy and to review the FHLBank's analysis of the adequacy of its retained earnings.

Advisory Bulletin 03-13, dated December 1, 2003, which offers guidance as to the form, content, and timeliness of the financial reports that are completed by the FHLBanks pursuant to Finance Board regulations.

Advisory Bulletin 04-2, dated May 13, 2004, which offers guidance on a minimum standard that Finance Board examiners will expect each FHLBank to satisfy for minutes of board meetings, including all general and executive sessions and board committee meetings.

Advisory Bulletin 05-05, dated May 18, 2005, which seeks to ensure that the board of directors and senior management of each FHLBank should ensure that the FHLBank's risk management process is effective and that the risk management oversight responsibilities of the board of directors, senior management, and other Bank personnel are clearly defined. Moreover, the board of directors and senior management should ensure that the FHLBank's risk management is undertaken on an enterprise-wide basis and the FHLBank's organizational structure is consistent with sound risk management practices.

3) Sarbanes-Oxley Act and regulations and interpretations of the Securities and Exchange Commission thereunder.

The statute was enacted in response to various corporate scandals, and addresses various corporate governance requirements that relate to the responsibilities of corporate boards of directors, the external and internal audit function, and the quality of management's attestation of internal controls pertaining to the accuracy of financial reporting.

4) Statements of Financial Accounting Standards adopted by the Financial Accounting Standards Board establish standards of financial accounting and reporting governing the preparation of financial reports and are officially recognized as authoritative by the Securities and Exchange Commission and American Institute of Certified Public Accountants (AICPA).

5) Securities and Exchange Commission is the primary regulator of the United States

securities markets and requires public companies to disclose meaningful financial

information to the public and enforces the securities laws.

6) American Institute of Certified Public Accountants Professional Standards (AICPA) is the national, professional organization for Certified Public Accountants (CPA). Its mission is to provide members with the resources, information and leadership that enable them to provide professional services to benefit the public as well as employers and clients. In fulfilling its mission, the AICPA works with state

CPA organizations and gives priority to those areas where public reliance on CPA skills is most significant.

**FHLBank Environment** 

Each of the FHLBanks has a strategic planning program. An FHLBank may designate a specific board committee to oversee the development of the strategic plan in addition to a management committee charged with overseeing the development process. The FHLBank should produce multi-year plans with scenario analyses.

In late 2002 and early 2003, the Finance Board conducted a series of targeted reviews to assess the effectiveness of board governance at each of the FHLBanks. One of the areas reviewed was strategic planning. The final report included a list of effective practices observed during the reviews. Those practices include:

1) Surveying directors concerning strategic issues;

2) Holding off-site meetings of directors for the sole purpose of strategic planning;

3) Conducting a comprehensive risk/reward analysis before engaging in new activities;

4) Incorporating scenario analysis into strategic planning, including base-, best-, and worst-case scenarios; and

5) Preparing periodic board reports comparing actual performance to plan and explaining variances.

The report also included the following recommendations for promoting effective strategic planning at all of the FHLBanks:

1) Formally monitoring the FHLBank's actual performance relative to strategic plan goals and objectives quarterly;

2) Integrating executive compensation with achievement of strategic plan goals and objectives; and

3) Formalizing processes to elicit strategic plan input from directors, including an annual strategic planning session with the board of directors.

## Risks Associated with Strategic Planning Process

The primary risks relating to strategic planning are as follows:

## 1) Lack of Sound Corporate Governance (Board of Directors' and Management Oversight)

- a) The board of directors and/or senior management does not have an adequate understanding of, and involvement in, the FHLBank's strategic planning process.
- b) Key policies and procedures pertaining to the strategic planning process have not been developed and/or implemented.
- c) Monitoring of the FHLBank's actual performance relative to the strategic plan is not formalized and reported to the board/senior management on at least a quarterly basis.
- d) Material variances are not presented to and discussed by the board of directors.
- e) Executive compensation is not integrated with achievement of strategic plan goals and objectives.
- f) There is no formal process to elicit strategic plan input from directors.
- g) Development of the strategic plan does not include a "bottom-up" exercise that solicits and uses input from line managers.
- h) Financials used in the strategic plan do not reflect most current available actual financial and portfolio information.
- i) The board of directors and/or management does not view the strategic plan as a useful "roadmap" for running the FHLBank.
- j) Assumptions underlying the strategic plan are not adequately supported by historical data or otherwise.
- k) The strategic plan does not present reasonable alternative scenarios that are helpful to the board/senior management in making strategic choices.

## 2) Operational Risk

- a) Management information systems do not adequately meet the needs of the strategic planning process.
- b) The strategic plan has not been adequately developed and communicated to key personnel to ensure that they are aware of and working towards the goals and objectives of the plan.

## **Examination Guidance**

A work program for Strategic Planning accompanies this narrative. What follows below are illustrative examples of attributes that should be considered by the examiner in completing the analyses required in that work program. In determining the extent of

review and testing to be conducted in completing each analysis, the examiner should take into account his or her assessment of the portfolio of the FHLBank and its tolerance for risk along with the quality and effectiveness of corporate governance, and risk management as they pertain to strategic planning.

#### 1) Document Analysis

Objective: Identify issues which were previously noted and require follow-up during the current examination.

- a) Review the prior report of examination and work papers with respect to: (1) governance; (2) strategic planning; (3) operating performance; and (4) financial condition and performance. Identify issues or concerns that require follow-up or closer review.
- b) Review prior quarterly reviews and correspondence that have been received since the last examination. Identify issues or concerns that require follow-up or closer review.
- c) Review current strategic plan of the FHLBank including all back-up schedules and worksheets. The back-up analysis/model of the strategic plan may be more detailed than what is submitted to senior management and the board of directors. Note if any significant information was not included in the strategic plan information provided to the board of directors/senior management.
- d) Review the minutes of meetings of the FHLBank's board of directors and relevant board and management committees.

#### 2) Review Strategic Planning Process

Objective: Review development, assessment, implementation and updating/revision processes by management to create the strategic plan.

- a) Interview key personnel which may include the senior management, staff member in charge of planning, staff member in charge of modeling, and other FHLBank staff as required to determine:
  - (1) Timeline of development of strategic plan;
  - (2) Timeline of, and events that may trigger, updates/revisions to the strategic plan;
  - (3) Plan review process by senior management and the board of directors; and
  - (4) Date plan was approved by the board of directors and became effective.
- b) Determine the modeling software and other computer systems used to create the

strategic plan.

c) Review the key inputs used to develop the strategic plan including, among other things:

- (1) Growth of key business lines (asset categories), including advances, investments and mortgages;
- (2) Growth of liabilities and other operating costs;
- (3) Net spreads of key asset categories;
- (4) Growth of retained earnings and shareholders' equity; and
- (5) Projected dividend rates.
- d) Develop a general understanding of the process by which the key inputs to the strategic plan are developed including: (1) FHLBank staff/group that developed key assumptions, and (2) how key assumptions were developed.

## 3) Use of the Strategic Plan

Objective: Assess the use of the strategic plan by the FHLBank's management and board of directors.

- a) Interview key personnel that may include senior management, staff member in charge of planning, and other FHLBank staff as required to determine how strategic plan is used by senior management and the board of directors. Potential uses could include, among other things: (1) benchmarking FHLBank operating performance, (2) determining incentive compensation for senior management, and (3) evaluating strategic initiatives of the FHLBank.
- b) Review minutes of meetings of the board of directors and relevant board and management committees and other relevant internal documents, ALCO committee minutes, minutes of the financial operating committee, etc. to determine whether the strategic plan is included or discussed, and in what context.

## 4) Output of the Strategic Plan

Objective: Review the quality/rigor of the output of the strategic planning process.

a) Determine the time series projected in the strategic plan, specifically: (1) the number of years of financial information projected forward and (2) the increments projected such as monthly, quarterly, or annually. If the financial information is projected quarterly or annually, determine whether the information is based on monthly projections.

- b) Assess whether the strategic plan projections include a sufficiently detailed balance sheet, income statement, and listing of key financial ratios for each year
  - Consider whether the line items in the projected financial statements are sufficient to forecast the future operations of the FHLBank in reasonable detail. Note that the back-up analysis/model of the strategic plan may be more detailed than what is submitted to senior management and the board of directors.
  - c) Review the key financial ratios for reasonableness for the projection period such as leverage ratio, return on assets (ROA), return on equity (ROE), net interest spread, and net interest spread by business line (asset class).
  - d) Assess whether the narrative included in the strategic plan is sufficient to adequately explain the key trends and assumptions included in the strategic plan. Particular attention should be paid to the narrative regarding strategic initiatives or changes in strategy of the FHLBank.
  - e) Review the scenario analyses included in the strategic plan. Determine whether the strategic plan includes both: (1) interest-rate sensitivities and (2) operational sensitivities for key assumptions such as advances, investments, and mortgage growth.

## 5) Financial Standards of the Strategic Plan

of the planning horizon.

Objective: Assess whether the financial statements included in the strategic plan are produced according to GAAP or a different financial standard.

- a) Determine whether the projected balance sheet and income statement are produced according to GAAP. If not, determine the standard to which the projected financial statements are produced by interviewing FHLBank staff.
- b) It is potentially problematic if an FHLBank does not use GAAP financials for its strategic plan. Non-GAAP figures make it more difficult to project future retained earnings levels as well as dividend payouts. In addition, non-GAAP financials tend to mask net income volatility. If the financial statements are not produced in accordance with GAAP, interview senior management, staff member in charge of planning, and other FHLBank staff as required and inquire as to the rationale for use of other than GAAP financial statements. Determine any adjustments made to the financial statements for the purposes of calculating retained earnings or dividend payouts.

## 6) Effective Date of the Strategic Plan

Objective: Determine whether the strategic plan was prepared using the most

#### recent financial information.

a) Determine the date that the strategic plan was approved by the board of directors or otherwise became effective.

- b) Assess the interest-rate curve such as forward interest rates, used in the strategic plan and whether it is dated similarly to the effective date of the strategic plan.
- c) Determine whether the "benchmark" balance sheet and income statement from which the financial projections are built coincide with the effective date of the strategic plan.
- d) If the effective dates of the strategic plan, interest-rate curve, and baseline balance sheet and income statements are significantly different, determine the rationale through discussion with appropriate FHLBank staff to determine if the financial projections are in any way compromised.

#### 7) Communications

- a) Determine whether the plan once approved by the board is widely disseminated throughout the Bank.
- b) Does the adopted plan serve as a guide in the development of plans by the FHLBank's business units?

## 8) Advance Growth Assumptions

## Objective: Assess the degree of rigor used to create advance growth assumptions.

- a) Determine how advances growth assumptions were created. There are generally two methodologies used to develop these assumptions:
  - (1) **Bottom-up.** Taking into account the roll-off of the existing advance book, the FHLBank analyzes future potential advance demand on a member-by-member basis (or grouping-by-grouping basis) based on, among other things, likely member demand, existing stock holding, and availability of qualifying collateral. The bottom-up methodology is generally the more rigorous approach.
  - (2) **Top down.** The FHLBank applies a fixed net advances growth rate such as \$100 million per month, to its existing advance book.

If the top-down approach is used, carefully assess the appropriateness and

sufficiency of the assumptions.

b) Create a historical time series of advance balances with the same time increments (monthly, quarterly) as the strategic plan, for at least five years or the length of one interest rate cycle, whichever is greater. Note the historical trend and volatility of advance balances.

- c) Compare the historical growth of advance balances to the projected growth rate. Assess the reasonableness of the forecasted assumptions given historical trends. In particular, review the rationale for significant increases/decreases from historical trend. If the plan embodies a high advances growth rate, does the plan indicate the source of this growth such as significant new members or significant expansion of advances by particular members?
- d) Create the following statistic for all periods in the historical and projected time series: advances/total assets. Note the historical trend and volatility of the ratio. Determine whether the historical trend and volatility change over the projection period. If so, review the narrative to the strategic plan and determine whether the change is adequately explained.

## 9) Net Interest Income from Advances

Objective: Review the reasonableness of forecasted income generated by advances.

- a) Determine methodology used to estimate net interest income generated by advances. Generally, an FHLBank will estimate this by applying a fixed spread to the cost of funds associated with future forecasted advances.
- b) If applicable, review how the fixed advance spread used in the projections was generated. Consider the reasonableness of the fixed spread assumption. This is especially critical if the FHLBank does not track spread by product line.
- c) Create a projected time series of advance net interest income/ total net interest income from the strategic plan over the projection period. Note the trend and projected volatility of advance net interest income. Determine whether the percentage of net interest income derived from advances increases of decreases over the projection period. If so, review the narrative to the strategic plan and determine whether the change is adequately explained.

## 10) Investment Growth Assumptions

Objective: Assess the degree of rigor used to create investment growth assumptions.

- a) Determine how investment growth assumptions were created. There are several steps required to review investment assumptions:
  - (1) **Review investment line items.** Investment line items may include agency MBS, private-label MBS, agency securities, and liquidity investments, among others.
  - (2) **Determine roll-off of existing investment book.** The payoff/expiration of certain investments such as a large tranche of agency securities, could affect the FHLBank's investment profile. Assess whether the roll-off of existing investments is used in the strategic planning process. Review of the expiration schedule for short-term investments is not required.
  - (3) **Review growth projections by line item**. Generally investment balances are projected using: (a) a straight-line growth rate such as a \$100 million/quarter, (b) a multiple of capital such as 3-times total regulatory capital, (c) a percentage of total assets, or (d) a residual.
  - b) Create a historical time series of investments with (1) the same time increments (monthly, quarterly) as the strategic plan for at least five years or the length of one interest rate cycle, whichever is greater and (2) the same line items as the strategic plan. Note the historical trend and volatility of investment balances.
  - c) Compare the historical growth rate of investments to the projected growth rate. Assess the reasonableness of the forecasted assumptions given historical trends. In particular, review the rationale for significant increases/decreases from historical trend.
  - d) Determine whether regulatory investment limitations are met throughout the projection period, such as the 3-times regulatory total capital limit on MBS securities.
  - e) Create the following statistic for all periods in the historical and projected time series: investment line item/total investments and investment line item/total assets for all investment line items. Note the historical trend and volatility of the ratios. Compare the ratios from the historical time series to the end of the projections. Determine whether the ratios increase of decrease over the projection period. If so, review the narrative to the strategic plan and determine whether the change is adequately explained.

#### 11) Net Interest Income from Investments

Objective: Review the reasonableness of forecasted income generated from investments.

a) Determine methodology used to estimate net interest income generated by investments. Generally, an FHLBank will estimate this by applying a fixed

spread to the cost of funds associated with each type of investments.

b) If applicable, review how the fixed spread used in the projections was generated and determine the reasonableness of the fixed spread assumption. This is especially critical if the FHLBank does not track spread by product line.

c) Create a projected time series of investment net interest income/total assets from the strategic plan over the forecast period. Note the trend and projected volatility of investment net interest income. Determine whether the percentage of net interest income derived from investments increases of decreases over the projection period. If so, review the narrative to the strategic plan and determine whether the change is adequately explained.

12) Mortgage Growth Assumptions

Objective: Assess the degree of rigor used to create mortgage growth assumptions.

a) Determine how mortgage growth assumptions were created. There are two key steps required to review investment assumptions:

(1) **Determine roll-off of existing mortgage book.** Assess whether the FHLBank takes into account prepayment of the existing mortgage book when creating mortgage growth assumptions. Determine the "as of date" for interest rates used to estimate the pay down schedule.

(2) **Review growth assumptions.** There are generally two methodologies use to develop these assumptions: (a) **Bottom-up.** Taking into account the roll-off of the existing mortgage book, the FHLBank analyzes future potential mortgage sales on a member-by-member basis (or grouping-by-grouping basis). The bottom-up methodology is generally the more rigorous approach, (b) **Top down.** The FHLBank applies a fixed net mortgage growth rate such as a \$100 million per month, to its existing mortgage book.

If the top-down approach is used, carefully assess the appropriateness and sufficiency of the assumptions.

b) Create a historical time series of mortgage balances with the same time increments (monthly, quarterly) as the strategic plan for at least five years or the length of one interest rate cycle, whichever is greater. Note the historical trend and volatility of mortgage balances.

c) Compare the historical growth rate of mortgages to the projected growth rate.

Assess the reasonableness of the forecasted assumptions given historical trends. In particular, review the rationale for significant increases/decreases from historical trend.

- d) Create the following statistic for all periods in the historical and projected time series: mortgages/total assets. Note the historical trend and volatility of the ratio. Determine whether the ratio increased of decreased over the projection period. If so, review the narrative to the strategic plan and determine whether the change is adequately explained.
- e) Determine whether the strategic plan addresses the relative volume of mortgage product provided by individual members. If a few members are responsible for providing the majority of mortgage product, does the strategic plan include any sensitivity analysis that shows projected volumes without those few members?

## 13) Net Interest Income from Mortgages

# Objective: Review the reasonableness of forecasted income generated from mortgages.

- a) Determine methodology used to estimate net interest income from generated by mortgages. For the existing mortgage book, the FHLBank will generally forecast a net mortgage spread (keep in mind that portfolio mortgage spreads tend to decline over time). For new mortgage product, an FHLBank will generally estimate net spread by applying a fixed spread to the cost of funds associated with the new pool.
- b) If applicable, review how the fixed spread used in the projections was generated and determine the reasonableness of the fixed spread assumption. This is especially critical if the FHLBank does not track spread by product line.
- c) Create a projected time series of mortgage net interest income/total net interest income from the strategic plan over the projection period. Note the trend and projected volatility of investment net interest income. Determine whether the percentage of net interest income derived from mortgages increases of decreases over the projection period. If so, review the narrative to the strategic plan and determine whether the change is adequately explained.

#### 14) Net Interest Income Trend

## Objective: Assess the reasonableness of forecasted net interest income.

a) Create a historical time series of net interest income with the same time increments (monthly, quarterly) as the strategic plan for at least five years or the length of one interest rate cycle, whichever is greater. Note the historical trend

and volatility of net interest income.

b) Compare the historical growth rate of net interest income to the projected growth rate. Assess the reasonableness of the forecasted net interest income growth given historical trends. Review the narrative of the strategic plan to determine whether significant net interest income volatility is adequately explained.

## 15) Overhead Growth Assumptions

Objective: Assess the degree of rigor used to create overhead growth assumptions.

- a) Determine methodology used to estimate overhead expense.
- b) Compare annual overhead expense to that of other FHLBanks by comparing: (1) nominal amount of overhead expense; (2) overhead expense/total assets; and (3) overhead expense/net interest income. Determine the level of FHLBank overhead expense relative to its peers.
- c) Create a historical time series of overhead expense with the same time increments (monthly, quarterly) as the strategic plan for at least five years or the length of one interest rate cycle, whichever is greater. Note the historical trend and volatility of overhead expenses.
- d) Create the following statistic for all periods in the historical and projected time series: overhead expense/total assets, and overhead expense/net interest income. Review the future growth rate of overhead expenses.
- e) Assess the reasonableness of overhead expense assumptions. In particular review strategic initiatives or other projects of the FHLBank to determine if staffing levels are appropriate.

#### 16) Other Gains/Losses Assumptions

Objective: Determine whether assumptions related to net gains/losses from the sale of securities and derivatives and hedging are supported.

- a) Determine whether the projected balance sheet and income statement are produced according to GAAP. If so, determine whether income statement includes line items for other gains/losses.
- b) Create a historical time series of other gains/losses with the same time increments (monthly, quarterly) as the strategic plan for at least five years or the length of one interest rate cycle, whichever is greater. Note the historical trend and volatility of overhead expenses.

c) Compare the historical trend of other gains/losses to the projected trend. Assess the reasonableness of the forecasted assumptions given historical trends. Should particularly large gain/loss arise from sale of securities or derivatives and hedging assess narrative for explanation.

#### 17) Net Income Trend

## Objective: Assess the reasonableness of forecasted net interest income.

- a) Create a historical time series of net income with the same time increments (monthly, quarterly) as the strategic plan for at least five years or the length of one interest rate cycle, whichever is greater. Note the historical trend and volatility of net income.
- b) Compare the historical growth rate of net income to the projected growth rate. Assess the reasonableness of the forecasted net income growth given historical trends. Review the narrative of the strategic plan to determine whether significant net income volatility is adequately explained.

#### 18) Dividend Assumptions

## Objective: Assess dividend and dividend payout assumptions.

- a) Review the FHLBank's current dividend policy from minutes of the board of directors meetings or other sources. Note how the quarterly dividend is determined such as LIBOR plus margin. Note when the quarterly dividend is declared and when it is paid. This information is on the dividend schedule in CRS.
- b) Create a historical time series of: (1) quarterly total dividend payout (\$ millions); (2) quarterly annualized dividend yield; (3) quarterly dividend payout ratio (total dividend payout/net income); and (4) if dividend is indexed, quarterly index level for at least five years or the length of one interest rate cycle, whichever is greater.
- c) Compare the historical growth of the quarterly total dividend payout to its projected growth. Assess whether projected growth is due to higher net income or higher dividend payout ratio. In particular, review the rationale for significant increases/decreases from historical trend.
- d) Compare the historical spread of the quarterly annualized dividend yield to its index (if not indexed, use fed funds) relative to the projected spread. Assess the rationale for significant increases/decreases from historical trend.
- e) Compare the historical trend of the FHLBank's dividend payout ratio relative to the projected trend. Assess the rationale for significant increases/decreases from

historical trend. Note if the payout ratio exceeds 1.

## 19) Retained Earnings Assumptions

## Objective: Assess the degree of rigor used to create retained earnings assumptions.

- a) Review the retained earnings policy of the FHLBank. Determine whether the FHLBank has achieved its retained earnings benchmarks.
- b) Create a historical time series of retained earnings with the same time increments (monthly, quarterly) as the strategic plan for at least five years or the length of one interest rate cycle, whichever is greater.
- c) Compare the historical trend of retained earnings to the projected trend in the strategic plan. Assess the reasonableness of the forecasted assumptions given historical trends.
- d) Create the following statistic: retained earnings/total assets, for both the historical and projected time series. Note the long-and short-term trend of this metric.
- e) Note if: (1) FHLBank does not achieve its retained earnings benchmarks as stated in its policy during the projection period; (2) retained earnings decline during the projection period; and (3) unusual deviance from historical trends not explained in the narrative.

#### 20) Interest-Rate Sensitivity Analysis

#### Objective: Review the interest rate sensitivity analysis, if applicable.

- a) Determine methodology used to create interest-rate sensitivities such as 50 basis point parallel shock, etc.
- b) Compare interest rate curve used when strategic plan became effective to current curve. Note the relative increase/decrease in rate when analyzing sensitivities.
- c) Note whether any of the "shocked" cases produce projections that: (1) significantly reduce net interest income or income; (2) affect ability to pay dividends at current level; or (3) affect ability to meet retained earnings targets.
- d) Assess the reasonableness of the "shocked" cases. Note if modest interest rate shocks create significant changes in the strategic plan financials. Assess the narrative review of scenario analysis.

## 21) Operational Sensitivity Analysis

## Objective: Review the operational sensitivity analysis, if applicable.

- a) Determine which operational variables are sensitized such as the advance growth rate. Assess whether the variables chosen are the drivers of FHLBank growth in the strategic plan. Review the sensitivities used such as the advance growth rate increased 5 percent. Assess the narrative review of scenario analysis.
- b) Note whether any of the sensitized cases produce projections that: (1) significantly reduce net interest income or income; (2) affect ability to pay dividends at current level; or (3) affect ability to meet retained earnings targets.

#### 22) Trend of Financial Ratios

#### Objective: Assess projected financial ratios.

- a) Review the financial ratios provided by the strategic plan during the projection period. These may include leverage ratio, ROA, ROE, net interest spread, and net interest spread by business line (asset class). Note if key projected financial ratios are not included in the strategic plan.
- b) Create a historical quarter time series of leverage ratio, ROA, ROE, net interest spread, and net interest spread by business line or asset class for at least five years or the length of one interest rate cycle, whichever is greater. Note the trend of the financial ratios.
- c) Compare the historical trend of financial ratios to the projected trend. Assess the reasonableness of the forecasted trends.

#### 23) Assessment of Strategic Planning

## Objective: To summarize the results of the review and complete a memorandum.

Summarize the results of strategic planning examined in a separate memorandum. The memorandum should clearly and specifically describe the basis and analysis for the assessment. The memorandum should discuss the quality and effectiveness of strategic and operational planning within the context of corporate governance (strong, satisfactory, supervisory concern, unacceptable). A memorandum must be prepared irrespective of whether the examiner's assessment is positive or negative.

## 24) Items requiring follow-up at the next on-site visitation

Objective: To identify key issues that require follow-up at the next on-site visitation.

Identify key issues that have been communicated to management or the board of directors (written or oral) that require follow-up during the next on-site visitation.