Farm Financial Standards Council

Promoting Uniformity and Integrity in Financial Reporting and Analysis

Financial Guidelines for Agriculture:

An Implementation Guide for Non-Accountants

October 2017

In order to avoid misunderstanding among members of the accounting profession relative to potential conflicts between current generally accepted accounting principles (GAAP) and the farm financial analysis recommendations contained in this report, the Farm Financial Standards Council issues the following statement:

> **The Farm Financial Standards Council (FFSC) recommendations are not written to suggest changes to GAAP; nor should they be construed to serve as a replacement for, or an alternative to, GAAP. In fact, the FFSC recognizes that financial statements prepared in accordance with GAAP may be the ultimate goal for agricultural producers. Currently, however, many producers do not maintain their financial records according to GAAP. It is for these producers—and the lenders, educators, and advisors who work with them—that our recommendations on financial reporting are prepared.**

Members of the Farm Financial Standards Council, who serve without compensation, are persons interested in improving the quality and meaningfulness of financial reporting and financial analysis for all agricultural producers.

INTRODUCTION

The *Financial Guidelines for Agriculture (Guidelines)*, as recommended by the Farm Financial Standards Council (FFSC), were first released in 1991. Since that time, there have been additions, revisions and clarifications to the *Guidelines*, as well as creation of a website and continuous sponsorship of an annual meeting that addresses timely and relevant financial reporting along with analysis topics related to agriculture. In addition, numerous presentations have been given to a variety of audiences, and several articles have been published in an array of industry outlets, both with the intent of increasing awareness and convincing potential users of the benefits from implementing the *Guidelines*.

The goal of implementing the *Guidelines* is to achieve better financial management decision-making for the farm business. This requires knowing the accurate financial position and performance of the farm business, and is represented in the construction and analyses of accurate, complete and timely financial statements. The *Guidelines* assist towards this end, and this Implementation Guide helps with implementing those *Guidelines*. Because this Implementation Guide frequently refers to page numbers in the *Guidelines*, users may find it useful to have a copy of the *Guidelines* available.

REASONS TO IMPLEMENT

There are several reasons to implement the *Guidelines*:

- Improve the accuracy of financial statements used to report financial position and performance to benefit management decision-making and, ultimately, enhance profitability in different agricultural economic cycles.
- Improve the accuracy of financial statements prepared for and presented to lenders for the purpose of attracting and obtaining borrowed funds, and retaining lender relationships during more challenging periods, regardless of the cause.
- Enhance the understanding and knowledge of a farm business, both from a production and financial perspective, including how the two areas interrelate and impact each other based on decisions made.
- Establish strengths that would set a farm business apart from its peers.
- Understand deferred income tax liability for the farm business.
- Determine cost of production (used in conjunction with *Management Accounting Guidelines for Agriculture*).
- Gain a better understanding of financial measures used by lenders to evaluate financial position and performance, and learn how to calculate and interpret the measures.

Managerial accounting provides more granular accounting information around the actual costs of production activities needed to run the farm business. It involves more than simply compiling and recording information needed to prepare taxes. Instead, it includes the preparation of financial information designed for use by managers and decision-makers inside the farm business (Eskew and Jenson, 1986). It can demonstrate a producer’s breakeven point (what is necessary to produce at current price levels to cover expenses), and the impact of actual or proposed investment decisions (land and equipment). The producer can make better decisions and avoid possible mistakes.

Those who have implemented the *Guidelines* have been satisfied with the results as expressed in testimonials.

> *"Healthy Futures is adapting the FFSC financial guidelines to assist rural Native American farmers. The guidelines are invaluable as a template and easy to modify for individual farm management business training!"*
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> *Healthy Futures, Albuquerque, NM*

> *"I have a 3-ring binder with the Farm Financial Standards Council Financial Guidelines in my car at all times. As an extension educator I'm often faced with, "we don't do it that way" or "how do you do that" in programs. A familiarity with the Financial Guidelines helps me answer questions quickly and with authority."*
>
> *Tim Eggers, Field Agricultural Economist*
> *Iowa State University Extension and Outreach*

> *"At some point, you need to put a stake in the ground and see where you are at. All this is part of managerial accounting. The worst thing you can do is wait for your banker to tell you they will no longer loan you money to operate and you had no clue."*
>
> *Marcie Scott, S Ranch LLC*

OBSTACLES TO IMPLEMENTATION

A major obstacle to implementation is often expressed as a question, "How do I get started?" Most agricultural producers and lenders are already using some system to collect and report financial information (i.e., farm record books, recordkeeping software programs, etc.) designed to provide information for two purposes: reporting federal income taxes and securing a loan from a financial institution. That information is **required**, at least annually. With some additional information, the result can be a vastly improved financial reporting program. In addition to the question of how to get started, there is a second obstacle. Generally, producers are not accountants, and in a cost-benefit framework, the cost is often considered too high to fully implement the *Guidelines*. Hence, the FFSC offers this implementation guide, which guides non-accountants in an abbreviated implementation of the *Guidelines*, by applying a checklist approach and discussion of implementation issues. Tools including stages of implementation and an actual checklist are included in this discussion.

GENERAL OVERVIEW

Generally Accepted Accounting Principles (GAAP) provide the official standards for private-sector and governmental agencies and the codified practices and procedures of the accounting profession that provide consistency for accounting transactions and the preparation of the resulting financial statements (Eskew and Jensen, 1986). Although the FFSC recognizes and strongly endorses GAAP, agriculture has some unique practices that result in areas of departure from GAAP. Those departures are specifically addressed in the *Guidelines* and in this implementation guide.

This implementation guide is intended to assist in implementing the *Guidelines*, recognizing that many producers do not have professional training in accounting. As stated on the first page of the *Guidelines*, "The Farm Financial Standards Council (FFSC) recommendations are not written to suggest changes to GAAP; nor should they be construed to serve as a replacement for, or an alternative to, GAAP. In fact, the FFSC recognizes that financial statements prepared in accordance with GAAP may be the ultimate goal for agriculture producers. Currently, however, many producers do not maintain their financial records according to GAAP. It is for those producers–and the lenders, educators, and advisors who work with them–that our recommendations on financial reporting are prepared." Furthermore, as noted on page I-5 of the *Guidelines,* in cases where farm businesses do not have and likely cannot afford to have the internal accounting systems necessary to generate financial statements in accordance with GAAP, the FFSC believes that the identified alternatives contained in the *Guidelines*, if adequately disclosed, still provide information useful for analytical purposes.

Detailed discussions, including the justifications for various recommendations, are provided throughout the *Guidelines*. Rather than repeat those discussions here, interested readers are directed to those discussions via *Guidelines* page numbers that are either listed in the guide or designated by parentheses. The approach is intended to preserve space and to keep the focus of this guide on implementation issues.

Audience

The intended audience for this guide is non-accountants. Accountants often prepare financial statements and reports to satisfy not only lenders and tax reporting requirements, but also management and/or outside parties (investors, non-resident owners, etc.). They have specific accounting expertise that non-accountants do not have. Therefore, the implementation guide focuses on non-accountants, who often prepare balance sheets for an agricultural lender as part of a loan application (using market values to value assets), and who provide their lender with federal income tax returns to support their farm earnings. Most often cash accounting is used to record income and expenses for federal income tax reporting.

Implementation Operational Commitments

Agricultural producers considering implementation of the *Guidelines* will need to make certain commitments for the resulting financial statements to provide useful information. Those commitments will often require changes in daily, or at minimum weekly, operating procedures. At a minimum, those commitments would include the following:

- **Frequency** – Implementation will require monthly (minimum) bookkeeping and review.
- **When to implement** – Implementation will be easiest at the start of a new tax year. Start by recording inventory balances; costs of seed, chemicals, fertilizers in growing crops; accounts receivable; accrued expenses; prepaid expenses; etc. on that date.
- **Software** – At a minimum, users should be using a software program for recording transactions. Accounting software offers significant advantages over other less automated recordkeeping systems, or even spreadsheet-based records. A double-entry accounting system is preferable to a single-entry accounting system, even for cash basis accounting, where the goal is preparing complete and accurate financial statements.
- **Change standard operating procedures/daily operations** – The need to track and record certain information throughout the entire farm business will require acceptance and a commitment to implement the *Guidelines* by not only family members, but also hired employees.

The above commitments will ensure complete and accurate year-end financial statements and avoid potentially large reconciliation differences.

IMPLEMENTATION STAGES

If net income calculated using an accrual-adjusted income statement must equal net income calculated using double-entry accrual accounting, then the probability for implementation by many non-accountants will likely decrease dramatically. For non-accountants who do attempt to implement the *Guidelines* and have that expectation, they should anticipate a major commitment in terms of time and learning and in some cases should expect some level of frustration during the process. However, if some degree of inaccuracy is acceptable, then the probability for implementation will increase.

Consequently, implementation will be discussed in this guide using four stages that provide a common evolutionary path along an implementation continuum (see Table 1).

Stage I is no implementation of the *Guidelines* and would generally be associated with some type of loan activity. The financial statements consist of market-value balance sheets; most likely, not at the beginning/end of the tax reporting period, and a cash basis income statement prepared using information collected solely for tax reporting purposes.

Stage II is the basic implementation stage and involves starting with cash basis income statement information, often reported using Schedule F and various forms (e.g., 4562, 4797) and prepared for the federal income tax return and adjusting those cash amounts for changes in such accounts as inventories, accounts receivable, accrued expenses, etc. reported on beginning and end of year, market-value balance sheets. Stage II may be the easiest stage of implementation, but it will also result in the largest reconciliation difference among financial statements at the end of the year.

The major change from Stage I is preparation of an accrual-adjusted income statement. Often producers question why accrual adjustments are even needed, but one producer addressed that question in a more persuasive manner than any academic argument when she said, "*Why are accrual adjustments made? What does it do? It puts all the income and expenses for one year in that year to see what the business is doing. (It) takes prepaid expenses out and puts deferred income in to look at what actually happened that one year without blending three years into one. There are significant dollars in and out in one year that there needs to be a point in time to look at.*" Marcie Scott, S Ranch LLC.

With that difference, the usefulness of the income measurement using an accrual-adjusted income statement is vastly improved and produces a meaningful measure of periodic net income. Please note that using Schedule F as a source of cash receipts and disbursements may be problematic as the Schedule F, even when filed on a cash-basis, is not necessarily cash.

Stage II may be an acceptable alternative to a cash basis income statement for some producers and their lenders. Examples of financial spreadsheets representing Stage II implementation would be spreadsheets available from several land grant universities (i.e., Iowa State, University of Illinois and Purdue University). An example cash-to-accrual income statement is illustrated in Appendix A, which is an adaptation of Figure 5 from Appendix E of the *Guidelines*.

Stage III is a more advanced stage of implementation that would include internally prepared double-entry records that result in all four of the recommended financial statements and would be used in many cash basis farm accounting systems, with accrual adjustments. This implementation stage would include additional accounts needed for a more complete reconciliation of end-of-year financial statements. The result will be a reduction for reconciliation to zero, if the farm records are maintained correctly.

Table 1. Implementation Continuum

Characteristic Features	Stages			
	I	II	III	IV
Valuation of noncurrent assets	Market (partial-incomplete)	Market	Market/selected cost	Both market and cost
Balance sheet dates	Balance sheets not available for beginning and end of tax year	Beginning and end of tax year	End of tax year or accounting period, if different	End of tax year or accounting period, if different
Basis of accounting	Cash	Cash with accrual-adjusting amounts recorded on the beginning-of-the-year and end-of-the-year balance sheets	Cash recording of revenue and expense transactions with accrual-adjusting entries recorded on ending balance sheet dates	Cash or accrual recording of revenue and expense transactions with accrual-adjusting entries recorded on ending balance sheet dates
Source documents	Cash basis income tax return	Cash basis income tax return; beginning and ending balance sheets	Internal (on-farm) prepared double-entry records of all financial statement accounts (i.e., farm accounting system software programs)	Internal or external (accountant-prepared) double-entry records for all financial statement accounts
Financial statements required	None	Beginning-of-tax year balance sheet; end-of tax year balance sheet; accrual-adjusted income statement for tax year	End-of-year balance sheet; accrual-adjusted income statement; statement of owner equity; statement of cash flows	End-of-accounting period balance sheet; accrual-adjusted income statement; statement of owner equity; statement of cash flows
Financial statements prepared in conformity with the *Guidelines*	N/A	Minimal	Partial adoption of Financial Guidelines, including a set of key financial statements	Extensive adoption of Financial Guidelines, including a complete set of financial statements
Financial statements reconcile	N/A	Reconciliation differences inevitable	Reconciliation differences should be zero if farm records are maintained properly	Only zero reconciliation difference is acceptable
Usefulness	Limited information about farm financial performance	Useful income statement and balance sheet measures for small added cost in time and effort; but yields an incomplete financial picture for which the accuracy is questionable	Complete, and more accurate, financial statements, but consistency from year to year and comparability to similar farms is questionable	Complete, accurate, consistent, and comparable to similar farms that prepare financial statements in conformity with Financial Guidelines

Stage IV would occur with total implementation of all the recommendations in the *Guidelines* and result in both market and cost basis balance sheets and a double-entry accrual-adjusted accounting system. The ultimate goal would result in a zero reconciliation difference.

Managerial accounting guidelines, along with four stages of implementation specific to managerial accounting are available in the FFSC *Management Accounting Guidelines for Agriculture*. That publication provides specific guidelines as related to accounting information captured, stored, and reported for that purpose.

Degree of Accuracy Tradeoff

Not all users will likely implement all the recommendations provided in the *Guidelines*, which will result in reconciliation differences of varying amounts along the implementation continuum. The suggestions herein are provided to minimize those differences. Moreover, implementation of the *Guidelines* will be influenced by features inherent to using the base documents mentioned above, which may be inaccurate and, in some cases, incomplete. The likelihood of inaccuracy has been acknowledged since origination of the FFSC, with departures from Generally Accepted Accounting Principles (GAAP) noted on pages II-2 through II-5 of the *Guidelines*.

Hence, a major implementation issue relates to what is an acceptable degree of inaccuracy for the financial statements, particularly an accrual-adjusted income statement. Stage I implementation would use incomplete cash receipts and disbursements collected for federal income tax reporting purposes combined with inaccurate or incomplete market-value balance sheets as underlying documents from which to prepare the accrual-adjusted income statement; the result would likely be the largest reconciliation difference. Whereas, Stage III implementation would likely involve an accountant, but would likely result in a zero reconciliation difference.

A System of Financial Statements

"The FFSC identifies financial statements to include: balance sheet, income statement, statement of cash flows, and statement of owner equity" (II-6). Furthermore, "Financial statements should be prepared on a consistent basis (i.e., the income statement, statement of cash flows, and statement of owner equity cover the identical time period and the balance sheet provides values for the beginning and end of that period)" (II-6).

Consequently, the interrelationships of the financial statements dictate the statements reconcile, with any differences often accumulating in the amount withdrawn for family living reported on the statement of owner equity and the ending cash balance reported on the statement of cash flows. In instances in which amounts calculated do not equal amounts reported on the beginning and end-of-year balance sheets, much of the inaccuracy can be traced to the underlying information used to complete the statements, which is often caused by four major implementation issues discussed below.

One major issue is that borrowers who have not implemented the *Guidelines* do not prepare their balance sheets "as of" the first and last day of the accounting period, which for many farm businesses is the calendar year. Instead, their balance sheets reflect "as of" the date they apply for or renew their loan. Therefore, the first major implementation issue is that beginning and end-of-year balance sheets for the business must be prepared "as of" the first and last days of the tax reporting period (II-6), which in most cases is a calendar year. For some producers who borrow money, balance sheets may be prepared "as of" beginning and end-of-year for the tax reporting period and when submitting a loan application to a lender.

Second, for retained capital reported on the statement of owner equity to reconcile for beginning and end-of-year balance sheets, it is recommended that certain capital assets be valued at net book value (II-10, II-12-13), which will be discussed in detail in the section on the balance sheet in this guide. In practice, for many non-accountant agricultural preparers, those assets are valued at market values.

The recommendation will require preparers to determine and report net book values for specified capital assets to reduce the retained capital reconciliation difference.

Third, when information reported on balance sheets prepared "as of" the beginning and end-of-year is combined with cash revenue, cash expenses, and depreciation expense, the major components are available to convert net income calculated on a cash basis to net income calculated on an accrual-adjusted basis (A-10). However, all the information needed for an accurate reconciliation of retained capital may not be available (i.e., gains and losses on the sale of capital assets, etc.). The adjustment procedure is outlined on page E-3. Examples of a cash basis income statement and an accrual-adjusted income statement are presented in the *Guidelines* (E-8 and E-9). Appendix E of the *Guidelines* provides a detailed discussion of the information needed to convert cash to accrual-adjusted.

Fourth, once an accrual-adjusted income statement has been prepared, it can then be combined with the amount withdrawn for labor and management (i.e., withdrawals for family living for sole proprietorships), non-farm income contributed to the farm business, other capital contributions, gifts (received or made), inheritances and distributions to calculate change in retained capital on the statement of owner equity (A-12). Often the amount withdrawn for family living is either unknown or is the result of some unsubstantiated, often vague, estimate. Since an inaccurate accrual-adjusted net income is combined with an inaccurate estimate of the amount withdrawn for labor and management, an accurate reconciliation of retained capital on the statement of owner equity is impossible, resulting in some degree of inaccuracy.

An example set of the four recommended financial statements including beginning and end-of-year balance sheets, accrual-adjusted income statement, statement of cash flows, and statement of owner equity is provided in Appendix A of the *Guidelines* (A-2 through A-12). Additional information is needed on net book value for depreciable capital assets (A-9), cost and market values for specified capital assets (II-13), as well as other information (A-10 and A-11). The interrelationships of the four statements, the importance of calculating net income on an accrual-adjusted basis, and the need to provide an accurate estimate of the amount withdrawn for family living are clearly illustrated (A-10 through A-11).

Finally, a question often asked when considering implementation is, "Why is the projected cash flow statement omitted from the list of recommended financial statements?" The projected cash flow statement is viewed by the FFSC as a budgeting tool used to project and manage liquidity of the business in the future. Hence, it is termed a "cash budget." It is not included as a financial statement used to report the historical financial position and performance. The list included in the *Guidelines* is the minimum set. So, omission of the cash budget should not be interpreted as meaning it is not useful; instead, it should be viewed as an additional statement that supplements the four recommended statements.

BALANCE SHEET

Format

This section assumes a basic understanding of the organization and preparation of a balance sheet, so the discussion focuses on implementation issues. A specific format for the balance sheet is not recommended by the FFSC (II-8), but there are recommendations related to the entity for which the balance sheet is prepared (II- 9 and I-10), materiality (II-8 and Appendix I), valuation methods (II-12 and I-13) and recording specific assets (i.e., growing crops) (II-2 through I-5). Several specific recommendations that directly affect implementation for many agricultural producers, but not discussed in detail above (i.e., “as of” dates for the beginning and end-of-year balance sheets) are discussed in the following sections.

Asset and Liability Classification

In the *Guidelines*, it is recommended assets and liabilities be classified into current and non-current. The recommendation presents an implementation issue for some non-accountant preparers, since the more widely used practice in agriculture is to use three classes; current, intermediate and long-term. One practical way to address the issue is to report intermediate and long-term assets and liabilities as sub-classes of the non-current class.

The classification issue is discussed in detail in the *Guidelines*. A specific section on **Classification of Current Assets and Current Liabilities** is provided on pages II-41 and II-42, with recommendations provided for several specified assets. In addition, at a minimum, the balance sheet should separately identify four categories of non-current assets: machinery and equipment, breeding livestock, buildings and improvements, and land (II-9 and II-10). Likewise, non-current liabilities should separately identify two categories: real estate debt and notes payable, other than real estate debt (II-9).

Asset Valuation

The recommendation to report both cost and market values on a balance sheet presents an implementation issue, since the more common, traditional practice in agriculture is to value all assets using market values. However, both cost and fair market values are recommended for capital assets (II-12 and II-13), which can be disclosed on the face of the balance sheet with parenthetical, footnote, or supporting schedule disclosure of cost and accumulated depreciation amounts, or by utilizing a double-column approach (II-10). Valuation recommendations for many assets common to agriculture are provided on page II-11, with example balance sheets using cost and fair market values, using supporting schedule disclosure (A-2 through A-9).

Inventories

Reporting inventory quantities in the appropriate category on a balance sheet is an implementation issue for some farm businesses since some grain producers sell grain produced and others feed grain produced to livestock and some producers do both. A detailed discussion on **inventories other than breeding livestock** is provided (II- 25 through II-28), including specific recommendations on inventories raised/harvested for sale, inventories raised/harvested to be used in the production process, inventories purchased for resale, and inventories purchased for use in the production process.

In addition, many livestock producers need to report inventories of breeding livestock, both raised and purchased. A detailed discussion on reporting and valuing **raised breeding livestock,** including the calculation and use of base value, is provided (II-36 through II-38). The valuation of **purchased breeding livestock** is discussed on page II-38.

Hedging

For many farm businesses, hedging is an integral part of the marketing plan and is one of the tools used to manage market risk. Properly reporting equity in the hedge accounts often presents an implementation challenge for many non-accountants. The types of hedges (i.e., fair value and cash flow) and the recommended approaches for recording and reporting hedge accounts are provided (II-28 through II-34). Detailed hedging examples for both grain and livestock, including tax treatment, are provided in Appendix H of the *Guidelines*.

Perennial Crops

Perennial crops present an implementation issue because the costs associated with the establishment and production of those crops normally span multiple years, which results in reporting issues for both the balance sheet and the income statement. The implementation issue relates to the identification, collection, allocation and reporting of development versus production costs. Recommendations on how to report both development and production costs for perennial crops are provided (II-40 and II-41).

Government Loan Programs

Government loan programs have been, at various times throughout history, widely used across U.S. agriculture. Since users of government loans have the option of either repaying the loan plus interest or forfeiting the crop to the Commodity Credit Corporation and keeping the loan proceeds with no interest charged, reporting issues arise. A discussion of the three basic approaches to reporting government loans is provided (II-41) along with the FFSC recommendation.

Depreciation

An implementation issue that surfaces frequently is the method used for depreciation of depreciable capital assets, specifically book depreciation versus tax depreciation. Tax depreciation methods, which are oftentimes highly accelerated in the year of purchase, are generally not a suitable basis for establishing depreciation expense reported on an income statement because they result in significant understatements of net income in years of major purchases and may cause significant swings in depreciation expense and net income from year to year. Depreciation is subject to several different calculation approaches. These approaches are discussed in detail in the *Guidelines*, along with the advantages and disadvantages of each (II-23 through II-25). The conclusions and recommendations of the FFSC regarding depreciation are provided (II-25) and are listed below.

1. The FFSC encourages producers to adopt book depreciation methods with appropriate useful lives and salvage values for the most accurate allocation of the purchase price of a depreciable asset over its useful life.

2. Depreciation expense is a significant component of total expense on most farm operations, and it is important that it be treated in a manner that will provide results that are as consistent as possible and that allow for reasonable comparative analysis. No depreciation method is perfect, and it is important to note that depreciation is a method of allocation, not of valuation. Generally, methods, which follow the "market-based" approach (II-24) will not result in numbers that are consistent or comparable and should not be used.

3. Depreciation expensing for specific assets may change as business plans change for the useful life and/or the expected salvage value of the asset.

4. The depreciation method utilized in preparing the financial statements should be clearly disclosed, either by identifying the method or by including supplementary schedules detailing the calculation.

An example of how to record and report book value depreciation is provided (A-9).

Capital Leases

Capital leases have become more widely used in agriculture due to the specialization and size of some items of machinery and equipment as well as some facilities. For agricultural lenders, implementation issues arise particularly for the balance sheet and portrayal of financial condition.

Failure to report capital lease obligations on the balance sheet misrepresents the solvency position of the business. In addition, failure to accurately classify lease obligations into current and non-current classes misrepresents the liquidity position of the business. Reporting capital lease obligations only as liabilities and omitting an offsetting position on the asset side of the balance sheet adversely affects owner equity. Recommendations on how to report capital leases for credit analysis purposes are provided (II-40). A detailed example is provided in Appendix G of the *Guidelines*.

Cooperatives

Cooperatives are used widely in agriculture as input suppliers, marketing outlets, and as service providers. Consequently, many agricultural producers own equity in cooperatives in the form of membership certificates. The certificates are not traded on open exchanges, so reporting issues arise as to how to both classify and value the certificates on the balance sheet. The FFSC recommendations are provided (II-39 and II-40).

Taxes, including Deferred Taxes

Every business faces the issue of reporting accrued taxes on the balance sheet. That issue is compounded in agriculture when market values are used to report assets on a balance sheet. That practice results in the creation of deferred tax liabilities that are contingent upon the sale of the assets. In practice, most farm businesses simply ignore that contingent liability, while including all the valuation equity, which misrepresents the equity position of the business. Implementation issues arise for both calculating and reporting deferred taxes on the balance sheet. The issue is discussed in detail (II-18 through II-23), along with a step-by-step procedure that can be used to calculate deferred taxes on values assigned to respective assets.

Personal Assets/Liabilities and Non-Farm Income

Many farm businesses still retain characteristics of a small, sole proprietor, family-operated business, and do not fully segregate business and personal assets, liabilities and non-farm income. A common example is the personal residence, which is often included as part of the farmstead. Hence, the farmstead would include business assets such as machinery sheds, grain storage, etc. as well as the personal residence. The FFSC states it is preferable to have separate financial statements for business and personal, but acknowledges that in certain cases, particularly involving smaller operations, combined business and personal statements will continue to be used (II-14). This lack of segregation and the related recommendations regarding the balance sheet, income statement and statement of owner equity are discussed (II-13 and II-14). An example of how to report personal assets and liabilities on the balance sheet and the statement of owner equity is provided (A-2 and A-12).

INCOME STATEMENT

The *Guidelines* acknowledge the existence and imply the use of other financial reporting programs to prepare an accrual-adjusted income statement by stating in the definition "…incorporating into the cash basis numbers the changes to accounts receivable, inventories, prepaid expenses, raised breeding livestock, accounts payable, accrued liabilities, deferred income taxes and other accrual amounts not otherwise recorded in the cash basis…" (Glossary-2). The major causes of inaccuracy associated with an accrual-adjusted income statement were discussed in the section entitled "System of Financial Statements" and will not be repeated here.

An often-asked question is, "How much difference is there between net incomes calculated using cash versus accrual-adjusted income statements?" The magnitude of that difference is provided by a study of Illinois producers (Barnard, Ellinger, & Wilson, 2010), which found the difference between

Net Farm Income calculated using a cash income statement versus an accrual-adjusted income statement was 66 percent (IV-6). Another study discussed on page E-2 of the *Guidelines* found, an 85 percent average annual difference in net farm income when measured on an accrual adjusted basis versus a cash basis.

The essential pieces of financial information needed to prepare an accrual-adjusted income statement are cash receipts and disbursements and the annual depreciation allowance, as well as beginning and end-of-year balance sheets. When an approximation of net income using an accrual-adjusted income statement is acceptable, these amounts can be transferred directly from the internal accounting system documents needed to prepare the federal income tax return. Appendix E of the *Guidelines* provides examples and identifies specific accounts needed to make the accrual adjustments needed to make the conversion.

WITHDRAWALS FOR FAMILY LIVING

Examples of the statements of owner equity and cash flows are provided in Appendix A of the *Guidelines* (A-11 and 12). A key piece of information needed for reconciliation of the owner equity and cash accounts for both statements is the amount for unpaid labor and management. The FFSC acknowledged in the 1991 Report, that in many cases, it would be reasonable to utilize the amount of family living withdrawals as an estimate of the value of unpaid labor and management (II-17). However, that amount is often unavailable for many farm businesses, because most do not keep detailed records on family living expenditures. Since a number is needed for the cash and retained capital accounts to reconcile beginning and end-of-the year balance sheets in an interrelated system, an estimate is often used. That estimate can range from an admittedly inaccurate, but somewhat informed, estimate to an outright guess.

When no estimate is provided and the two statements are prepared, the amount needed to reconcile each statement can range from an unrealistically small amount to a number that implies a level of extravagance that most producers typically deny. Of course, the desired approach is to record each amount withdrawn for family living expenditures and to assign that amount in a family living expenditure category. However, most producers are not willing to devote the time needed to record such detail. The challenge for those considering implementation of the *Guidelines* is how to provide a realistic amount for family living withdrawals without being overly burdensome.

A practical approach that is limited in the ability to provide useful information on individual personal expenditures, but one that does provide a more accurate estimate of the amount withdrawn is to have two separate checking accounts. One account is used exclusively for the farm business and the second is used exclusively for personal expenditures. An amount is withdrawn periodically (i.e., monthly) from the business account and deposited in the personal account. At the end of the year, the checking account balances reported at the beginning and end of the year are reconciled with the summation of amounts transferred throughout the year to calculate an estimate of family living expenditures.

It is essential that payments for personal expenditures be made only from the personal account, with additions into the account transferred from the business account or deposited from off-farm income. No family living or personal expenditures should be paid from the business account. Likewise, no business expenditures should be paid from the personal account. Also, the producer should never take cash for pocket money out of deposits of farm business income. If the producer maintains a savings account, always deposit farm business income in the farm business checking account, and then transfer it out to the savings account rather than initially depositing the income directly into the savings account.

FINANCIAL ANALYSIS AND BENCHMARKING

Financial Criteria and Measures

Financial measures included in the *Guidelines* are not intended to be all-inclusive, but do provide a framework from which to conduct financial analysis for a farm business (II-1). A discussion of the financial criteria and each financial measure recommended, as well as the calculations and limitations of each is provided in the *Guidelines* (III-1 through III-24). Those discussions will not be repeated here, but potential users of the *Guidelines* should review those calculations and ensure they use financial information prepared in accordance with the recommendations of the FFSC when calculating the measures (i.e., accrual-adjusted versus cash income statements). Spending time analyzing the financial statement measures and the recommended ratios is the key to achieving the full benefits of implementation. Do not stop with one year's results. The information becomes more valuable as more years of results are added and trends in financial position and performance emerge.

Recommendations on how to use financial information are provided (IV-1 through IV-11). Example calculations using the example financial statements provided in Appendix A are provided in Appendix C.

Benchmarking

As stated on page IV-12, benchmarking can be used to help evaluate financial position and performance to improve decisions, but attention is needed to ensure comparability of the data to the farm business. Useful information for many potential users of the *Guidelines* is the source and availability of comparative data that can be used for benchmarking. The *Guidelines* discuss several issues to consider when selecting a source for benchmarking, including selection of financial benchmarks (IV-3 and IV-4), comparability from an accounting perspective (IV-4 and IV-5), accounting methods (IV-5 through IV-6), business characteristics (IV-6 through IV-8) and financial data stratification (IV-8 through IV-10). Several state farm and ranch record-keeping programs provide summaries of comparative data collected and analyzed (i.e., Illinois, Kansas, Kentucky, Minnesota, etc.). An example of the financial benchmarks published by the Center for Farm Financial Management (https://www.cffm.umn.edu) is provided (IV-9 and IV-10).

FINAL COMMENT

Implementation of the *Guidelines* often means different things to different users. To address that, an implementation continuum is used to present the stages of implementation and the reporting requirements needed as one moves along the continuum. The reporting requirements are summarized into an Implementation Checklist in Appendix B in this document. The checklist enables users to assess the information needed at the various stages of implementation as well as the benefits and costs associated with moving to each successive stage of implementation.

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APPENDIX A: EXAMPLE OF CASH-TO-ACCRUAL INCOME STATEMENT

Income Statement, Accrual-Adjusted Basis
Farm Operation Name
For the Year Ended, 12/31/X6

	Revenues			*Notes*
a	Cash Receipts from Grain Sales			*Cash Receipts[1]*
b	Change in Grain Inventory			*Ending less Beginning B/S value*
c	Cash Receipts from Market Livestock Sales			*Cash Receipts[1]*
d	Change in Market Livestock Inventory			*Ending less Beginning B/S value*
e	Cash Government Program Payments			*Cash Receipts[1]*
f	Other Cash Receipts			*Cash Receipts[1]*
g	Change in Accounts Receivable			*Ending less Beginning B/S value*
h	**Gross Revenues** *(a + b + c + d + e + f + g)*			
	Expenses			
i	Cash Disbursements for Operating Expenses			*Cash Disbursements[2]*
j	Change in Accounts Payable			*Ending less Beginning B/S value*
k	Change in Prepaid Expenses			*Beginning less Ending B/S value*
l	Change in Unused Supplies			*Beginning less Ending B/S value*
m	Change in Investments in Growing Crops			*Beginning less Ending B/S value*
n	Depreciation[3]/Amortization			
o	**Total Operating Expenses** *(i + j + k + l + m + n)*			
p	**Income from Operations** *(h – o)*			
	Other Revenues (Expenses)			
q	Dividend/Interest Income			
r	Gain/Loss on Sale of Farm Capital Assets[4]			
	Interest Expense			
s	Cash Paid for Interest			*Cash Disbursements[2]*
t	Change in Accrued Interest			*Ending less Beginning B/S value*
u	Total Interest Expense *(s + t)*			
v	Miscellaneous Expense			
w	**Total Other Revenues (Expenses)** *(q + r – u – v)*			
x	**Income before Income Taxes (Net Farm Income)** *(p + w)*			
	Income Tax Expense			
y	Income & Self-Employment Taxes Paid			*Cash Disbursements[2]*
z	Change in Income & Self-Employment Taxes Payable			*Ending less Beginning B/S value*
aa	Changes in Current Portion of Deferred Taxes			*Ending less Beginning B/S value*
ab	**Total Income Tax Expense** *(y + z + aa)*			
ac	**Net Income, Accrual-Adjusted** *(x – ab)*			

[1]Cash receipts received during the year. If using the Schedule F as a source of cash-basis information, keep in mind that some Schedule F items may not be cash such as deferred sales contracts, CCC loans, fuel tax credits, patronage dividends, etc. Necessary for measurement of accrual-adjusted net income is the actual cash received during the period.

[2]Cash disbursements paid during the year. If using the Schedule F as a source of cash-basis information, again keep in mind that some Schedule F items may not be cash such as purchases of feeder livestock, pension & profit-sharing plans, employee benefits, etc. The actual cash paid during the year is the amount needed on this form.

[3]Should be based on book depreciation. If tax depreciation is used, note that net income may be understated due to accelerated depreciation methods.

[4]The gain/loss on sale should be determined based on the difference between sales price and the book value of the asset sold. Assistance may be necessary to determine the cost-basis of sold assets.

APPENDIX B: IMPLEMENTATION CHECKLIST

Stage I

- [ ] Cash basis tax return, partial (incomplete) market value balance sheet.

Stage II

- [ ] Beginning and end-of-year balance sheets prepared at the start and end of the fiscal year, usually a calendar year.
- [ ] Market values reported for business assets, supplemented with cost values for:
  - [ ] marketable securities
  - [ ] breeding livestock
  - [ ] machinery and equipment
  - [ ] real estate
- [ ] Personal assets and liabilities reported separately from business assets, including the residence.
- [ ] Cash receipts and disbursements (generally the source information for tax preparation) or Schedule F of the federal income tax return.
- [ ] Sales of business assets such as breeding livestock, machinery, equipment, etc. or Form 4797 of the federal income tax return.
- [ ] Purchases of business assets such as breeding livestock, machinery, equipment, land, buildings, improvements, etc.; some evidence of this information may be on Form 4562 of the federal income tax return.
- [ ] Separate personal and business checking accounts, and family living expenses paid exclusively from the personal checking account.

Stage III

- [ ] All assets reported using both market and cost basis valuation methods.
- [ ] Deferred tax liabilities reported in conjunction with market value asset values.

Stage IV

- [ ] Chart of accounts needed to prepare a balance sheet using the cost basis valuation method.
- [ ] Chart of accounts needed to prepare an income statement using double-entry accrual accounting.