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Business Transfer Guide for the Junior Generation

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Junior Generation Workbook Table of Contents

Worksheets

Introduction: Your Personal Business Transfer Guide

What is a Business Transfer?

For the purposes of this workbook, a business transfer is defined as one or more of these three scenarios.

Transferring business management decision making
Transferring the control of business assets
Transferring ownership of business assets

What about partnerships?

If you are considering working together with the senior generation for a while, you may be considering a partnership type of arrangement. Keep in mind, there are many different ways of working together than a general partnership.

Do you need a facilitator?

These workbooks are designed to be used with a facilitator. This person has undergone facilitation and business transfer training and can be very helpful to you and your family.

> *Note: A facilitator is a third-party unbiased person that can step back from the emotions and assumptions in a situation. They direct conversation making sure the parties are respectful, focused, and helps the parties to find additional tools and resources to help when challenges arise. It is not the facilitator's role to make decisions for the parties involved, but they can make suggestions. A facilitator should be someone that honors confidentiality.*

A facilitator can help focus people to get tough issues resolved, provide information and resources, and keep the transfer process moving. If you would like a facilitator to help you work through this workbook, please call NY FarmNet at 1-800-547-3276. We have financial and personal consultants to help facilitate your family meetings.

Using this Workbook

Farm transfer decisions are often complicated; however, it is possible to reach a working agreement. This workbook is a step-by-step process to be taken at your own pace with the help of a business transfer facilitator. The steps in this workbook are meant as a guide- you may use them in a different order if you wish. Skipping steps is not recommended; you should at least review the materials in each chapter before moving forward.

No one transition formula or plan is right for everyone. Each plan will differ based on your goals and those of the senior generation. The size and scope of a business entity also play a role *in a business decision. Be sure to give good weight to the communication and goal-setting section of this workbook (Step 4).*

Chapter Heading Symbols

Business transfer has three basic disciplines: family/people (or business entity), communications, legal, and financial. Throughout this workbook, you will see these disciplines represented by three symbols:

 Family  Legal  Financial

These symbols will help you decide which expert may be able to assist you with a particular step in this workbook. For example, financial topics are best handled by an accountant, lender, or business consultant; while legal matters are best handled by the appropriate attorney for either estate planning, or real estate transactions. Family matters such as communication issues are best handled by your family, but with the assistance of a professional personal consultant or a trained facilitator.

NY FarmNet provides financial and personal consultants to facilitate farm transfers in the state of New York. Please contact them by calling 1-800-547-3276.

Symbols found throughout this workbook

There are three symbols you will see throughout this workbook. They represent discussion points, decision points, and more information.

 Discussion points

There will be many questions to answer and discuss along the way. This symbol will alert you that you need to discuss an important question or fill out a worksheet. Most of the worksheets are included in this workbook

Decision Points

At each step in the transfer process, you will be asked to make decisions regarding the future of your farm. This will help you narrow down the options that fit your particular situation. *Before you move to the next step in the process, you will need to answer these questions.*

 More Information

If you are in doubt, these symbols will direct you on how to get more information from your business transfer facilitator. If you do not have a facilitator and need more information, please call NY FarmNet at 1-800-547-3276

Step 1: Why Do You Want to Farm?

Reality Check

Farming can provide a rewarding career. However, the reality check is that farming is a challenging occupation. Talk with your family and discuss what you are willing to "put up with" if you decide on a career in farming.

See Exercise 1. Positives and Pitfalls of Farming. Is farming the right career for me and my family?

Are you and your family willing to struggle through the possible pitfalls of operating a farm business? Think about how to overcome the pitfalls using risk management, other employment, etc to be able to enjoy the positives of farming like being your own boss, being a producer.

Other expectations

Realize that the list above is just some of the key discussion points to get the conversation started. You, your spouse, and your children may have other questions about what their future on the farm will be like (i.e. housing, work expectations, ability to participate in family/community events.)

What are your expectations from the farm business?

For instance: Are you looking to be a co-owner with the senior generation? What income do you need to support your lifestyle? How much time off do you want?

If you are looking to farm with the senior generation, you will need to discuss these expectations of farm life with them. You need to know if they think your expectations are realistic.

Future goals for your farm family

Now that you have discussed the possible realities and expectations with your family and the senior generation, you need to envision what you want the farm to be like in the future.

See Exercise 2 Worksheets: Goal Setting. Complete the SWOT analysis and personal goals section of the Goal Setting Worksheet.

Before continuing to the next step, make sure you have completed the following:

- Discussed farming realities with my family
- Listed our farm career expectations for future discussion with the senior generation
- Completed the personal goals section of the Goal Setting Worksheet

Step 2: Do You Have What You Need to Get Started?

The Three E's

Getting started in farming is like applying for a job and a housing loan at the same time. For a job, you need to show that you have adequate experience and education to handle the work. For a house loan, you need to show that you can handle payments. So when you are considering getting into farming, rate yourself on the Three E's: experience, equity, and education. The statistics given below were gathered from a survey of banker, Cornell Cooperative Extension Educators, and agricultural producers. The survey asked each person how much experience, equity, and education was necessary was necessary in order to rent, work in, or buy a farm. Use these as a guideline for your own "Getting Started Plan".

Experience

There is no substitute for real-life farming experience. This was the highest ranking criteria for lenders and agricultural producers alike. While the amount of experience deemed necessary to start farming varied, the survey results show that significant experience is important whether working into a farm or buying one. While "how-to" experience was highly regarded, it seemed that management experience was the limiting factor for new farmers. For example, someone may have grown up or worked on a farm doing "chores", but the person never made critical decisions regarding the daily farm operations. As a part of managing a farm you must market commodities, determine production, handle labor, deal with government agencies and regulations (for example Farm Service Agency, Natural Resource Conservation Agency, Department of Environmental Conservation, etc.) and make land and financial decisions.

	"How-To" Experience	Management Experience
To Rent a Farm	5-7 years	0-3 years
To Work into a Farm	7-10 years	0-5 years
To Purchase a Farm	8+ years	3-10 years

What experience do you have/need? See Exercise 3 Worksheet: Part One: Experience

Equity
How much money, equipment, or livestock do you have? Whether you are renting a farm, working your way into a farm, or buying a farm, you need resources! A family farm transfer may also require a buyout, so don't assume that resources are handed to you.

	Operating Capital
To Rent a Farm	5-10%
To Work into a Farm	0-10%
To Purchase a Farm	10-30%

See Exercise 3 Worksheet Part Two: Equity. How much equity do you currently have? How much equity do you need?

Education
Education, surprisingly, was rated last among the criteria needed to get started in farming. However, this does not mean that it isn't necessary. Most new farmers have some higher education.

What is clearly needed (from the survey) is more emphasis on farm management education and farm production skills education. Instead of learning how a plant grows, we need to know how to grow plants. Instead of learning how to do chores, we need to know how to manage labor, livestock, equipment, and finances. When you think of how much education you have, and how much you need, think of areas where you might be weaker in and what skills you might need for the future.

What education/skills do you have/need? See Exercise 3 Worksheet Part Three: Education

<u>*The getting started plan*</u>

Your getting started plan is how you are going to obtain any experience, equity, or education that you need, but may be lacking, to get into farming.

Experience: production and management

Working on a farm is one of the best ways to learn. However, you need to be sure that you are rotated in your duties so that you learn all the aspects of a farm operation. Even though you may not work directly in one of these areas again, you need to know how each farm duty feeds into the whole farm profitability and how each employee relies on the others. Learn about managing employees, understanding the finances, participating in purchasing decisions, marketing commodities, and being involved in the long-term planning.

Equity: are you gaining any?

Whether you are working on your family's farm or a non-relative's, you should strive to gain equity. Whether this is in the form of cows, equipment, or cash, this will help you get started quicker. Also, be aware of tax consequences of asset transfers.

Education: expanding your tool kit

Maybe you already have all the education you need. However, jot down some things you wish you knew (i.e. computerized book keeping, advanced dairy nutrition, nutrient management or agronomy). What opportunities exist in your area to gain additional education? Cornell Cooperative Extension is a good place to start.

Complete the Education and Skills Improvement timeline. See Exercise 3 Worksheet Part Four: Getting Started

How will you get the needed education and skill? Think of ways to do this.

Step 3: Evaluating Farm Opportunities

This chapter will help you assess the current and future viability of farm opportunities (those farms that you are or will be working on). Some key points to consider: Is the farm viable long term? What changes need to be made on the farm to increase its viability? If in partnership, is there enough income to sustain all parties.

Is the farm viable?

If the farm you are considering is going to produce the same products in the future, you need to evaluate the current and future viability of those products. There are many tools to help assess business viability; such as working with NY FarmNet consultants.

See Exercise 4 Worksheet Business Analysis. Perform a current business analysis.

Complete the current business analysis worksheets in this workbook and discuss with your family. Is the business you are considering ready to support more than one family? Pay particular attention to profitability (income statement), financial position (balance sheet), family expenses, and current management practices. If you need worksheets with examples other than dairy, please contact NY FarmNet at 1-800-547-3276.

Based on the results of your business analysis, you (and your family) need to decide whether working on this particular farm is still an option. Discuss this question with your business transfer facilitator and other farm transfer professionals (such as a lender and/or an accountant).

See the Exercise 6 Worksheet: Future Business Potential. Estimate future business potential.

Complete the future business potential worksheet in this workbook and discuss with your family. Specific areas of attention should be revenue growth, cost control, resource availability, and increasing your skills as well as those of employees. Also, identify and discuss trends in the industry.

What changes will be made on the farm to increase its viability?

It may be hard to accept, but the business *will* change in the future. What are these changes going to be? It could be expanding, changing/adding a new enterprise, value-added products or a completely new venture. Discuss this question with your family, your business transfer facilitator, and other professionals. If you wish to make drastic changes in your business, you may need to draft a new business plan. For business planning assistance, consult NY FarmNet.

STOP What changes need to be made on the farm to increase its viability?

Step 4: Communicating with the Senior Generation

If you are working into a family farm, a non-family farm, or making a purchase with another farmer, good communications skills are essential. Assumptions often prove unfounded or askew, so be clear and open in your communication. Ask for clarification if you are unsure about what others are saying and be willing to rephrase or add detail when others ask for clarification from you. Below are some points to ponder and use when communicating about business matters.

<u>What type of a communicator are you? How about the senior generation?</u>

Direct

- Family talks about the goals of the farm, questions are asked, needs and wants are discussed.
- Talks are not always comfortable, but they allow for open and sometimes heated discussions.
- Conflicts are dealt with direct contact; there is no talking behind someone’s back.
- Issues tend to get resolved sooner rather than later.
- Transparency is valued; issues are laid out on the table and discussed.

Passive

- There is more of an “understanding” of what’s going on vs. what is actually talked about.
- This understanding can have completely different meanings for each person.
- Some issues are harbored and not discussed, which creates angry resentments.
- More of a tendency to let things “blow over” but never gets addressed.
- As a strategic, positive move, some battles are “chosen”, which accentuate bigger arguments needing attention.

Triangulation

- Occurs when one party in the dispute goes to a third party to curry favor, rather than dealing directly with the other person in the conflict.
- Issues do not get resolved; it’s more of a venting session.
- When the triangle is revealed, further conflict typically results.

Conflict often arises when there is a lack of good direct communication. One of the most effective ways to ensure good communication is to schedule regular family business meetings.

Family Business Meetings

Planning the Meeting

- Decide where the meeting should be.
- Who is invited to the meeting?
- How will those attending be notified?
- How much notice should be given, what about reminders?
- What is the purpose of the meeting?
- The more people you have involved in the business, the more frequently you need to have meetings.

Leadership/Facilitator role in the meeting

- Who will lead the meeting?
- Often times an outside facilitator is necessary to lead the meeting if there is tension/conflict or lack or experience with conducting meetings
- Consider rotating the leadership role of the meeting, this fosters equality.
- This person ensures that everyone is being heard and keeps everyone on track.

Set Guidelines and Boundaries

- Everyone gets a chance to speak.
- No cross talk or talking over each other. This is where a third-party facilitator can be helpful. There are tools that can help getting some people to talk and others to choose their words wisely. For example, use a tool such as a stress ball to signify the speaker as the only one talking at that time...

Stick to an Agenda

- Have everyone's agenda items before the meeting. Agendas should be printed and offered for review prior to each meeting.
- Decide how this agenda will be formed.
- Meetings drag on and on without an agenda.
- A facilitator is diligent in referring back to the agenda to keep things on track.

Set a time limit

- Inform everyone what time the meeting will end. Really strive for the business meeting to be one hour or less.
- If more time is needed, at the stop time, ask if everyone agrees with extending the meeting.
- Schedule the next meeting.

Professionalize meeting

- Notes are taken during the meeting and kept in a notebook accessible to everyone involved. Preferably, the notes are typed and dated.
- Use meeting times to bring in accountants, farm planners etc.
- From time to time consider inviting someone in to present on a topic that could be beneficial to the business.

See Exercise 6 Worksheet: Business Meeting Agenda Template. Set up a 1st Family Business Meeting.

Here are some useful strategies in being an effective communicator for meetings and other times, too:

1. **Active listening for clarification**
   - "What I hear you saying is…" "Do you mean…?"
   - Allows for clarification.
   - Communicates to the other person that what they have to say is important to you.
2. **Don't withhold information**
   - Don't make someone crowbar information out of you.
   - When asked for information, give clear, thorough and useful information.
3. **No "rabbit trails"**
   - Learn to get where you're going without side-stepping to other things.
   - Avoid "rabbit trails" and long stories, unless you're using those to illustrate an important point; still attempt to keep it brief.
4. **Notice nonverbal communication**
   - Body language can be a cue to a person's feelings, arms folded, muscle tension, cracking knuckles, facial expressions. At times it may be a mannerism or physical need, so ask for clarification if you are not sure what a gesture or expression means. For example, a person with a headache may be squinting/grimacing. Ask for clarification, "I feel your expression shows you are upset about this topic, is that true?"
   - Amount of eye contact, too little, or staring in a fixed glaze.
   - Voice tone. Is the voice tone rising in volume or soft and under the breath, which is showing excitement or withdrawing?
   - Doodling, checking your cell phone. This shows disconnect or boredom (however, for some doodling is a way to keep them focused. Simply ask for the person to respond to a relevant topic to check if they are attentive.)
   - Withholding simple verbal signals to confirm that you've heard and are interested in what's being said. Are they nodding or shaking their head or staring straight ahead in response to someone speaking.
5. **Answer questions directly**
   - Don't evade the question by not answering the question directly.
6. **Be comfortable with silence**
   - When you ask someone a question, give him or her enough time to think and then answer.
   - Filling dead air with talk, just to fill it, can shut the other person down.
7. **Learn to take a breath**
   - Pausing for minute, catching your breath, helps to keep focused and calm.
   - Gives yourself time to think of something you wanted to say and may have missed.
8. **Use "I statements"**
   - Allows for an individual to own their frustrations and not point fingers.
   - Pointing fingers shuts down communication by putting someone on the defense.
   - Instead of saying, "you aren't paying attention" say "I feel like you haven't been paying attention, because you are doodling. For my sake, can you comment on what we were just talking about?"
9. **Acknowledge and validate**

- o People often just want to know that they're being heard.
- o Letting someone know that you "hear what he or she is saying" and "that it must be frustrating" can go a long way in a conversation.

10. Invite a neutral third party

- o When the going gets tough, keep going. However, inviting a neutral third party to help sort things out might be very helpful.

<u>External Influences on Communication</u>

Letting disagreements go beyond the boiling point

- o Some are better than others with letting disagreements roll off our backs.
- o Some family members are really good at knowing which buttons to push.
- o Walls of resentment can be built so high, making it very difficult to ever tear down.

Adults with "arrested development"

- o Adults with arrested development are able to "play the part" of an adult, but inside they are stuck at a much younger age, ten, twelve, sixteen etc.
- o They are emotionally immature, stuck in the past, and are not able to move beyond the parent/child relationship. Must be told what to do or will be irresponsible.
- o Individuals must be able to move through, not get stuck in the cul-de-sacs of life, i.e. childhood, adolescence etc.

Established family decision making patterns

- o Who makes the decisions? What "X" says, goes. This does not take advantage of the knowledge of your human resources.
- o Is there a false sense of collective decision-making? There may be discussion, but is the ultimate decision made by one who likes to think they are catering to everyone?
- o Are new ideas and concepts welcomed?

Patterns of emotional cutoff

- o Some take silence to the extreme and use it as power over the people involved and the business. To curtail this behavior, ask the person to respond. Both parties should note the request or their silence will signify agreement to disagree and the topic will advance with the parties actively involved.
- o Silence is control, by not interacting at all; you shut everything down in the business.

Personal problems such as substance abuse or marital problems

- o Individuals with personal problems need to get the help they need to be able to function as a family business member.
- o The family business meeting time is not the setting for these problems to be addressed. Approach the person one-on-one to suggest help be sought to resolve the personal problem. Make sure they are not a danger to themselves or others.

Personal relationships as well as certain business characteristics are extremely important to the success of joint business operations. Before you decide to go into business with someone else, complete a comprehensive evaluation of the farm resources, including management. Identify your personal strengths and attributes that can be contributed to the business and identify your shortcomings that may cause problems.

See Exercise 7 Worksheet: Partnership Quiz Complete the partnership quiz with your future business partner(s).

<u>Vision, values, goals</u>

Complete the Goal Setting Worksheet (business and personal goals). For the worksheet to be useful, you, your family, and your business partner(s) must fill it out. In order to be able to manage the farm together, you need to have shared goals. Please take as much time as you need for this crucial step.

Step 5: Getting Started with a Team

Up until now, the advice you have needed for your getting started plan has been limited. Now things get a little more complex: legal issues combine with family and financial issues.

<u>Which professional service providers do I need on my team?</u>

The most common mistake people make as they get started in farming is that they don't get second opinions. Often, the excitement of getting started combined with the unwillingness to upset the senior generation leads to an "agree to anything" policy. While placing all of your trust in the senior generation can be OK, you still need to think about your future and how potential farm ownership may affect it. If both you and the senior generation are going to use the same transfer team, you need to be sure there is a "devil's advocate" to question the team to make sure both parties are represented equally. Ask yourself if the people you are considering for your advisory team will work toward your business and business goals, or if they are just trying to sell their product/service. Below is a list of who should be consulted when pulling together a transfer/getting started plan.

Family Members: Include family members affected by the decisions being made. Not all members may need to attend every meeting; however, do not exclude those that will be affected/responsible for decisions being made. For example, if a spouse works off-farm but is expected to be a cosigner for debt, this spouse should be included in the decisions for which the debt is being assumed. However, this spouse may not be required during crop production discussions.

Farm Transfer Facilitator: This is someone that you can rely on to focus the group, be devil's advocate, offer resources and connections, be a voice of reason, someone that can keep the group on task while working toward a goal. This is highly recommended for all families particularly when communication has been difficult in the past.

Attorney: Attorney's provide information to keep the farm decisions within the realm of the law, provide avenues of protection to meet the goals you have set, implements the appropriate documentation for land deals, buy-sell agreements, wills, trusts, operating procedures and business entity filings.

Accountant: Offers tax advice as well as the ins and outs of the tax code depending on the business entity you choose. Some will prepare taxes, and some will also do some additional work with payroll, bookkeeping, and/or managerial accounting.

Lender/Investor: Farms often require the financial assistance of an institution or investor. They may need to be included in discussions particularly when transfers, expansions, or operating loans are concerned.

Financial Planner/Insurance Agent: A financial planner can provide the team and farm with additional expertise on retirement and long-term care planning. Having a clear understanding of these costs will help in mitigating any risks to the retirement of the senior generation and can inform the financial analysis of the transfer. Also, a planner or agent can help ensure the appropriate level of life insurance coverage for funding a buy-sell agreement.

Business Management Specialist: This should be someone with great management and financial skills. They can be your unbiased numbers person to help you gather information; create a business plan, financial records, and analysis insights.

Other: Professionals that you often deal with can be valuable resources for certain issues. Examples could be veterinarians, nutritionists, agronomists, extension educators/specialists, and agricultural educators.

With any advisor it is important to have a workable relationship. Choose advisors that have the appropriate specialty area expertise. One attorney that is great at land transactions may not possess the skills for estate planning. Do not be afraid to remove a member of an advisory team that is not working out with your business. However, do not rush to decisions just because advisors may not be on board with every decision and suggestion. The role of an advisor is to advise with an objective point of view. Sometimes ah ha moments happen when looking at other options as it opens new ideas or actually supports what you had planned to do.

Realize that you will not need to meet with these people every week. Nor will you have to meet with all of the team at the same time. For instance, if there are production challenges that need to be addressed for a financially feasible transfer, the veterinarian, nutritionist, and business management specialist may meet without the attorney and accountant. However, the team needs to know what is expected and be kept in the loop as a decision may affect the suggestions or work of another team member during the process.

<u>How do I find a good service provider?</u>
After reviewing the list of team members, you may discover that you need to find more people to be on the team. How do you go about finding the right service provider? Here are some tips:

1. **Compile a list of names**. List all the people you can find in each service area. Ask around, check other service providers, and even your neighbors. Realize that neighbors' issues and values may vary from yours so their advisor may be excellent, but not suited to your situation. As you select members of your team, they may suggest others professional they have worked with on farm transfers.
2. **Check the person out**. Find out who has used this provider's services and call them as a reference. Schedule a consultation with a provider, most will do so for free as a way to find out if what they have to offer is beneficial to your needs. Treat this like a job interview. This service provider is going to be working for you, so you want the best. Your advisor should help you to research a decision, play devil's advocate to help you think through a decision, and then offer the tools to help you meet the goals your family has made. Refrain from being sold a product by an advisor if they are not willing to take into consideration your goals first.

How do I get the most from professional service providers?
Service providers are busy people like you. They have other cases to handle besides yours. Advice for getting the most from your service provider.

1. Keep in contact: Make sure that your service provider gives you the attention that you need is like the old adage: "The squeaky wheel gets the grease." You need to be in regular contact with your transfer team – Don't wait for them to call you.
2. Ask the right questions. Ask questions that are in the service provider's experience. (i.e. don't ask the accountant for legal advice). Also, do your homework, so that you ask the most direct, concise question(s) possible. Don't be afraid to get clarification on items that you don't understand.

Do I need my own personal attorney?
Yes, an attorney can give legal guidance and create the needed legal documentation. This could be the same person guiding the business, but it may be beneficial to have a separate set of eyes to handle your case on a personal basis.

Working with your attorney
Working with your attorney is exactly the same as working with any other service provider. However, people can be intimidated by someone who has the law at his/her fingertips. This doesn't have to be the case.

Questions to ask when considering potential team members
1. What education and experience do they have?
2. Do they hold any relevant certifications?
3. How may farm transfers have they worked on?
4. Can they build relationships on the farm and with other team members?
5. Do they help address specific goals of the farm transfer?

Who will be on your team?

- Business members ______________________________
- Lender/Investor ______________________________
- Accountant ______________________________
- Business Management Specialist ______________________________
- Farm Transfer Facilitator ______________________________
- Financial Planner: ______________________________
- Attorney ______________________________
- Other: ______________________________

Step 6: Strategies for Getting Started

How are you going to get started in farming? You may already have that answer. However, read through the strategies in this chapter to see if you have considered all of your options. People usually get started in farming through one of the following methods: gifting/inheritance, renting, buying, working into ownership/partnership, or a combination of methods.

Strategies for Getting Started

Strategy	Examples	Advantages	Disadvantages
Inheriting or being gifted a farm	Farm gifted during life of senior generation or left in a will.	Inheritance or gift is an "easy way" to acquire a farm. May inherit a good equity position.	"Inheriting" debt "Inheriting" problems. Senior generation may change their minds or need retirement income. Possible estate taxes or capital gains. Medicaid issues
Buying a Farm	Using personal capital and/or obtaining loan funds to purchase assets. Owner financing	Provides income to the senior generation. Ownership	Requires equity, experience, and education. Possible cash flow problems.
Renting farm property	Renting all assets Renting land and buildings Renting equipment	Easier to get started. Easier to transition in and out. May be more economical than purchasing.	Problems with landlord Rental property can be highly competitive and hard to find locally
Share leasing, working into a partnership and/or ownership	Gaining equity in livestock or equipment over time Gaining ownership through shares or stock, such as a milk check assignment	Can be flexible Provides income for senior generation Provides equity/income to the junior generation	Conflicts of interest with business partners Contracts can be broken Not enough income without expansion
Combining of	Working into a	Opportunity to	Can be more

aforementioned methods	partnership then buy owner out. Buying some, inheriting some later, renting some	capture advantages of each method Able to determine if this is the right occupation/business for you	difficult to set up, requires more contracts and agreements.

Inheriting or being gifted a farm

This may have advantages for the junior generation, in as much as there is not much to do to gain equity. However, you must critically evaluate what it is you are inheriting or being gifted. Are you taking on a lot of debt? Will you be taking title to a property that is not viable? Pay close attention to the legal, tax, and financial consequences. Gifting, is done while the senior generation is living, but will the gift be permanent? For example, land gifted to you could be "recalled" should the senior generation become subject to the look back period for Medicaid qualification. In addition, has the senior generation officially documented in a will or trust you as the beneficiary. Will the farm be split with others?

Will gifting or inheritance be a part of your "Getting Started Plan"?

Buying a farm

This may have been the method of choice for your parents or grandparents. Today, with high asset prices (land, equipment, and livestock), it is harder to start farming through purchasing a farm. If you are looking to buy a farm directly, you will need a large amount of money for a down payment and the most experience and education of all the getting started options. If you are on a family farm, do not be surprised if you are expected to buy part of the farm from your senior generation someday.

Will buying farm assets be a part of your Getting Started Plan?

Renting a farm

Why own everything right off the bat? Renting of land can be particularly advantageous. Many new farmers rent as a transition step before taking on the responsibilities and investment of ownership. They build equity while renting so that they are able to save money for a down payment on a future purchase.

Will renting farm assets be a part of your Getting Started Plan?

Work into a partnership/ownership

This method has become more popular, as the senior generation needs a source of retirement income. This also benefits your generation by providing a gradual transition into farm ownership. Whether it is within your family or with someone not related, good contractual agreements are necessary to ensure that everything goes according to plan. It is also a great method for building equity while you are working – making future options more flexible if things don't work out. Chances are this transfer of ownership will happen through the business structure. Below is a table of business structures and how they affect the ease of transfer.

Business Structure	Ease of Transfer	Income Sharing	Decision Making
Sole Proprietor	Ownership of assets determines interest in business. Some difficulty may arise when transferring assets.	Proprietor makes the decisions on how net income is split. Proprietor pays the taxes on net income.	Up to the owner who makes the decisions.
Partnership Limited Liability Company	Partnership share % Is determined by contribution to business. Percentage may be increased or decreased fairly easily.	Partnership agreement determines how net income is split. Can be based on management, labor, and ownership.	Partnership share determines who makes the decisions. LLC operating agreements spell out job duties.
S Corporation C Corporation	Shares of stock determine ownership. Shares of stock can be transferred easily. Valuation is difficult.	Net income is split among shareholders according to how much stock each shareholder owns.	Shareholders vote on decisions. Operating agreements spell out job duties.

Will "working into ownership" be a part of your Getting Started Plan?
Again, if you want more in-depth information about working together, contact NY FarmNet.

Combinations of methods

Combining buying, renting, gifting inheritance, and partnership agreements happens all the time. A good transfer plan developed with the senior generation with the assistance of a professional transfer team can help you work out all the details of future farm ownership. When bargaining for which method is best, remember the golden rule of farm transfer: "The one that has the gold, rules." If you don't have a lot of assets or equity, the senior generation is taking more of a risk on you; therefore, they often get to make the decisions that make them feel financially comfortable with the deal.

Check off the items which you are considering in your plan for getting started

Buying Business Assets

Owner held mortgages
Land contracts
Bank financing
Other____

Inheritances

Annual gifts of business assets from senior generation
Business assets left to you in a will or estate plan

Renting Business Assets

Renting
Renting with option to purchase

Working into a Partnership/Ownership (transfer through business structure)

Partnerships
Limited Liability Company
Corporation (C or S)

Step 7: The Transfer Plan

The five steps of a business transfer

Transferring business ownership has five components: A business entity agreement, a buy-sell agreement, and operating agreement, sales/lease contracts, and an estate plan. Let's start by defining what each of these components entail:

Business Entity Agreement: Before you decide how you are going to transfer the business, you have to decide how you want to structure the business. How you structure your business can affect what options are available to you, both legally and financially. Maybe you have the right business structure now, or maybe you need to change. The structures to choose from are Sole Proprietorship, Partnership, LLC, C Corporation, and S Corporation. *Take a look at the table below and the flowchart on the next page when deciding.*

Discuss the need to change business structures with senior generation.

Buy –Sell Agreement. A buy-sell agreement isn't exactly what it sounds like. A buy-sell agreement is not the tool you would use to buy and sell companies. Basically, this is a contract that can control who owns an interest in a business, when that interest can be sold, and at what price. This provides insurance to all parties in the business against the risks of involuntarily losing a business partner due to retirement, disability, or death. In addition, a buy sell agreement can spell out what each business partner gets if he or she leaves the business voluntarily. Vesting schedules, payment amounts, and payment terms can be arranged ahead of time so that the business can afford to lose a partner and still keep operating.

Discuss the need for a buy-sell agreement

Operating Agreements. Formally, these are what companies (LLC's C corporations and S corporations) use to specify who does what in business. Who is the chief executive officer (CEO)? Who is the chief operating officer (COO)? Who is the chief financial officer (CFO): Even though these sound like fancy titles, it is important that job duties and management are specifically assigned to individuals in your business. An operating agreement can bolster your management transfer plan by specifying when the duties of one person become the duties of another. A system of responsibility and accountability are necessary in any business, otherwise things tend to "fall through the cracks."

Discuss the need for an operating agreement

Contracts. Often, there will be a need for some additional contracts in a business transfer. It is rare that every scenario can be covered by just the business entity and buy-sell agreement. See the next chapter for explanations/samples of each contract type.

> **Sales contracts.** Many transfers incorporate selling assets to the next generation, even family members. **A sales contract will also be used if a gift is made**; the price tag on the "sale "may be as little as $1.00.
>
> **Purchase Options.** If you aren't able to buy the farm right away, a purchase option is a good contract to have. This will specify the price, payment methods, and the amount of time the offer remains open before it can be sold to anyone else. This will give you time to accumulate equity without the fear of losing your opportunity to buy the farm.
>
> **Lease Contracts.** Maybe some of the assets are going to be leased to you? Often, this is how land is handled, due to the high cost of an OUTRIGHT SALE to the junior generation and high capital gains taxes for the senior generation.
>
> **Lease Purchase Contracts:** This is a highly flexible tool that combines lease contracts with purchase options. This is similar to the "rent-to-own" idea. Lease payments can be put toward the purchase price or not, depending on the goals of the two parties. Being so flexible, this is often how one business partner lets another business partner "work his way" into the business.

Other Contracts: Contracts can be tailor made to your situation. Often, these contracts will be manipulations of a sales, lease, or lease-purchase contract. One contract, not previously mentioned, is a **deferred compensation agreement**, which is often used as a "retirement" payment from the junior generation to the senior generation. Basically, the agreement gives the senior generation a steady income and some stability during retirement if they have transferred their farm assets. This is often a win-win scenario: the senior generation gets to retire and the payment terms of the compensation agreement are often less than the amount if junior would have to pay if he/she had bought the farm.

Discuss the need for sales and lease contracts

Estate Plans & Wills: The following information is for your understanding of the complex issues faced by the senior generation. You may also need to prepare a will and an estate plan for yourself. The following are the basic pieces of an estate plan:

Choosing Beneficiaries: Who gets the property when the senior generation dies? A simple beneficiary situation is where the people whom the property is left to are clear and there are no strings attached to the property once it is transferred.

Providing for Minor Children: Who will raise your children and who will manage the money left to them?

Transferring Property: The "meat" of the will or estate plan. Below are the most common ways to transfer property. All of these items (except for the living trust) can be done "in-house" by your family as preparations. Some more in-depth strategies for property transfer are discussed in the next chapter.

1. Wills: a document used to specify who gets what. Wills may be subject to probate. Probate is a process of the court to determine that there are no contestants to the will or its beneficiaries. Probate can be costly and time-consuming –bad news for business.
2. Revocable Living Trusts: similar to a will except is avoids probate proceedings. Can be changed at any time (revocable). This is a good option for elderly people that no longer care to handle business affairs on their own.
3. Pay on Death Accounts: can be used for cash, stock, and bond accounts. Good idea to have on business checking accounts.
4. Joint Tenancy: a form of property ownership where the surviving owners automatically receive the deceased/s share: This would be recorded on a deed.
5. Tenancy by the Entirety. Joint tenancy version for married people.
6. Life Insurance: the beneficiaries are named on the policy, not on the will—so it would not have to go through probate.

Estate Taxes: The death tax. Its bark is a lot worse than its bite for many small-business owners. Check for current estate tax rates at www.irs.gov and/or the state taxation department. In New York, go to www.tax.ny.gov. The senior generation may be exploring ways to reduce these taxes if the personal and business assets total more than the federal exemption.

Planning for incapacity: Who will handle the financial affairs of the business if you and/or the senior generation become disabled? What happens if you need assisted living or nursing home care?

1. Power of Attorney for finances: This document gives someone else the ability to make financial decisions on your behalf, should you become unable to do so.
2. Health Care Proxy: This document gives someone else the ability to make medical decisions (about you) on your behalf, should you become unable to do so.
3. Retirement planning: Make sure that all retirement budgets for the senior generation build in health care costs, prescription drug costs, and possible long-term care costs.
4. Long-term Care Insurance: Should you or a family member need nursing home care, you will pay for it out of pocket, have insurance pay for it, or apply Medicaid. New York offers a long-term care program to protect assets, New York State Partnership for Long-term Care. http://www.nyspltc.org/
5. Medicaid planning: If you do not have the cash to pay for nursing home care and cannot purchase a long-term care policy, Medicaid is the only option left. Medicaid, however, can place liens on farm assets in order to recoup the costs of nursing home care. If you are considering transferring farm assets, there are penalty periods in which Medicaid can "look-back" and place liens on transferred property and five years for property placed into a trust (as of this writing). For more information on Medicaid planning, refer to the NY State Department of Health or local Social Security Office. Elder care attorneys can also be helpful, but choose an attorney of good standing.
6. Making changes to your will. Changes can be made at any time, for any reason, as long as you are mentally competent and haven't been unduly influenced by someone else to change your will. There are some changes which cannot occur, such as changing joint tenancy and disinheriting your spouse. Check with your attorney for an explanation of these exceptions.

Discuss the need for wills, estate plans, and planning for incapacity of the current owner.

Checklist of Items to Complete before moving to the next section:

I understand the difference between the business entities
I understand what a buy-sell agreement is and why it is needed

I understand the importance of an operating agreement
I understand the differences between the different contract types
I understand the difference between an Estate Plan and a Will
I understand the importance of planning for incapacity of the owner

Step 8: Putting the Plan into Action

You have all the pieces you need to complete your getting started/business transfer plan! Now you have to put things down on paper and get your transfer team to implement your wishes. Below are the items that you still need to accomplish. Most agreements need to be drafted by an attorney. However, you can save yourself a lot of time and money if you have your plan spelled out exactly before you visit your attorney. Members of your farm transfer team will be able to help you get to this point. Honesty and full disclosure are keys to a valid plan.

Compare your Getting Started Plan Worksheet with the senior generation's Business Transfer Worksheet and complete the Business Transfer Plan Overview and the separate sections of the Business Transfer Plan with all business members.

Discuss a business entity agreement (if you decided to change your business structure).

Discuss a buy-sell agreement.

Discuss an operating agreement. Clearly spell out the management structure.

Discuss any necessary sales of lease agreements.

STOP **Congratulations**, your farm transfer is beginning. However, it will always be a work in progress as state and federal laws change and family situations change. Look for the opportunities of change and continue to progress.

Step 1 Worksheet: Positives and Pitfalls of Farming

Ask yourself and your family members what would be positive about farming and what would be a pitfall of farming.

Positives	Pitfalls
We get to live and work in the same place with extended family.	*We would have no privacy and work is always right there.*

Step 2 Worksheet: Goal Setting

From PRO Dairy's "Managing for Success"[i]

Part One: SWOT Analysis to Evaluate Where You Are Now

This section can be used as a starting point, particularly if you are inexperienced with written goals. Creating some lists of those things important to you as a person and as a business will start to give you direction and then it will be easier to create a plan to reach your ultimate goals. If you feel that you have an understanding of where you are and have written goals, you could skip this particular step and proceed on to more specific goal setting. Do this for Personal and then Business

Strengths - List your abilities/skills that you bring to the table.

Weaknesses – List abilities/skills that require training/education or the abilities of others to do

Opportunities - List those opportunities to strive for with your resources.

Threats – What do you see as a threat to your goals?

SMART Goals

Written goals put a plan on paper. It is the map for how you will start from where you are and get to your ultimate goal. Use this acronym to guide how you write goals so that you have a tool that is useful. Again, things may change, but if you are able to write a SMART goal, you can redirect and get right back on track, just like a detour on a trip.

Specific – Use detail in what it is you plan to do.
Measurable – Use numbers/amounts/yields to give a specific target you plan to obtain
Attainable/Assign – Create a direction and appoint the appropriate people
Reasonable – Honesty is the best policy and set yourself to succeed,
Timed – Create a timeline to keep you on track

Ask yourself these questions and then develop your personal SMART goals.

1. Why are you in farming?

____
____
____
____

2. Why do others (spouse, employees, etc.) think you are in business?

____
____
____
____

3. What will your farm look like in a year?

____
____
____
____

4. What will your farm look like in 5 years?

____
____
____
____

5. What will your farm look like in 10 years?

____
____
____
____

6. What do you hope to accomplish in your lifetime?

If your farm will be different in the future:

7. What will you change?

8. How will you make that change?

9. Who is responsible for making that change (you, employees, others)?

10. When will the change take place?

11. How will you know when you have succeeded (how will you measure the change)?

My SMART GOALS

Step 2 Worksheet: Experience, Equity, Education

Part One: Experience

What experience do you have?

How-to experience (list for example: milking, herd health, maintenance, etc.)

Management experience (list for example, marketing, production, labor, financial, etc.)

What experience do you need?

How-to experience (determine fertilizer needs, timing of operations, hiring labor, dealing with labor issues, analyzing financials, etc.)

Management experience (labor laws, reporting regulations, margins/hedging, insurance etc.)

Part Two: Equity

Total assets required for you to farm	$ ________________ A	(Estimate of farm's cost; can be derived from appraisal, real estate listings, cooperative extension)
Total assets that you have	$ ________________ B	
Total debt that you currently have	$ ________________ C	
Amount of equity that you currently have	=	**$** ________________ (B-C)
Approximate equity still needed	$ ________________ (A-B+C)	

Part Three: Education

What education/skills do you have?

____

____

____

____

What education/skills do you need?

____

____

____

Part Four: Getting Started Plan Outline and Example

____

____

Getting Started Plan Outline

Year	Education, Skills Improvement	Mgmt. Experience and Responsibility	Farm Asset Equity

Timeline

Example Getting Started Plan Outline

Year	Education, Skills Improvement	Mgmt. Experience and Responsibility	Farm Asset Equity
2016	**Improve young stock performance**	**Take over young stock management**	**Start buying livestock**
2017			
2018	Improve dairy herd performance	Take over dairy barn responsibilities	
2019	Improve Financial Management skills		Livestock ownership complete – begin buying equipment
2020	Improve cropping skills Inquire about grid sampling	Take over cropping responsibilities	
2021			
2022	Improve marketing skills Attend grain marketing class		Equipment ownership complete – Begin buying Land & Buildings
2023		Take Total Responsibility for management, marketing	
2024		Full responsibility for Finances	
2025	Continue to look for educational opportunities		
2026			
2027		Plan for expansion	Buildings owned

Step 3 Worksheet: Current Business Situation How Does it Rate?				
Measure	**Calculation or Status**	**Needs Improvement**	**May be Possible**	**Excellent Position**
Net Income per Operator	Net Farm Income ÷ Farm Operators	Decreasing	Staying the same	Increasing
Return on Assets	Net Farm Income ÷ Farm Assets	Decreasing	Staying the same	Increasing
Debt to Asset Ratio	Total Debt ÷ Total Assets	Greater than 60%	30% to 60%	Less than 30%
Debt per cow for Dairy Operations	Total debt/Number of cows	$4000 or greater	$2000-$4000;	$2000 or less
Cash Available For Family Living	Cash from Business available for Family Needs	Decreasing	Staying the same	Increasing
Family Savings	Total Cash Saved by Family	Decreasing	Staying the same	Increasing
Strategic Plan	What is your status?	Waste of time	Have one, somewhere	Have one, follow and closely monitor
Perform Economic Analysis	What is your Status?	Will do it if I must	Is OK, but only if I have time to do it.	A priority for the business
Managing Family and Employees	Your comfort level	Would rather not	Will do it if I must	A priority for the business

Source: Wayne Knoblauch, Dave Gruesenmeyer, and Jason Karszes, Cornell University, 2015

Developing a Cash Flow Plan

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Oklahoma Cooperative Extension Fact Sheets are also available on our website at: **http://osufacts.okstate.edu**

A cash flow plan is a recorded projection of the amount and timing of all cash inflows and cash outflows expected to occur throughout the planning period. Larger farms, substitution of capital assets for labor, and inflation increase the amount of cash required to operate the farm or ranch and make the cash flow plan an increasingly valuable tool in farm financial management. The cash flow plan:

- establishes target levels for income and expenses, which can be used in monitoring progress towards goals
- points out potential problems in meeting financial obligations
- indicates when cash is available for new investments

Although the cash flow plan is important in farm management, it is most effective when used with the balance sheet (Extension Fact Sheet AGEC-752) and income statement (Extension Fact Sheet AGEC-753). These three statements, supported by good farm records, form the core of financial decision making information. Financial planning involves projecting the consequences and results of possible actions, using the fi statements, and then analyzing the projected results. Thus, the potential effect of actions and decisions can be analyzed prior to their implementation and the financial requirements can be evaluated in advance. Comparing budgeted flows with those that actually occur is a useful management technique for monitoring performance.

The Cash Flow Plan

A Cash Flow Statement form is provided with this fact sheet. The form may be used to **document actual cash flows or to develop a projected cash flow plan.** The cash flow may include only business cash flows or both business and personal cash inflows and outflows. Operations with multiple owners (partnerships, corporations) likely will use the business option, while sole proprietors are more likely to use the form as a consolidated statement. The user may designate at the top of the form which type of cash flow is being developed.

For a monthly cash flow plan, the columns can be used to denote the 12 months of the year. Alternatively, columns can be used to denote bi-monthly, quarterly, or semiannual periods. The last column can serve as a record of the previous year's total for each line. Or, it may be used to enter estimated prices, quantities, or other information pertaining to individual cash inflow or outflow estimates.

The rows correspond to individual cash inflow and outflow items. Additional rows provide space for determining the projected cash position, borrowing, operating loan payments, and the accumulated loan balance for each period of the year. Sums of each cash inflow and outflow item (rows) for the year are listed in the Totals column. Thus, the values in this column represent the projected annual sources (inflows) and uses (outflows) of cash. The Totals column is also useful as a check column for possible mistakes in the entries for each period.

Steps in Estimating Cash Flow

A cash flow projection should be prepared when farm plans for the coming year are being developed. A good time to plan and prepare the cash flow estimate is at the beginning of the accounting period. For many farm and ranch firms, this will be at the first of the year when information is summarized for income tax returns. For others, it may be during the planning period prior to planting crops, purchasing cattle, or seeking a loan.

Last year's actual entries from hand records, tax forms, or checkbook registers are useful in projecting the cash flow for the coming year. Some record keeping systems provide a complete cash flow summary of the previous year.[1] Another source of information is last year's projections, if available. If a cash flow has not previously been completed, or if major changes in the operation are planned, relying on previous estimates may not be adequate. Crop and livestock budgets also provide input for projecting cash flows. Budgets can be adjusted from last year's actual figures to reflect changes in cattle numbers, crop acreage, and expected costs and prices.

Once records and other available information such as enterprise budgets and a farm organization plan for the coming year are gathered, you are ready to begin entering data in the cash flow form. A good starting point is to complete last year's actual column (the last column). This will serve as a check for reasonableness in estimates for the coming year. Rows 1 to 57 may be completed several ways:

1. Estimates of the totals may be entered in the Totals column and then prorated to the periods of expected flow.

1 See OSU Extension Fact Sheet AGEC-302 for more detailed information about farm record systems available to Oklahoma farmers.

2. Entries may be made directly in the appropriate column for each period and summed across to get Totals.

Often, a combination of the two approaches is used. Each section of the Cash Flow Form will be discussed below using an example Oklahoma farm, the James and Dolly Madison case. The discussion and illustration will focus on line items on a section-by-section basis.

Cash Inflows

Cash Received from Operations

In this section, total cash receipts are estimated for items sold during the period. Whether the inflows are from sale of inventory or from current production makes no difference for the cash flow statement. Only cash transactions are reflected in the cash flow. Lines 1 through 5 document expected cash receipts from Livestock Sales (except breeding livestock, which is a capital asset sale), Sales of Livestock Purchased for Resale, Livestock Product Sales, and Crop Sales. Unused lines can be customized to separate receipts by enterprise.

Cash receipts from stockers, feeders, and any other livestock purchased to be resold are recorded on line 1. For cash flow planning, it is not essential to separate receipts for livestock purchased for resale from other cash receipts (after all, cash is cash). But, most record systems and the income tax schedules require separate entries for sales as well as purchases of livestock to be resold. To better conform to these uses of information, the livestock purchased for resale and raised livestock sales are listed on separate lines for both receipts and expenses in the OSU Cash Flow form. Stockers purchased last October are expected to be sold in March and are entered as Sales of Livestock Purchased for Resale (line 1). Estimated March receipts are $126,489 (before trucking and commissions). In the example, James Madison plans to sell calves from the cow-calf enterprise in October with expected cash income of $34,592. This figure is entered on line 3.

Cash receipts from crop sales are handled similarly to livestock. Make entries to reflect the marketing plan or estimated marketing each period. For example, if all wheat will be sold at harvest, enter the total for projected wheat sales in the column for the harvest month. Although the marketing plan may change, careful estimates are better in the long run than no plans or estimates at all. Finally, if share-rent arrangements are used for crops or livestock, only the cash portion of the producer's share of sales is included on the cash flow. Although James Madison has some wheat and hay storage, most crop sales occur at harvest. Wheat sales are expected to generate $50,800 (line 4) in July and $25,400 in October. Alfalfa sales are expected to generate $17,975 from September through January. Hay sales are expected to generate $4,800 in July.

Estimated Ag Program Payments (line 6) should be based on anticipated participation in government programs and expected payments for participation. The Madisons expect to receive $7,567 in Ag Program Payments during the plan year, split between October and December. Crop insurance indemnity payments might also be included or could be listed separately. Line 7 provides space to estimate cash inflows from Other Farm Income. Receipts from custom work, cash rental of farm business property, and miscellaneous receipts should be included. James Madison does custom work for neighbors and expects to receive $28,672 in June. Here, Patronage Dividends are entered on line 8, $280 in December. Line 9 is used to sum cash operating inflows.

Note: The designated lines of the cash flow statement may not provide sufficient space for the detail needed. For instance, you may want to keep three crop enterprises on separate lines on the cash flow. These enterprises can be accommodated on lines 7 or 8 or on unused livestock lines. Similar minor changes can be made throughout the cash flow to fit specific needs.

Cash Received from Capital Sales

Cash receipts from the sale of breeding livestock, machinery, equipment, vehicles, real estate and buildings, and nonfarm capital assets are entered in lines 10 through 12. While not all capital sales can be projected in advance, breeding livestock and machinery should be reviewed to anticipate cull cow or bull sales or changes in machinery and equipment that involve cash. Cash sales of any breeding livestock, whether purchased or raised, should be included. For machinery and equipment, record expected cash sales only. Trade transactions do not normally generate cash. In our example, James Madison expects to sell ten cows from the herd and replace them with raised heifers. Cash generated from the sale of culled cows is anticipated to be $15,000 in November. The Madisons plan to sell a combine for $85,000 in April.

Other Cash Received

Lines 13 to 15 represent nonfarm cash receipts that will be available for use in the farm or ranch business during the coming year. These include nonfarm income; sales of marketable securities; investment income; sale of personal assets/retirement account withdrawals; capital contributions; gifts and inheritances. Nonfarm income may include expected wages and salaries from off-farm work (operator and spouse) plus income from a nonfarm business. Income from the sale of marketable securities, interest and dividends from investments, and royalty payments are combined on the next line. Past experiences are useful in estimating nonfarm receipts. Dolly Madison works off-farm and earns $1,800 per month. The Madison's receive $80 per month in royalty income.

Total Cash Inflows

Total Cash Inflows (other than new borrowing), line 16, is derived by summing lines 9 through 15. The number in the Totals column ($491,935 in the example) should equal the sum across periods for line 16 as well as the sum of the totals in lines 9 through 15.

Cash Outflows

Projecting expenditures is generally easier than projecting revenues. Operating expense figures can come from many sources. The previous year's cash expenditures serve as a good starting point. If an actual past cash flow statement is not available, hand records, year-end summaries of computerized records, or tax forms from prior years are useful. The cash flow form is designed to be compatible with IRS Schedule 1040 F, farm record handbooks, and computerized record systems. While the order of line items may differ slightly, you will find each of these sources of information corresponds well with items listed on the form.

For some expenses, adjustments may be needed to reflect changes in the farm plan and expected prices. For other expenses, simply inflating or deflating the previous period's actual expenditures by an appropriate factor may adequately estimate upcoming expenditures. Use your judgment in applying one or both methods to develop good estimates of anticipated cash outflows. A cash flow plan helps the operator avoid potential cash management problems as well as prepare for possible opportunities as they occur.

Cash Paid for Operating Expenses

Operating expenses refer to those cash expenses incurred for the period to period operation of the business. If Car and Truck expenses are combined for tax purposes, line 17 may be used to sum the expenses for upkeep of vehicles used in the business (gas, oil, repairs, license tags, insurance, etc.). Alternatively, gas, fuel, oil, repairs, taxes and insurance can be summed with other like items in lines 25, 26, 30, and 34, as James Madison does.

The amount and timing of *Chemicals* (line 18) used will depend on crops grown, pests, disease, weather, and costs of treatment. If the crop and pest management plan is not expected to change significantly, use last year's figures as a guide for this year's cash flow plan with appropriate price adjustments. *Conservation* expenses may be entered on line 19 and include cash outlays for soil or water conservation or for the prevention of erosion (unless they are treated as capital expenses).

For line 20, *Custom Hire* (machine work), generate a total expenditure estimate based on the planned crop acreage and predicted or contracted cost per acre. (Note: If crop receipts in line 4 or 5 were listed net of custom work or costs do not include the deducted costs here as they would be double counted.) These costs may be prorated to months of expenditure. James Madison has an extensive machinery and equipment complement and does not custom hire any field work. He does however, have crop hauling costs included in the Custom Hire (line 20) because they occur as part of the harvest.

Feed expenditures (line 22) will greatly depend upon livestock enterprise plans and feed inventories. Major expenditures may be calculated on an estimated need and expected price basis. If major changes are planned in the livestock operations, the cost of expected requirements should be budgeted based on the new plan. This method is more complicated than the simple inflation mark-up, but also is more accurate. James Madison plans to stay with about the same plan used last year. Thus a major portion of the feed expense will be incurred from December through February. For the other months, last year's feed expenditures are adjusted upward to reflect expected cost increases.

Fertilizers and Lime (line 23) and *Seeds and Plants* (line 31) expenditures depend on planting intentions, soil tests, and input prices. If little change in varieties, planting rates, and application rates is planned, adjusting for acreage and predicted price differences is adequate. On the other hand, major changes require more explicit budgeting. If part or all of the expenses are shared in a rental arrangement, only cash expenditures for this business, not the total cost, should be included in the cash outflows. In the example, the seed is paid for at the time it is delivered for planting. If early purchases are made or late payment is planned, entries should be made accordingly. James Madison's cash outlay for fertilizer and lime occurs primarily during the application months of August, February, and March.

Freight and Trucking (line 24) depends primarily on how much and when crops and livestock are marketed. For example, James Madison pays trucking costs for stockers purchased in October. Often only the charges for cattle show up in line 24. The timing of freight and trucking expenditures should correspond to the marketing plans for those enterprises. If hauling is not custom hired, most of the cash expenses will appear on other lines such as gas, fuel, oil, labor hired, and repairs.

Projecting *Gasoline, Fuel, and Oil* costs (line 25) for the upcoming year may be quite a task. It may be easiest to take the costs from each period of last year and make a blanket adjustment estimate, based on expected changes in the production plan and input prices. For James Madison, 108 percent of last year's outlays served as an estimate for the coming period. If per acre fuel, oil, and lubricant cost accounts are kept, more accurate estimates may be made by multiplying acres of crops to be planted times estimated costs per acre.

Insurance (line 26) and *Taxes* (line 34) are straightforward. Taxes may include car licenses, state or local sales taxes, state and federal income taxes, federal use taxes, and self-employment taxes for the farm. The previous year's figures are a useful guide for the present year's plan.

Labor Hired (line 27) should include cash wages as well as cash expenditures for employee benefits and employer contributions to employee social security. James Madison expects to need part-time help June through September.

Rent or Lease (line 29) are generally predictable. Cash renting of crop land, pasture, and buildings will comprise the major expenses. Annual, quarterly, or monthly cash payments are entered in the appropriate month(s).

Line 30 allows for estimation of *Repairs and Maintenance* expenses (those not capitalized) in the coming period. The effect of major items on last period's actual repair cost should be considered in anticipating major outlays in the period ahead. For routine repairs, simply increasing or decreasing the previous year's figure based on expected price changes estimates outlays. Based on previous experience, James Madison expects most machinery repair to occur from wheat harvest through planting. While some minor machinery and equipment repair is forecast throughout the year, typically most breakdowns and equipment preparation occur in this period.

Repairs to buildings and fences are less obvious. If major building repairs are planned, the estimated cost should be entered for the appropriate period. Estimates of minor building repair and maintenance should be based on those experienced in the last few years. Since no major repairs are anticipated by James Madison, last period's expenditures were simply increased by 10 percent and prorated throughout the year.

Careful consideration of the entire crop program including expected quantities, the marketing schedule, and on-farm storage availability will serve as the basis for deciding on the cash expenses for *Storage and Warehousing* (line 32). Estimated crop size and cost of storage per unit should be easy to get. The greatest uncertainty may stem from the length of time the crops will remain in storage. Make your best estimate based on previous experience and the marketing plan at the time a cash flow budget is developed. James Madison plans to sell crops at harvest or use on-farm storage so no storage and warehousing costs are shown.

CASH FLOW

Business ☐   Actual

Consolidated ☐   Projected ☐   Covering the period: Mar 2014 through Feb 2015

Personal ☐

		Totals	March	April	May	June	July
CASH RECEIVED FROM OPERATIONS							
1	Sale of Livestock Bought for Resale: Stockers	126,489	126,489	-	-	-	-
2	Sale of Livestock Products	-	-	-	-	-	-
3	Livestock Sales (raised)	34,592	-	-	-	-	-
4	Crop Sales: Wheat & Alfalfa	166,075	-	-	-	-	50,800
5	Prairie Hay	5,700	900	-	-	-	4,800
6	Ag Program Payments	7,567	-	-	-	-	-
7	Other Farm Income	28,952	-	-	-	28,672	-
8	Patronage Dividends	280	-	-	-	-	-
9	TOTAL CASH RECEIVED FROM OPERATIONS (Sum 1 thru 8)	369,375	127,389	-	-	28,672	55,600
CASH RECEIVED FROM CAPITAL SALES							
10	Non-Real Property	100,000	-	85,000	-	-	-
11	Land, Buildings & Improvements	-	-	-	-	-	-
12	Non-Farm Property	-	-	-	-	-	-
OTHER INFLOWS							
13	Wages and Salaries	21,600	1,800	1,800	1,800	1,800	1,800
14	Other Contributed Capital	-	-	-	-	-	-
15	Royalty Income	960	80	80	80	80	80
16	TOTAL CASH INFLOWS (Sum 9 thru 15)	491,935	129,269	86,880	1,880	30,552	57,480
OPERATING EXPENSES							
17	Car and Truck Expenses						
18	Chemicals	5,768	5,768				
19	Conservation Expenses						
20	Custom Hire (machine work)	1,066	-	-	-	-	1,066
21	Employee Benefits						
22	Feed	9,796	-	-	-	-	-
23	Fertilizers and Lime	38,018	15,602	1,235	-	-	-
24	Freight and Trucking	835	935	-	-	-	-
25	Gasoline, Fuel, and Oil	29,838	263	259	2,327	9,846	4,885
26	Insurance	7,001	-	-	-	3,502	2,088
27	Labor Hired	13,975	145	142	2,156	3,239	2,400
28	Pension and profit-sharing						
29	Rent or Lease	10,918	2,350	-	-	-	-
30	Repairs and Maintenance	28,408	332	327	2,638	10,584	3,806
31	Seeds and Plants	15,912	-	-	15,283	-	-
32	Storage and Warehousing	1,547	-	-	-	-	-
33	Supplies	163	-	-	163	-	-
34	Taxes	3,332	1,647	-	-	-	-
35	Utilities	1,320	110	110	110	110	110
36	Veterinary, Breeding and Medicine	1,251	26	166	48	107	-
37	Miscellaneous	607	-	-	-	-	-
38	Marketing Expenses	2,465	595				
39		-	-				
40	Cost of Livestock Purchased for Resale	85,000					
41	TOTAL CASH EXPENSES (Sum 17 thru 40)	257,420	27,773	2,239	22,725	27,388	14,355
CAPITAL EXPENSES							
42	Non-Real Property	155,000	-	-	155,000	-	-
43	Land, Buildings & Improvements	-	-	-	-	-	-
44	Non-Farm Property	-	-	-	-	-	-
OTHER OUTFLOWS							
45	Family Living	53,000	4,417	4,417	4,417	4,417	4,417
46	Income & Social Security Taxes	10,350	-	-	-	-	-
47		-	-	-	-	-	-
48		3,000	250	250	250	250	250
SCHEDULED LOAN PAYMENTS							
49	Current Short Term -Interest	3,186	3,186	-	-	-	-
50	-Principal	85,000	85,000	-	-	-	-
51	Non-Real Estate -Interest	2,605	51	1,208	48	46	44
52	-Principal	10,767	208	4,183	211	213	215
53	Real Estate -Interest	11,376	-	-	2,232	-	-
54	-Principal	11,592	-	-	3,000	-	-
55	Non-Farm Loan -Interest	3,739	342	336	331	326	320
56	-Principal	8,104	645	651	656	661	667
57	TOTAL CASH OUTFLOWS (Sum 41 thru 56)	615,139	121,872	13,284	188,870	33,301	20,268
NEW BORROWING							
58	Short Term	85,000	-	-	-	-	-
59	Non-Real Estate	150,000	-	-	150,000	-	-
60	Real Estate	-	-	-	-	-	-
CASH FLOW SUMMARY							
	Interest Rate: 7.00%						
	Minimum Cash Balance: 1500						
61	Beginning Cash Balance		3,421	1,500	12,870	1,500	1,500
62	Inflows - Outflows (16 - 57)		7,397	73,596	(186,990)	(2,749)	37,212
63	Cash Position (Sum 58 thru 62)		10,818	75,096	(24,200)	(1,249)	38,183
64	New Borrowing, Line of Credit		-	-	25,720	2,749	-
65	Interest Accrued, Line of Credit Accrued Interest = 2,331		2,731	361	-	150	316
66	Line of Credit - Interest Payments	3,838	2,731	361	-	-	316
67	Line of Credit - Principal Payments		9,287	61,965	-	-	28,469
68	Ending Cash Balance		1,500	12,770	1,500	1,500	9.927
OUTSTANDING LOAN BALANCES		Feb 14					
69	Outstanding Credit Line Loans	68,552	61,965	-	25,720	28,469	-
70	Outstanding Short Term Loans	85,000	-	-	-	-	-
71	Outstanding Non-R.E. Loans	28,085	27,877	23,695	173,483	173,270	173,056
72	Outstanding Real Estate Loans	130,962	130,962	130,962	127,962	127,962	127,962
73	Outstanding Non-Farm Loans	41,624	40,979	40,328	39,672	39,011	38,344

74	TOTAL OUTSTANDING LOANS	(sum 64 thru 68)	354,223	261,783	194,985	366,837	368,712	339,362	

STATEMENT

Name: James and Dolly Madison
Date Prepared: 3/1/2015

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.		
	-	-	-	-	-	-	-	1	
	-	-	-	-	-	-	-	2	
	-	-	34,592	-	-	-	-	3	
	-	17,975	43,375	17,975	17,975	17,975	-	4	
	-	-	-	-	-	-	-	5	
	-	-	-	-	-	7,567	-	6	
	-	-	-	-	280	-	-	7	
	-	-	-	-	-	-	-	8	
	-	17,975	77,967	17,975	18,255	17,975	-	9	
	-	-	-	15,000	-	-	-	10	
	-	-	-	-	-	-	-	11	
	-	-	-	-	-	-	-	12	
	1,800	1,800	1,800	1,800	1,800	1,800	1,800	13	
	-	-	-	-	-	-	-	14	
	80	80	80	80	80	80	80	15	
	1,880	19,855	79,847	34,855	20,135	27,422	1,880	16	
								17	
								18	
								19	
	-	-	-	-	-	-	-	20	
								21	
	-	-	48	1	3,249	3,249	3,249	22	
	-	7,861	-	-	-	-	7,552	23	
	-	-	-	-	-	-	-	24	
	3,668	4,550	248	223	223	223	223	25	
	-	-	-	-	1,385	-	26		
	2,727	3,166	-	-	-	-	-	27	
								28	
	-	8,568	-	-	-	-	-	29	
	4,246	4,940	307	307	307	307	307	30	
	-	629	-	-	-	-	-	31	
	-	-	1,547	-	-	-	-	32	
	-	-	-	-	-	-	-	33	
	-	-	-	-	1,647	38	-	34	
	110	110	110	110	110	110	110	35	
	-	-	904	-	-	-	-	36	
	-	-	-	-	107	100	400	37	
				1,870				38	
								39	
			85,000					40	
	10,751	29,824	88,164	2,511	7,628	4,027	11,867	41	
	-	-	-	-	-	-	-	42	
	-	-	-	-	-	-	-	43	
	-	-	-	-	-	-	-	44	
	2,630	2,630	2,630	2,630	2,630	2,630	2,630	45	
	-	-	-	-	-	-	10,350	46	
	-	-	-	-	-	-	-	47	
	250	250	250	250	250	250	250	48	
	-	-	-	-	-	-	-	49	
	-	-	-	-	-	-	-	50	
	42	41	989	37	35	33	31	51	
	217	218	4,402	222	224	226	228	52	
	7,244	190	187	2,277	182	179	176	53	
	5,925	335	338	3,341	343	346	349	54	
	122	119	116	114	111	108	105	55	
	340	343	345	348	351	354	357	56	
	29,308	35,737	99,208	13,517	12,941	9,940	28,130	57	
	-	-	85,000	-	-	-	-	58	
	-	-	-	-	-	-	-	59	
	-	-	-	-	-	-	-	60	
	9,927	1,500	1,500	31,942	53,856	61,050	78,532	61	
	(27,428)	(15,882)	(19,361)	21,914	7,194	17,482	(26,250)	62	
	(17,501	(14,382)	67,169	53,856	61,050	78,532	52,282	63	
	19,001	15,882	-	-	-	-	-	64	
	-	111	314	-	-	-	-	65	
	-	-	314	-	-	-	-	66	
	-	-	-	-	-	-	-	67	
	1,500	1,500	34,883	53,856	61,050	78,532	52,282	68	
	19,001	34,883	-	-	-	-	-	69	
	-	-	85,000	85,000	85,000	85,000	85,000	70	
	172,839	172,621	168,218	167,996	167,772	167,546	167,318	71	
	145,726	145,391	145,053	141,712	141,369	141,023	140,674	72	
	14,315	13,972	13,627	13,279	12,927	12,573	12,216	73	
	350,881	366,867	411,898	407,987	407,068	406,142	405,208	74	

CASH FLOW

Business ☐ | Consolidated ☐ | Personal ☐

Actual ☐ | Projected ☐

Covering the period: ____________ through ____________

		Totals	March	April	May	June	July	
CASH RECEIVED FROM OPERATIONS								
1	Sale of Livestock Bought for Resale:							
2	Sale of Livestock Products							
3	Livestock Sales (raised)							
4	Crop Sales: Wheat							
6	Ag Program Payments							
7	Other Farm Income							
8	Patronage Dividends							
9	TOTAL CASH RECEIVED FROM OPERATIONS (Sum 1 thru 8)							
CASH RECEIVED FROM CAPITAL SALES								
10	Non-Real Property							
11	Land, Buildings & Improvements							
12	Non-Farm Property							
OTHER INFLOWS								
13	Wages and Salaries							
14	Other Contributed Capital							
15	Royalty Income							
16	TOTAL CASH INFLOWS (Sum 9 thru 15)							
OPERATING EXPENSES								
17	Car and Truck Expenses							
18	Chemicals							
19	Conservation Expenses							
20	Custom Hire (machine work)							
21	Employee Benefits							
22	Feed							
23	Fertilizers and Lime							
24	Freight and Trucking							
25	Gasoline, Fuel, and Oil							
26	Insurance							
27	Labor Hired							
28	Pension and profit-sharing							
29	Rent or Lease							
30	Repairs and Maintenance							
31	Seeds and Plants							
32	Storage and Warehousing							
33	Supplies							
34	Taxes							
35	Utilities							
36	Veterinary, Breeding and Medicine							
37	Other Expenses							
38								
39								
40	Cost of Livestock Purchased for Resale							
41	TOTAL CASH EXPENSES (Sum 17 thru 40)							
CAPITAL EXPENSES								
42	Non-Real Property							
43	Land, Buildings & Improvements							
44	Non-Farm Property							
OTHER OUTFLOWS								
45	Family Living							
46	Income & Social Security Taxes							
47								
48								
SCHEDULED LOAN PAYMENTS								
49	Current Short Term -Interest							
50	-Principal							
51	Non-Real Estate -Interest							
52	-Principal							
53	Real Estate -Interest							
54	-Principal							
55	Non-Farm Loan -Interest							
56	-Principal							
57	TOTAL CASH OUTFLOWS (Sum 41 thru 56)							
NEW BORROWING								
58	Short Term							
59	Non-Real Estate							
60	Real Estate							
CASH FLOW SUMMARY								
	Interest Rate:							
	Minimum Cash Balance:							
61	Beginning Cash Balance							
62	Inflows - Outflows (16 - 57)							
63	Cash Position (Sum 58 thru 62)							
64	New Borrowing, Line of Credit							
65	Interest Accrued, Line of Credit Accrued Interest =							
66	Line of Credit - Interest Payments							
67	Line of Credit - Principal Payments							
68	Ending Cash Balance							
OUTSTANDING LOAN BALANCES								
69	Outstanding Credit Line Loans							
70	Outstanding Short Term Loans							
71	Outstanding Non-R.E. Loans							
72	Outstanding Real Estate Loans							
73	Outstanding Non-Farm Loans							
74	TOTAL OUTSTANDING LOANS (Sum 64 thru 68)							

STATEMENT

Name: ____________________________
Date Prepared: ______________________

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.		

Supplies (line 33) are likely to be less predictable than some other expenses. Last year's figures should be a reasonable starting point. One way to avoid making inaccurate estimates is to use this line only for supplies rather than as a catch-all for every small expense item. Try to include most small items in other more descriptive lines. By limiting the sort of items typically included in Supplies, the estimate will be much improved. For James Madison, most of the planned supply costs are for baler twine.

Utilities (line 35) refers to the business portion of the expected utility bills. If this figure has been budgeted in the past, simply adjusting for expected changes in price and use is adequate. It is important to identify the business portion of the utility bill for tax purposes and to prevent double-counting in family living expenses. Since no major changes are planned in James Madison's operation, utilities were marked up 10 percent from last year and rounded to the nearest dollar.

Although *Veterinary, Breeding, and Medicine* (line 36) may vary from year to year, certain procedures like vaccinations, insect control, worming, and artificial insemination may be done each year and the projected costs will be based primarily on animal numbers and cost per unit. For less predictable veterinary and medicine expenses, an inflation adjusted typical or average from the past several years is useful.

Any unused lines from 17 to 40 can be relabeled and used for a specific purpose. If you minimize the items included in the *Miscellaneous* line, analyzing the plan and presenting it to outsiders (e.g. lenders) will be less difficult. In the Madison case, *Miscellaneous* includes tax consulting fees, producer magazine subscriptions, and memberships in a farm organization and a cattlemen's association. Because sales commissions are not subtracted from cattle sales, line 39 is used for *Sale Commission* in the Madison example. Line 41 is used to sum monthly requirements for cash operating expenses, lines 17 to 40.

Cash Paid for Items for Resale

Any livestock purchased for resale, such as stockers and feeder cattle, should appear on line 40, Livestock Purchased for Resale. Although it is difficult to predict these figures due to the uncertainties of prices, weights, numbers purchased, feed and pasture availability, and the timing of the purchase, the plan should be based on the best information available at the time.

Cash Paid to Purchase Capital Assets

Lines 42 and 43 are for cash outlays to acquire assets with a productive life typically longer than one year, e.g. breeding livestock, machinery, equipment, buildings, fences, land, and major repairs or improvements that depreciate. Entry for these items is straight forward. Simply enter whatever cash outlay is necessary for the appropriate periods of the year. In the Madison example, a used combine purchase is planned in May for $155,000 (line 42). The down payment of $5,000 will come from this year's cash flow and the remaining $150,000 will be recorded as new term debt (line 59).

Line 44 is used to record the purchase of nonfarm capital assets.

Other Cash Payments

Cash Withdrawals for Family Living (line 45) and Income and Social Security Taxes (line 46) are intended to be used by those completing a consolidated business and personal cash flow. If this is a business-only cash flow, these lines could be used to reflect salary withdrawals in a partnership. A corporation may want to separate out dividends and salary paid to officers or stockholders and enter these flows on line 47.

Cash Withdrawals for Family Living can be based on past cash withdrawals, adjusted for general increases in costs, and any major changes in expenditures (child starting college, major furniture or appliance purchases, non-typical medical expenses, etc.). The checkbook or farm records supply important information for this estimate. James Madison keeps a separate checking account for family expenditures, which makes estimation easier as well as more accurate. The Madisons expect to use $53,000 in cash during the upcoming year. Although the flows will not be the same every month, an average of $4,417 per month was considered sufficiently accurate.

The ability to accurately predict Income and Social Security Taxes (line 46) likely will depend on the time of year the cash flow is completed. Because James Madison's cash flow estimates start in March, income and self employment tax estimates can be based on last year's income.

Line 47 will be used to enter dividends and capital distributions if the farm or ranch is incorporated and payments are made to stockholders or if cash generated by the farm will be channeled to an off-farm business. Line 48 shows a transfer of $250 per month to the Madison's savings account.

Scheduled Loan Payments

Lines 49 to 56 list scheduled interest and principal payments on loans. In projecting these payments, the previous year's balance sheet, current loan schedules, or a liabilities schedule (OSU Extension Fact Sheet AGEC-792) should be useful in determining balances of principal and interest due by the end of the year. Check your loan schedule to see if the interest portion of payments due is listed separately from principal payments. If other than annual payments are to be made, the amounts must be prorated to the proper periods. A loan schedule or a copy of the original note should indicate the exact amount and timing of the payments.

To estimate payments for this coming year on new term loans, review capital asset purchase plans and expense categories. If financing payments are expected on new loans for capital purchases, make the proper entry(s). A discussion with the lender and use of OSU Extension Fact Sheet AGEC-792 "Liabilities Schedule," should increase the accuracy of this estimate.

Total Cash Outflow

Line 57 represents the Total Cash Outflow expected for each period. This line is calculated by adding lines 41 to 56 for each column. If you have been entering estimated year totals only (last column) for some outflows, you should prorate those totals among the months before calculating line 57.

This is a good point to check arithmetic. The sum of lines 17 to 41 in the Totals column should equal the sum across all periods for line 41. In the example, $248,652 checks as the sum of each set of figures. To check Total Cash Outflow, add the Totals for lines 41 through 56 then compare this figure to the sum across periods for line 57. Both equal $606,371 for James Madison.

New Borrowing

Lines 58 through 60 summarize money flowing into the operation from new loan obligations. New short term notes of less than one year are entered on line 58, new non-real estate debt is entered on line 59, and new real estate debt is entered in line 60.

Cash Flow Summary

The cash flow summary section is used to calculate expected line of credit borrowing (if any). The cash position at the end of the month (line 63) is equal to new borrowing plus the beginning cash balance plus monthly net cash flow (the sum of lines 58 to 62).

If the Cash Position is positive but less than the minimum desired ending cash balance, money must be borrowed to bring the Ending Cash Balance up to the minimum level. The amount borrowed is listed in line 64, New Borrowing: Line of Credit. If the Cash Position is positive and greater than the minimum desired cash balance, funds are available to apply to Line of Credit: Interest Payments (line 66) and Line of Credit: Principal Payments (line 67). At times, only enough cash to pay accrued interest and part of principal may be available. Before the amount of principal payment is determined, interest payable should be calculated. If there is no line of credit debt, excess funds are added to the cash balance.

For planning purposes, it may be assumed that all line-of-credit transactions are made at the end of each month. A running total of interest accrued to the line of credit is recorded on line 65. To calculate the interest accrued, multiply the previous month's balance (line 69) by the interest rate and divide by 12 to estimate the accrued interest for the current month. Add this amount to the interest accrual recorded in the previous month. The Madison's accrued interest is $2,331 at the beginning of the fiscal year (line 65), the principal balance is $68,552 (line 69), and the interest rate is 7 percent. An additional $400 interest is accrued during March (68,552 x .07/12); hence, accrued interest on the line of credit is $2,731 at the end of March. Subtracting the interest payment and $1,500 desired minimum balance from the March cash position (10,818 - 2,731 - 1,500) allows $6,587 to be paid on the loan principal balance (line 67).

When the Cash Position is at least as large as the minimum desired balance, the negative Inflows - Outflows are simply covered from the Beginning Cash Balance. No new borrowing occurs and the difference is the Ending Cash Balance. When the Beginning Cash Balance is greater than the minimum desired but not enough to offset a negative net cash flow (outflows exceed inflows) additional capital must be borrowed.

To complete the cash flow summary, begin at the first period and repeat the calculations for each successive period. The Ending Cash Balance from one period becomes next period's Beginning Cash Balance.

Debt Outstanding

When principal payments are made for notes and term debt (lines 50, 52, 54, and 56) or line of credit loans (line 67), the debt outstanding at the end of the period is reduced by that amount. In the James Madison example, principal payments of $208 for non-real estate notes and $645 for nonfarm, are made on term debt in March. Additional principal payments are made in April. New term debt is added when the combine is purchased in May.

Uses of Cash Flow Plan

Projecting the cash flow establishes a plan for the coming year. The farm business operator knows which months borrowing or withdrawal from savings will be necessary and when loan payments or new investments can be made. The cash flow plan provides information needed to establish a loan or line of credit with the lender. If no major operational changes are planned, the lender may expect that the operating loan will be completely paid off at some point during the year. While operations with several enterprises that have overlapping seasonal financing requirements may never completely pay off an operating loan, the projection should indicate the ability for one enterprise's marketing to substantially reduce the financing attributable to that enterprise.

Projecting the cash flow may point out potential liquidity problems. Liquidity refers to the ability of the business to meet its financial obligations as they come due. One indicator of liquidity from the completed cash flow plan is the Current Credit Line balance (line 69). A comparison of the operating loan balance at the beginning and the end of the projection period may also signal potential problems. If the cash flow projection indicates that the operator cannot pay all operating expenses, previous debt commitments, taxes, and family living expenses without an increase in the ending operating loan balance, then liquidity problems exist. The operator should consider, and the lender may suggest, changes in the production plan, reductions in family living expenses, delaying a planned machinery purchase, or refinancing existing debt to reduce the liquidity problem.[2] James Madison's cash flow projects the ability to reduce the line of credit loan to zero in March and doesn't require new line of credit borrowing during the plan year.

Projecting the cash flow can also indicate when cash is available for investment purposes. It helps analyze the feasibility of capital purchases and major changes in the farm or ranch operation. Although cash is certainly not the only aspect of investment analysis, it is extremely important in today's business world. One may wish to project cash flows for several years when considering a substantial capital outlay, such as a land purchase.

As capital requirements increase, more farm investments and operating inputs are being financed with borrowed funds. Increases in the level of debt add to risk for both the operator and the lending institution. Thus, it is important that both the farmer or rancher and the lender know when outstanding debts can be paid and the amount of additional debt that the farm or ranch business can support. By projecting the flow of cash in and out of the business, the farm operator can estimate when and how much annual operating debt will be required, make provisions for its repayment, and determine the business' loan repayment capacity for longer term debt obligations. Finally, the lender can determine how much credit the borrower needs month by month during the year and when the borrower plans to make payments on the operating loan.

Cash flow information is especially useful when the debt repayment schedule is being negotiated at the time a loan is

[2] See OSU Fact Sheet AGEC-208 "Farmers in Transition: Evaluating Options for Change" for additional suggestions.

made. For example, if James Madison were using the projected cash flow to establish fixed repayment dates with the lender (rather than the line of credit arrangement portrayed in the example), payments ought to be scheduled in March in conjunction with cattle sales, in July with wheat sales or in October with wheat and cattle sales. Each individual should review the cash flow plan with the lender to establish the best timing for repayment. Also, the manager should discuss with the lender the possibility of modifying repayment dates if, as the year progresses, changes occur in expected prices or market readiness of livestock and crops.

Care should be taken in projecting inflows, particularly when they rely on uncertain yields and prices. The ultimate success of cash flow planning depends upon the accuracy of the information and the effort that goes into it. Cash flow planning helps avoid cash flow crises.

Computerized Farm Financial Statements

Estimating costs and returns for each farm enterprise and making the calculations necessary to summarize the cash flows take a considerable amount of time. An OSU spreadsheet program, "Integrated Farm Financial Statements (IFFS)," facilitates calculation of farm enterprise cash flows as well as balance sheets and income statements (see agecon.okstate.edu/iffs). The computer program utilizes data from farm enterprise cost and return budgets and additional information from input forms completed by the farm or ranch operator. For additional information, contact the Department of Agricultural Economics, Room 515 Agricultural Hall, Oklahoma State University, Stillwater, Oklahoma 74078-6026 or Cooperative Extension area agricultural economics specialists.

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Developing a Balance Sheet[1]

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http://osufacts.okstate.edu

A good information system contributes to the financial success of the farm business. The information system should provide the manager with production information as well as current measures of the financial position, financial progress, income performance, and debt repayment capacity. A financial information system contains four essential and interrelated components: the balance sheet, the cash flow statement, the income statement, and farm records.

The balance sheet indicates the financial position of the farm business at a particular point in time. The balance sheet shows what is owned versus what is owed. The difference between what is owned and owed represents the owner's claim to the assets of the business, or owner's equity. A projected cash flow statement (AGEC-751) summarizes expected cash requirements (including credit needs and repayment capabilities) of the business for a future period of time. The income statement (AGEC-753) shows the profitability of the business for a particular period of time, usually a year, and is used to analyze the financial success of the business. Farm records provide information useful in completing the set of financial statements (AGEC-752).

The Balance Sheet

An accurately prepared balance sheet measures the financial position of a firm at a given point in time. It shows the value of assets that would remain if the business were liquidated and all financial obligations to others were paid. A series of balance sheets prepared at the same time of year for successive years shows the change in financial position and the progress being made by the business.

Some basic concepts are important to ensure consistency in the preparation of the balance sheet. The balance sheet is typically divided into two major parts: assets and claims to assets. The claims are further distinguished as liabilities (creditors' claims) and owner's equity (owner's claim). A basic accounting rule exists for the relationship between assets and these claims:

Assets = Liabilities + Owner Equity

This basic rule indicates that owner's equity is the difference between the value of assets and the amount owed to creditors. Any changes in assets, liabilities, or owner equity are evident in successive balance sheets.

Before completing a balance sheet, two important decisions must be made. The fi is whether the statement will refl the financial position of the business only or the consolidated finances of the owner and the business. The second decision relates to the method for valuing the assets. The supplement (statement form) provided with this OSU Fact Sheet is designed to be flexible with respect to these considerations. As the following sections explain, the supplement permits the user to select the combination that is right for his or her operation.

Defining the entity: Because farms and ranches are characteristically personal or owner-operated businesses, personal assets and liabilities often cannot be easily separated from business assets and liabilities. In addition, a particular use of the balance sheet might dictate what information it should contain. For example, a lender may be interested in information on both farm and nonfarm assets. On the other hand, for measuring the growth of the farm or ranch business, it is meaningful to consider only farm or ranch assets and liabilities. Either approach is acceptable, but the method used should remain consistent from one year to the next. The supplement to this OSU Fact Sheet can be used for either approach. Simply check the appropriate box at the top of the page: Business, Consolidated, or Personal.

Valuation methods: One of the difficulties in preparing a balance sheet is the valuation of assets. Market-basis valuation is an estimation method based on fair market value less selling costs. Cost-basis valuation adjusts the original cost for accumulated depreciation.[2] Cost less depreciation is termed book value. Base value is a stipulated amount that roughly approximates cost and may be used when valuing raised breeding livestock (AGEC-323) to reduce the amount of record keeping necessary in accounting for all costs of raising each animal. Tax basis is cost less depreciation claimed for tax purposes.

Market-basis valuation is an appropriate method for evaluating financial position for credit analysis and estimating owner equity. Cost-basis valuation is typically more useful when measuring the financial progress of an individual business from year to year.

1 Based on an earlier version by Ross Love and Damona Doye.

2 Depreciation is a method of allocating the non-recoverable portion of cost to each of the years during which the asset will be used to produce revenues. Additional information regarding valuation of depreciable assets may be found in OSU Extension Fact Sheet AGEC-791.

The Farm Financial Standards Council (FFSC) recommends that both cost and market values be disclosed for most assets (Table 1). A set of schedules to facilitate documentation of current and noncurrent asset values is available in OSU Extension Fact Sheet AGEC-791. These forms will aid in deriving the total value for each category of assets and in accounting for changes in total value due to new purchases and sales. Alternatively, the balance sheet may be completed by entering the amounts for each line without using supporting schedules.

If market values are used, one must consider deferred taxes (a contingent tax liability) associated with selling assets such as machinery, equipment, and land at market values above tax basis as well as the transaction costs involved in selling these assets. The estimated tax liability is posted as deferred taxes in the balance sheet. A worksheet to assist in estimating deferred taxes is included with OSU Extension Fact Sheet AGEC-939.

Flexibility of format. The supplement's multi-column format provides considerable flexibility as to the desired method or methods of valuation used. The design of the supplement allows cost basis, market value, or a combination of farm asset valuation methods to be used. Columns have been titled Beginning Balance, Ending Balance, and Net Change. If only one method of valuation is to be used, Beginning Balance should represent the value at the start of the user's tax or fiscal year, while the Ending Balance column is for the value at the end of that year. Net Change is the difference or change in value during the year.

An alternate way to use the form is to compare cost or book value with market value for farm assets. In this approach, the form would be used as a two-column or two-value balance sheet. The first column, Beginning Balance, could be retitled Cost-Basis (or Book Value) and the Ending Value column retitled Market Value. With this procedure, the Net Change column would represent the difference between book and market values. Cost basis or book values are necessary for estimating depreciation and for calculating income while market values are necessary to determine owner's equity, collateral availability, and deferred tax liability.

Table 1. Disclosure Recommended for Complete Financial Statements.

	Market-Based Balance Sheet	Full Disclosure[1]
Marketable Securities	M[2]	C,TB
Prepaid Expenses	C	- Cash
Investment, Growing Crops	C	-
Inventories:[3]		
Marketable Livestock	M	C, TB[4]
Stored Crops and Feed	M	C
Purchased Feed	M/C	-
Supplies	M/C	-
Accounts Receivable[5]	C	-
Purchased Breeding Livestock	M	C,TB
Raised Breeding Livestock	M	C[6]
Machinery, Equipment, Vehicles	M	C,TB
Investment in Capital Leases	C	TB
Contracts and Notes Received	M/C	-
Investment in Cooperatives	NE	-
Real Estate, Land	M	C,TB
Building and Improvements	M	C,TB
Cash Value of Life Insurance	M	-
Investment in Other Entities	C[7]	-
Retirement Accounts	M	C
Other Personal Assets	M	C,TB

1 Additional information needed to do a complete set of financial statements including deferred taxes on the balance sheet and accrual adjustments on the income statement.
2 C=Cost, M=Market, NE=Net Equity ,TB=Tax Basis, M/C=For most instances, market and cost will be about the same and either could be used.
3 GAAP requires lesser of cost or market, except for certain inventories ready for sale.
4 Purchased marketable livestock will need Tax Basis.
5 Less an allowance for doubtful accounts.
6 While full-cost accounting is desirable, for most livestock, base value is more practical.
7 Net Equity - if enough exists ownership exists to exert control in the entity.

Completing the Balance Sheet

Following is a section-by-section explanation of the balance sheet. A fictional Oklahoma farm situation serves to illustrate parts of the statement. These instructions focus on developing a market-based balance sheet, notes on additional calculations needed for full disclosure, and complete financial statements are included in a separate section.

Assets

Assets are usually defined as items of value owned by the business plus items owed to the business. The assets include production units held for sale (e.g. stocker calves, grain) or resources used in the business operation (e.g. breeding livestock, machinery, land). For financial analysis, the assets are usually categorized according to their liquidity or how readily they can be converted to cash.

Current Assets

Current assets are cash and other assets that are typically and easily converted to cash in the course of business during the year without any loss in value. Cash and Checking, line 1 of the balance sheet, should include amounts held in all accounts applicable to the reporting entity. When preparing business-only statements, only the amount of cash held in business accounts would be entered.

In sole proprietorships, cash for business and personal use is sometimes held in a single checking account (separate accounts are recommended, however). All cash that is available for use by the combined entity should be included on line 1. In the example, James and Dolly Madison are using the form as a consolidated statement. The Madisons had $3,421 in their checking account (line 1, col. A) when they prepared the balance sheet at the beginning of the year. Since the statements were prepared as a projection through the following year, they entered their end of year expected cash balance of $52,282 in line 1, col. B.

Accounts Receivable, line 2, is a value for goods and services that have been provided but for which payment has not yet been received. If the receipt of payment for any of the accounts is doubtful, the amount is not included. The Madisons have accounts receivable of $900 on the balance sheet date.

Prepaid Expenses, line 3, includes expenditures for goods or services that have not yet been received as of the balance sheet date or that cannot be readily classified as work in process. One example is cash rent that has been paid for a lease that will expire some time in the future. Another example is fertilizer that has been applied to the soil for a crop that has not yet been planted by the date of the balance sheet. If the crop were actually growing, this amount would be part of Cash Investment, Growing Crops (line 4). However, until a crop is planted, the cost of the applied fertilizer is a prepaid expense. The Madison example shows no prepaid expenses. Cash expenses for planting 499 acres of winter wheat, which were growing as of the balance sheet date, are shown on line 4, $57,385 (an average cost of $115.00 per acre). A comparable investment in growing crops is expected at the same point in time next year; hence, no change is expected in the cash investment in growing crops at year end.

The preferred method for valuing farm inventories, lines 5 through 8, is the lower of cost or market since this method results in the more conservative value.[3] FFSC recommended methods of inventory valuation are given in the next four paragraphs.

Marketable Livestock, line 5, should be valued at market prices when preparing a market-based balance sheet. Market prices may be available from local newspapers and weights may be measured or estimated. Market value may be equal to cost for livestock purchased near the balance sheet date, but weight gain and price change may result in a market value that is significantly different from cost if the livestock have been held for some time. Cost of raised market livestock is more difficult to determine than market value (see OSU Extension Fact Sheet AGEC-323, Valuation of Raised Breeding Livestock). The Madison example includes raised and purchased cattle, steers, and heifers, grouped by weight with a total market value of $134,348.

Stored Crops and Feed, line 6, are valued at current market prices if they are readily available. An estimate of the cost of production may be substituted for market price of a stored crop or feed if no market exists from which to determine price or when preparing a cost-basis balance sheet. The Madisons have 20 tons of prairie hay valued at $105 per ton and 20 tons of alfalfa hay valued at $195 per ton for a total value of $6,000.

Purchased Feed, line 7, is entered at cost or market value, the purchase price multiplied by the quantity in inventory. Cost is usually easy to determine from receipts or farm records and usually will not be significantly different from current market value. A problem might arise when raised feed and purchased feed are commingled. The FFSC recommends that all feed in inventory, up to the total amount purchased during the last year, be treated as purchased and valued at average cost. Any remaining amount is considered raised feed.

Supplies, line 8, are entered at cost, which is assumed to also represent market value. Supplies include stores of fuel, lubricants, veterinary medicines, baling wire, welding rods, and other similar items used in farm production. The Madisons included $2,000 worth of fence posts, diesel fuel, oil, and grease.

Savings, line 11, is the total balance of the savings account(s), including interest earned. When the owner's intent is to restrict the use of savings to the farm only, the amount may be entered on line 9, Other Current Assets. Although it provides liquidity for the farm business, James and Dolly consider their $28,394 savings to be primarily for personal use; hence, it is entered on line 11.

Marketable Securities, line 12, are business assets that are held to provide liquidity and income in the short term. Common examples are stocks and bonds. When preparing consolidated statements, the value of these assets would be listed as nonfarm assets on line 13 if the intended use was strictly personal.

Noncurrent Assets

Noncurrent assets are not normally for sale but rather are held for the production of livestock or crops to be sold later. Noncurrent assets are usually not easily and quickly converted to cash without some expense or loss in value. Some noncurrent assets are depreciable; others are not. Breeding livestock, machinery, equipment, and buildings are used up in the production process over more than one production cycle. These are depreciable assets. Information on depreciable assets may be found in OSU Extension Fact Sheet AGEC-791. Land is a non-depreciable asset and is typically the least liquid of the assets.

Most noncurrent assets are entered at current market value when preparing a market-based balance sheet. Book value (cost less accumulated depreciation) is entered on a cost-based balance sheet and is also needed to calculate valuation equity. Tax basis for assets is needed to calculate deferred taxes.

Breeding Livestock, line 15, are entered at current market value when preparing a market-based balance sheet. The value of $195,000 entered on the balance sheet includes the estimated market value of four bulls, 80 mature cows, 10 bred heifers, and 10 younger replacement heifers.[4]

Vehicles, line 16, are entered at current market value when preparing a market-based balance sheet. Market value may be estimated by comparing the vehicles to similar assets sold at recent auctions, by hiring the services of a professional appraiser, or by relying on personal judgement. The Madisons estimate the market value of all their farm vehicles to be $86,000 at the balance sheet date.

Machinery, Equipment, line 17, are valued in the same manner as vehicles. The Madison example shows the total market value for all machinery of $329,500 at the balance sheet date and an estimated market value of $367,957 one year later.

Investments in Capital Leases, line 18, are entered at book value. A capital lease is a transaction that is termed a lease, but which has many of the qualities of a purchase. However, unlike normal purchases, ownership of the asset does not transfer at the transaction date, but may transfer at the end of the lease term. Lease payments, which are usually made in advance, give the lessee a right to use up some of the value of the asset over a specified period. At the end of that period, title may pass to the lessee or the major part of the value of the asset will have been used up. Current market value would, in many cases, overstate the lessee's claim to the asset. Cost is determined by discounting the lease payments to present value at the date of the lease. This cost is then adjusted by accumulated depreciation to book value, which

3 FFSC guidelines and to some extent GAAP (Generally Accepted Accounting Principles), allow deviations from this method in the interest of simplicity in preparing the balance sheet.

4 A more detailed discussion of valuing raised breeding livestock may be found in OSU Extension Fact Sheet AGEC-323.

BALANCE

Name: ____________________________

☐ Business
☐ Consolidated
☐ Personal

CURRENT ASSETS	A Beginning Balance	B Ending Balance	C Net Change
1. Cash & Checking			
2. Accounts Receivable			
3. Prepaid Expenses			
4. Cash Investment Growing Crops			
Inventories:			
5. Marketable Livestock			
6. Stored Crops and Feed			
7. Purchased Feed			
8. Supplies			
9. Other Current Assets			
10. TOTAL CURRENT FARM ASSETS			
Non-Farm Assets:			
11. Savings			
12. Marketable Securities			
13. Other Non-Farm Assets			
14. TOTAL CURRENT ASSETS			
NON-CURRENT ASSETS			
15. Breeding Livestock			
16. Vehicles			
17. Machinery, Equipment			
18. Investment in Capital Leases			
19. Contracts & Notes Receivable			
20. Investment in Cooperatives			
21. Real Estate, Land			
22. Buildings & Improvements			
23. Other Non-Current Assets			
24. TOTAL NON-CURRENT FARM ASSETS			
Non-Farm Assets:			
25. Cash Value, Life Insurance			
26. Investment in Other Entities			
27. Other Non-Farm Assets			
28. TOTAL NON-CURRENT ASSETS			
29. TOTAL ASSETS			

SHEET

Date Statement Developed: ____________

☐ Cost Basis
☐ Market Based

CURRENT LIABILITIES		D Beginning Balance	E Ending Balance	F Net Change
30.	Accounts Payable			
31.	Line of Credit and Operating Notes			
32.	Current Portion of Term Debt			
33.	Accrued Interest			
	Taxes Payable:			
34.	Ad Valorem			
35.	Employee Payroll Withholding			
36.	Income Taxes			
37.	Deferred Taxes			
38.	Other Accrued Expenses			
39.	Other Current Liabilities			
40.	TOTAL CURRENT FARM LIABILITIES			
	Non-farm Liabilities:			
41.	Non-Farm Notes & Interest			
42.	Other Non-Farm Liabilities			
43.	TOTAL CURRENT LIABILITIES			

NON-CURRENT LIABILITIES				
44.	Notes Payable, non-Real Estate			
45.	Notes Payable Real Estate			
46.	Deferred Taxes			
47.	Other Non-Current Liabilities			
48.	TOTAL NON-CURRENT FARM LIABILITIES			
	Non-Farm Liabilities:			
49.	Non-Farm Notes			
50.	Other Non-Farm Liabilities			
51.	TOTAL NON-CURRENT LIABILITIES			
52.	TOTAL LIABILITIES			

OWNER EQUITY				
53.	Contributed Capital			
54.	Retained Earnings			
55.	Total Valuation Equity			
56.	TOTAL EQUITY			
57.	TOTAL LIABILITIES & EQUITY			

Name: James and Dolly Madison

BALANCE

Business
Consolidated
Personal

		A	B	C
		Feb. 1, 2014 Beginning Balance	Feb. 1, 2015 Ending Balance	Net Change
CURRENT ASSETS				
1.	Cash & Checking	3,421	52,282	48,861
2.	Accounts Receivable	900	-	(900)
3.	Prepaid Expenses	-	-	-
4.	Cash Investment Growing Crops	57,385	57,385	-
	Inventories:			
5.	Marketable Livestock	134,348	134,348	-
6.	Stored Crops and Feed	6,000	6,200	200
7.	Purchased Feed	-	-	-
8.	Supplies	2,000	2,000	-
9.	Other Current Assets	-	-	-
10.	TOTAL CURRENT FARM ASSETS	204,054	252,215	48,161
	Non-Farm Assets:			
11.	Savings	28,394	32,590	4,196
12.	Marketable Securities	-	-	-
13.	Other Non-Farm Assets	-	-	-
14.	TOTAL CURRENT ASSETS	232,448	284,805	52,357
NON-CURRENT ASSETS				
15.	Breeding Livestock	195,000	195,000	-
16.	Vehicles	86,000	77,400	(8,600)
17.	Machinery, Equipment	329,500	367,957	38,457
18.	Investment in Capital Leases	-	-	-
19.	Contracts & Notes Receivable	-	-	-
20.	Investment in Cooperatives	18,000	18,350	350
21.	Real Estate, Land	1,590,000	1,590,000	-
22.	Buildings & Improvements	47,000	46,161	(839)
23.	Other Non-Current Assets	-	-	-
24.	TOTAL NON-CURRENT FARM ASSETS	2,265,500	2,294,838	29,368
	Non-Farm Assets:			
25.	Cash Value, Life Insurance	14,056	14,914	858
26.	Investment in Other Entities	15,000	16,000	1,000
27.	Other Non-Farm Assets: House	65,000	63,839	(1,161)
28.	TOTAL NON-CURRENT ASSETS	2,359,556	2,389,591	30,065
29.	TOTAL ASSETS	2,592,004	2,674,396	82,392

Date: 8/11/2015

SHEET

☐ Cost Basis
☐ arket Based

		D	E	F
		Mar. 2014 Beginning Balance	Feb. 2015 Ending Balance	Net Change
CURRE T LIABILITIES				
30.	Accounts Payable	-	-	-
31.	Line of Credit and Operating Notes	153,552	85,000	(68,552)
32.	Current Portion of Term Debt	26,368	48,858	22,491
33.	Accrued Interest	10,728	17,719	6,991
	Taxes Payable:			
34.	Ad Valorem	1,647	1,647	-
35.	Employee Payroll Withholding	-	-	-
36.	Income Taxes	10,350	10,350	0
37.	Deferred Taxes	41,340	41,461	121
38.	Other Accrued Expenses	-	-	-
39.	Other Current Liabilities	-	-	-
40.	TOTAL CURRENT FARM LIABILITIES	243,985	205,035	(38,950)
	Non-farm Liabilities:			
41.	Non-Farm Notes & Interest	4,164	4,576	412
42.	Other Non-Farm Liabilities	-	-	-
43.	TOTAL CURRENT LIABILITIES	248,149	209,611	(38,538)
NON-CURRENT LIABILITIES				
44.	Notes Payable, non-Real Estate	17,319	134,944	117,626
45.	Notes Payable Real Estate	140,674	124,189	(16,485)
46.	Deferred Taxes	200,245	207,960	7,715
47.	Other Non-Current Liabilities	-	-	-
48.	TOTAL NON-CURRENT FARM LIABILITIES	358,237	467,093	108,856
	Non-Farm Liabilities:			
49.	Non-Farm Notes	12,216	7,691	(4,525)
50.	Other Non-Farm Liabilities	-	-	-
51.	TOTAL NON-CURRENT LIABILITIES	370,453	474,784	104,331
52.	TOTAL LIABILITIES	618,602	684,395	65,793
OWNER EQUITY				
53.	Contributed Capital	93,500	93,500	-
54.	Retained Earnings	1,254,362	1,270,961	16,599
55.	Total Valuation Equity	625,540	625,540	-
56.	TOTAL EQUITY	1,973,402	1,990,001	16,599
57.	TOTAL LIABILITIES & EQUITY	2,592,004	2,674,396	82,392

is entered on the balance sheet. A more complete discussion of capital leases is given in OSU Extension Facts AGEC-935.

Contracts and Notes Receivable, line 19, are obligations of others which the owner is entitled to receive. For example, the owner may have sold a parcel of land to another individual and received a note promising payment(s) at specified time(s). The note would probably be secured by a mortgage. Only the principal balance of the note and interest accrued to the date of the balance sheet should be entered. Interest, which may be received at a later date, has not yet been earned and cannot be considered an asset. Some notes receivable have little or no security. These are included when it is likely that the payments will be received, but excluded if it is doubtful that the note will be collected.

Investments in Cooperatives, line 20, are recorded at net equity. The most practical method for determining net equity in marketing and supply cooperatives would be to divide the shareholders' equity by the number of outstanding shares and multiply by the number of shares held by the producer. Shareholders' equity and number of shares outstanding should be readily available from the annual report of the cooperative(s). The value of stock held in farm credit cooperatives should be readily available from statements issued by the cooperatives. Stock in cooperatives is generally restricted in transferability and therefore has no easily determinable market value. The Madisons' investment in cooperatives includes $18,000 net equity in the local farmer's coop.

Real Estate, Land, line 21, is valued at current market price when preparing a market-based balance sheet. Market value is determined by comparing the land to recent sales of similar land, by appraisal, or by the judgement of the owner. The Madisons own 960 acres with values ranging from $1,440 to $1,880 per acre for a total of $1,593,600.

Buildings and Improvements, line 22, are also real property, but differ from land in that they are generally depreciable assets. In a market-based balance sheet, the current market value of all buildings and improvements is recorded. The Madison example includes three farm buildings valued at $47,000 at the balance sheet date.

Cash Value of Life Insurance, line 25, is valued at the current market value, that is, the amount which might be borrowed against the policy or the cash amount which would be received if the policy were surrendered to the insurance company. Although this is usually a very liquid asset, it is considered noncurrent because the intent is to provide longer-term financial security rather than ready cash.

Investment in Other Entities, line 26, should be accounted for in accordance with GAAP. If the owner's holding is too small to have significant influence on the operation of the other entity, the asset should be entered on the balance sheet at cost. Dividends or distributions will be recorded as investment income and the cash or savings account, line 1 or line 11, will be adjusted accordingly. When the owner's share of the entity is great enough to exert significant influence (generally assumed at 20% to 50% ownership), the net equity method should be used. In this situation, a portion of the earnings or losses of the other entity accrue to the shareholder and adjust the investment account, line 26. Dividends or distributions reduce the investment account and adjust the cash account.

For example, assume that four partners each own a 25% interest in a business with equity of $400,000. Each would record an investment asset of $100,000 on their respective balance sheets. If the entity earned $40,000 during the year and kept the entire amount in retained earnings, each would record an investment in other entities of $110,000 at the end of the year. However, if the entity earned $40,000 and distributed $20,000 to the owners, each would record $105,000 investment in other entities and adjust their cash account by $5,000. When more than 50% of the other entity is owned, consolidated statements are required.

Other Nonfarm Assets, line 27, should include the market value of items such as the residence or rental properties, which are not used in farm production and not easily converted to cash. The Madison's house is valued at $65,000 on the balance sheet data.

Liabilities

Liabilities are claims by others against the assets and are categorized according to the time period in which the obligations are to be paid. Like assets, liabilities are either current or noncurrent. OSU Extension Fact Sheet AGEC-792, Liabilities Schedule, may be used to summarize the liabilities for an individual or business.[5]

Current Liabilities

Current liabilities are those that are due in the current operating period, usually within 12 months. Accounts Payable are entered on line 30. These are obligations that arise from purchasing goods and services on credit. Whether through billing or credit card purchase, only the farm portion of credit card balances should be included on this line.

Line of Credit and Operating Notes, line 31, include the principal balances of line-of-credit and other short-term loans. A "line-of-credit" is a financial arrangement where an operator may borrow as required to sustain operations up to a limit set with the lender. Short-term notes have a duration of one year or less and are typically single-payment notes but may have other repayment schedules. On the balance sheet date, the Madisons have a line-of-credit balance of $68,552 and a cattle note for $85,000. The sum of these notes, $153,552, is entered on line 31.

The Current Portion of Term Debt, line 32, is the sum of principal payments, which will be due in the 12-month period following the balance sheet date on loans scheduled to be repaid over a period longer than one year. The portion of the principal amount, which is due within one year is a current liability and the remaining principal amount is classified as noncurrent. The Madisons have a tractor loan, a pickup loan, two loans for land, and a loan for their house. Their liabilities schedule lists $22,360 in currrent principal for the farm loans plus $8,104 for non-farm loans.

Accrued Interest is calculated on all farm loans to the balance sheet date and entered on line 33. The easiest and most accurate means of determining the interest accrued is by obtaining a statement from the lender. If the loan statement is not available, an approximate amount may be calculated. For example, the Madisons' tractor note has a principal balance of $22,067 and an interest rate of 10.5%. The last payment was made in mid-October 2014. Assuming that all payments are

5 This publication includes additional detail about the Madison example discussed in following paragraphs.

made in the middle of the month, interest will have accrued for 4 1/2 months to March 1, 2010: $22,067 x .105 = $2,317 for one year. $2,317 ÷ 12 = $193 per month and $193 x 4.5 = $869 accrued to the balance sheet date. Interest accrued to the operating notes and other term notes is calculated in the same manner. The total interest accrued to the Madisons' notes is $10,623.

Ad Valorem Taxes (taxes on assets based on value), line 34, and *Employee Payroll Withholding*, line 35, are amounts accrued to the balance sheet date. The Madisons owe half of the ad valorem (property) taxes for last year, due in March, plus an amount accrued for January of the current year for a total of $1,647.

Income Taxes, line 36, are estimated amounts. The income tax liability accrues as taxable income is earned. Farmers generally have the option to pay estimated taxes quarterly or to file early in the next tax year. The graduated tax-rate system along with various exemptions and deductions make precise estimations of tax liability difficult until all supporting data can be assembled. James and Dolly Madison estimate their accrued tax liability to be $10,350 based on tax amounts paid in recent years and production for the past year.

Deferred Taxes, line 37, arise when asset values increase beyond their tax basis. The change represents taxable income which is not recognized for tax purposes until the assets are actually sold. Most current assets will not have a tax basis since the cost of the assets are expensed. Two exceptions are marketable securities and livestock purchased for resale. Accrued expenses are subtracted from the excess of market value over tax basis to determine deferred taxable income for the current assets. This amount is then multiplied by an estimated average tax rate for federal and state income taxes. The Madison's deferred taxable income is $107,201 on current assets. The Madisons estimate the average federal income rate to be about 20 percent and the state income tax rate will be about 5 percent. In addition, the first $106,800 of earned income is taxable as self-employment income at 12.4 percent. All earned income is taxed at 2.9 percent for medicare. Thus, the Madisons estimated current deferred taxes are $43,152. More detailed information about deferred taxes may be found in OSU Extension Fact Sheet AGEC-939. The total Deferred Tax expense for current assets is entered in the balance sheet on line 37.

The sum of the current farm liabilities is entered on line 40. Non-Farm Current Liabilities are entered on lines 41 and 42. Personal credit card balances should be included with the current portion of other nonfarm liabilities on line 42. The Madisons have two nonfarm notes with current principal and accrued interest of $8,275. This is added to the farm liabilities and the result is entered in line 43, total current liabilities.

Noncurrent Liabilities

Noncurrent Liabilities are those which are not due in the current operating year, but are due beyond this year. The Noncurrent Portion of Term Debt, line 44, is found by subtracting the principal balance due in the current year from the total principal owed. The tractor note in the Madison farm example has a principal balance of $22,067. This year $8,156 in principal payments is due and is included in the amount on line 32. The noncurrent principal balance is therefore $13,912. This amount is added to the noncurrent portion of the pickup note ($3,406) and entered on line 44, Notes Payable non-Real Estate. The non-current portion of the Federal Land Bank note ($77,370), and Equitable real estate loan ($42,000) is summed and entered on line 45, Notes Payable Real Estate.

Noncurrent Deferred Taxes are calculated in the same manner as current deferred taxes. The procedure is slightly simpler since social security and medicare taxes do not apply to the noncurrent deferred income. The Madisons have taxable gains on non-current assets of $1,109,108, which is subject to federal and state income taxes. This deferred tax is estimated to be 25 percent of that amount, or $277,277. Credit for previous operating losses, which have not been claimed for tax purposes, should be calculated and subtracted from the estimated deferred taxes to determine the net noncurrent deferred tax liability. This amount is then transferred to the balance sheet on line 46.

The total for noncurrent farm liabilities is entered in line 48. Any noncurrent portion of nonfarm liabilities such as the Madison's house note are entered on lines 49 and 50, are added to the noncurrent farm liabilities and the total entered in line 51. Finally, total current liabilities, line 43, is added to total noncurrent liabilities, line 51, and the result entered in line 52, total liabilities.

Additional Information Needed for Full Disclosure

For marketable securities, tax basis (which equals cost in this case) will be used to determine deferred taxes and valuation equity. If a cost-basis balance sheet is prepared, enter the total cost of the securities.

For full disclosure statements, book value for purchased breeding livestock is determined by subtracting accumulated depreciation from cost. Determining book value for raised breeding livestock is more complicated. This OSU fact sheet uses a base-value method, which roughly approximates the cost of raising an animal to production. The costs are expensed during each year as they occur and the base value is not depreciated. The base-value method greatly reduces record-keeping and is easier to use than the preferred method of full-cost absorption. With full-cost absorption, the total cost of raising an animal (or group of animals) to production age is accumulated and capitalized. The cost is then depreciated over the useful life of the animal. The Madisons use a schedule to estimate market value for the balance sheet and to record base values for raised breeding stock (OSU Extension Fact Sheet AGEC-791).

For machinery and equipment, accumulated depreciation is subtracted from cost to determine book value. For land, original cost is used on a cost-basis balance sheet since land is never depreciated. Valuation of buildings and improvements for full-disclosure statements is the same as for machinery and equipment except that the useful life used in calculating depreciation is usually longer.

Owner Equity

Owner equity is a calculated residual after the claims of others (liabilities) are subtracted from the value of assets. Total equity is, therefore, easy to determine once the value for total assets and total liabilities have been calculated. Division of total equity into contributed capital, retained earnings, and valuation equity is very useful in analyzing the farm's productivity and financial position.

Contributed Capital (line 53) represents the original investment into the business (or reporting entity) plus additional amounts that may have been added by some source from outside the entity such as gifts and inheritances. When the farm business alone is the reporting entity, additional investment of the owner's personal funds (e.g., wages from off-farm work) would be added to the initial investment and withdrawals from the business (e.g. family living expenses) would be subtracted. In the example, the Madisons include personal and other nonfarm assets and liabilities in the financial statements. Thus, the reporting entity is the combination of the owners and the business. Any movement of personal assets to or from the farm does not change the contributed capital of the combined entity. Their contributed capital of $93,500 is the original cash amount (not borrowed), which they paid for their first farm and some used equipment.

Retained Earnings (line 54) are an accumulation of net earnings, which have not been withdrawn or distributed. A series of retained earnings provides strong historical evidence of the ability of the business to generate profits above withdrawals. The amount may be difficult to determine directly if adequate records are not available to show net farm income for each year since the beginning of the business. However, the amount may be determined indirectly by subtracting contributed capital and valuation equity from total equity. The Madisons' retained earnings of $1,270,961 is about 64 percent of their total equity of $1,990,000 and the projected increase in retained earnings, $16,599, for the year indicates a profitable operation.

Total Valuation Equity (line 55) is the change in owner equity due to changes in the market values of assets owned. Valuation equity equals the sum of market values of assets minus the sum of book values (cost less accumulated depreciation) and minus noncurrent deferred taxes. The Madisons total valuation equity as o f the balance sheet data is $625,540.

Relationship to Other Financial Statements

The balance sheet is one of the most commonly used financial tools. Time invested in keeping records and preparing financial statements including the balance sheet yield positive returns. However, the balance sheet does not measure profitability except to the extent that profits increase retained earnings and total owner equity from one period to the next. It also does not measure the repayment capacity or the ability to meet financial obligations when they come due. Thus, for financial analysis and credit management purposes, the balance sheet should be supplemented with an income statement and a cash flow projection.

Computerized Farm Financial Statements

An OSU spreadsheet program, "Integrated Farm Financial Statements (IFFS)," facilitates calculation of farm enterprise cash flows, balance sheets, and income statements. The computer program utilizes data from farm enterprise cost, return budgets, and additional information from input forms completed by the farm or ranch operator. For additional information, contact the Department of Agricultural Economics, Room 515 Agricultural Hall, Oklahoma State University, Stillwater, Oklahoma 74078-6026 or Cooperative Extension area agricultural economics specialists or visit agecon.okstate.edu/iffs.

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2. Entries may be made directly in the appropriate column for each period and summed across to get Totals.

Often, a combination of the two approaches is used. Each section of the Cash Flow Form will be discussed below using an example Oklahoma farm, the James and Dolly Madison case. The discussion and illustration will focus on line items on a section-by-section basis.

Cash Inflows

Cash Received from Operations

In this section, total cash receipts are estimated for items sold during the period. Whether the inflows are from sale of inventory or from current production makes no difference for the cash flow statement. Only cash transactions are reflected in the cash flow. Lines 1 through 5 document expected cash receipts from Livestock Sales (except breeding livestock, which is a capital asset sale), Sales of Livestock Purchased for Resale, Livestock Product Sales, and Crop Sales. Unused lines can be customized to separate receipts by enterprise.

Cash receipts from stockers, feeders, and any other livestock purchased to be resold are recorded on line 1. For cash flow planning, it is not essential to separate receipts for livestock purchased for resale from other cash receipts (after all, cash is cash). But, most record systems and the income tax schedules require separate entries for sales as well as purchases of livestock to be resold. To better conform to these uses of information, the livestock purchased for resale and raised livestock sales are listed on separate lines for both receipts and expenses in the OSU Cash Flow form. Stockers purchased last October are expected to be sold in March and are entered as Sales of Livestock Purchased for Resale (line 1). Estimated March receipts are $126,489 (before trucking and commissions). In the example, James Madison plans to sell calves from the cow-calf enterprise in October with expected cash income of $34,592. This figure is entered on line 3.

Cash receipts from crop sales are handled similarly to livestock. Make entries to reflect the marketing plan or estimated marketing each period. For example, if all wheat will be sold at harvest, enter the total for projected wheat sales in the column for the harvest month. Although the marketing plan may change, careful estimates are better in the long run than no plans or estimates at all. Finally, if share-rent arrangements are used for crops or livestock, only the cash portion of the producer's share of sales is included on the cash flow. Although James Madison has some wheat and hay storage, most crop sales occur at harvest. Wheat sales are expected to generate $50,800 (line 4) in July and $25,400 in October. Alfalfa sales are expected to generate $17,975 from September through January. Hay sales are expected to generate $4,800 in July.

Estimated Ag Program Payments (line 6) should be based on anticipated participation in government programs and expected payments for participation. The Madisons expect to receive $7,567 in Ag Program Payments during the plan year, split between October and December. Crop insurance indemnity payments might also be included or could be listed separately. Line 7 provides space to estimate cash inflows from Other Farm Income. Receipts from custom work, cash rental of farm business property, and miscellaneous receipts should be included. James Madison does custom work for neighbors and expects to receive $28,672 in June. Here, Patronage Dividends are entered on line 8, $280 in December. Line 9 is used to sum cash operating inflows.

Note: The designated lines of the cash flow statement may not provide sufficient space for the detail needed. For instance, you may want to keep three crop enterprises on separate lines on the cash flow. These enterprises can be accommodated on lines 7 or 8 or on unused livestock lines. Similar minor changes can be made throughout the cash flow to fit specific needs.

Cash Received from Capital Sales

Cash receipts from the sale of breeding livestock, machinery, equipment, vehicles, real estate and buildings, and nonfarm capital assets are entered in lines 10 through 12. While not all capital sales can be projected in advance, breeding livestock and machinery should be reviewed to anticipate cull cow or bull sales or changes in machinery and equipment that involve cash. Cash sales of any breeding livestock, whether purchased or raised, should be included. For machinery and equipment, record expected cash sales only. Trade transactions do not normally generate cash. In our example, James Madison expects to sell ten cows from the herd and replace them with raised heifers. Cash generated from the sale of culled cows is anticipated to be $15,000 in November. The Madisons plan to sell a combine for $85,000 in April.

Other Cash Received

Lines 13 to 15 represent nonfarm cash receipts that will be available for use in the farm or ranch business during the coming year. These include nonfarm income; sales of marketable securities; investment income; sale of personal assets/retirement account withdrawals; capital contributions; gifts and inheritances. Nonfarm income may include expected wages and salaries from off-farm work (operator and spouse) plus income from a nonfarm business. Income from the sale of marketable securities, interest and dividends from investments, and royalty payments are combined on the next line. Past experiences are useful in estimating nonfarm receipts. Dolly Madison works off-farm and earns $1,800 per month. The Madison's receive $80 per month in royalty income.

Total Cash Inflows

Total Cash Inflows (other than new borrowing), line 16, is derived by summing lines 9 through 15. The number in the Totals column ($491,935 in the example) should equal the sum across periods for line 16 as well as the sum of the totals in lines 9 through 15.

Cash Outflows

Projecting expenditures is generally easier than projecting revenues. Operating expense figures can come from many sources. The previous year's cash expenditures serve as a good starting point. If an actual past cash flow statement is not available, hand records, year-end summaries of computerized records, or tax forms from prior years are useful. The cash flow form is designed to be compatible with IRS Schedule 1040 F, farm record handbooks, and computerized record systems. While the order of line items may differ slightly, you will find each of these sources of information corresponds well with items listed on the form.

For some expenses, adjustments may be needed to reflect changes in the farm plan and expected prices. For other expenses, simply inflating or deflating the previous period's actual expenditures by an appropriate factor may adequately estimate upcoming expenditures. Use your judgment in applying one or both methods to develop good estimates of anticipated cash outflows. A cash flow plan helps the operator avoid potential cash management problems as well as prepare for possible opportunities as they occur.

Cash Paid for Operating Expenses

Operating expenses refer to those cash expenses incurred for the period to period operation of the business. If Car and Truck expenses are combined for tax purposes, line 17 may be used to sum the expenses for upkeep of vehicles used in the business (gas, oil, repairs, license tags, insurance, etc.). Alternatively, gas, fuel, oil, repairs, taxes and insurance can be summed with other like items in lines 25, 26, 30, and 34, as James Madison does.

The amount and timing of *Chemicals* (line 18) used will depend on crops grown, pests, disease, weather, and costs of treatment. If the crop and pest management plan is not expected to change significantly, use last year's figures as a guide for this year's cash flow plan with appropriate price adjustments. *Conservation* expenses may be entered on line 19 and include cash outlays for soil or water conservation or for the prevention of erosion (unless they are treated as capital expenses).

For line 20, *Custom Hire* (machine work), generate a total expenditure estimate based on the planned crop acreage and predicted or contracted cost per acre. (Note: If crop receipts in line 4 or 5 were listed net of custom work or costs do not include the deducted costs here as they would be double counted.) These costs may be prorated to months of expenditure. James Madison has an extensive machinery and equipment complement and does not custom hire any field work. He does however, have crop hauling costs included in the Custom Hire (line 20) because they occur as part of the harvest.

Feed expenditures (line 22) will greatly depend upon livestock enterprise plans and feed inventories. Major expenditures may be calculated on an estimated need and expected price basis. If major changes are planned in the livestock operations, the cost of expected requirements should be budgeted based on the new plan. This method is more complicated than the simple inflation mark-up, but also is more accurate. James Madison plans to stay with about the same plan used last year. Thus a major portion of the feed expense will be incurred from December through February. For the other months, last year's feed expenditures are adjusted upward to reflect expected cost increases.

Fertilizers and Lime (line 23) and *Seeds and Plants* (line 31) expenditures depend on planting intentions, soil tests, and input prices. If little change in varieties, planting rates, and application rates is planned, adjusting for acreage and predicted price differences is adequate. On the other hand, major changes require more explicit budgeting. If part or all of the expenses are shared in a rental arrangement, only cash expenditures for this business, not the total cost, should be included in the cash outflows. In the example, the seed is paid for at the time it is delivered for planting. If early purchases are made or late payment is planned, entries should be made accordingly. James Madison's cash outlay for fertilizer and lime occurs primarily during the application months of August, February, and March.

Freight and Trucking (line 24) depends primarily on how much and when crops and livestock are marketed. For example, James Madison pays trucking costs for stockers purchased in October. Often only the charges for cattle show up in line 24. The timing of freight and trucking expenditures should correspond to the marketing plans for those enterprises. If hauling is not custom hired, most of the cash expenses will appear on other lines such as gas, fuel, oil, labor hired, and repairs.

Projecting *Gasoline, Fuel, and Oil* costs (line 25) for the upcoming year may be quite a task. It may be easiest to take the costs from each period of last year and make a blanket adjustment estimate, based on expected changes in the production plan and input prices. For James Madison, 108 percent of last year's outlays served as an estimate for the coming period. If per acre fuel, oil, and lubricant cost accounts are kept, more accurate estimates may be made by multiplying acres of crops to be planted times estimated costs per acre.

Insurance (line 26) and *Taxes* (line 34) are straightforward. Taxes may include car licenses, state or local sales taxes, state and federal income taxes, federal use taxes, and self-employment taxes for the farm. The previous year's figures are a useful guide for the present year's plan.

Labor Hired (line 27) should include cash wages as well as cash expenditures for employee benefits and employer contributions to employee social security. James Madison expects to need part-time help June through September.

Rent or Lease (line 29) are generally predictable. Cash renting of crop land, pasture, and buildings will comprise the major expenses. Annual, quarterly, or monthly cash payments are entered in the appropriate month(s).

Line 30 allows for estimation of *Repairs and Maintenance* expenses (those not capitalized) in the coming period. The effect of major items on last period's actual repair cost should be considered in anticipating major outlays in the period ahead. For routine repairs, simply increasing or decreasing the previous year's figure based on expected price changes estimates outlays. Based on previous experience, James Madison expects most machinery repair to occur from wheat harvest through planting. While some minor machinery and equipment repair is forecast throughout the year, typically most breakdowns and equipment preparation occur in this period.

Repairs to buildings and fences are less obvious. If major building repairs are planned, the estimated cost should be entered for the appropriate period. Estimates of minor building repair and maintenance should be based on those experienced in the last few years. Since no major repairs are anticipated by James Madison, last period's expenditures were simply increased by 10 percent and prorated throughout the year.

Careful consideration of the entire crop program including expected quantities, the marketing schedule, and on-farm storage availability will serve as the basis for deciding on the cash expenses for *Storage and Warehousing* (line 32). Estimated crop size and cost of storage per unit should be easy to get. The greatest uncertainty may stem from the length of time the crops will remain in storage. Make your best estimate based on previous experience and the marketing plan at the time a cash flow budget is developed. James Madison plans to sell crops at harvest or use on-farm storage so no storage and warehousing costs are shown.

CASH FLOW

Business | Actual

Consolidated | Projected | Covering the period: Mar 2014 through Feb 2015

Personal

		Totals	March	April	May	June	July
	CASH RECEIVED FROM OPERATIONS						
1	Sale of Livestock Bought for Resale: Stockers	126,489	126,489	-	-	-	-
2	Sale of Livestock Products	-	-	-	-	-	-
3	Livestock Sales (raised)	34,592	-	-	-	-	-
4	Crop Sales: Wheat & Alfalfa	166,075	-	-	-	-	50,800
5	Prairie Hay	5,700	900	-	-	-	4,800
6	Ag Program Payments	7,567	-	-	-	-	-
7	Other Farm Income	28,952	-	-	-	28,672	-
8	Patronage Dividends	280	-	-	-	-	-
9	TOTAL CASH RECEIVED FROM OPERATIONS (Sum 1 thru 8)	369,375	127,389	-	-	28,672	55,600
	CASH RECEIVED FROM CAPITAL SALES						
10	Non-Real Property	100,000	-	85,000	-	-	-
11	Land, Buildings & Improvements	-	-	-	-	-	-
12	Non-Farm Property	-	-	-	-	-	-
	OTHER INFLOWS						
13	Wages and Salaries	21,600	1,800	1,800	1,800	1,800	1,800
14	Other Contributed Capital	-	-	-	-	-	-
15	Royalty Income	960	80	80	80	80	80
16	TOTAL CASH INFLOWS (Sum 9 thru 15)	491,935	129,269	86,880	1,880	30,552	57,480
	OPERATING EXPENSES						
17	Car and Truck Expenses						
18	Chemicals	5,768	5,768				
19	Conservation Expenses						
20	Custom Hire (machine work)	1,066	-	-	-	-	1,066
21	Employee Benefits						
22	Feed	9,796	-	-	-	-	-
23	Fertilizers and Lime	38,018	15,602	1,235	-	-	-
24	Freight and Trucking	835	935	-	-	-	-
25	Gasoline, Fuel, and Oil	29,838	263	259	2,327	9,846	4,885
26	Insurance	7,001	-	-	-	3,502	2,088
27	Labor Hired	13,975	145	142	2,156	3,239	2,400
28	Pension and profit-sharing						
29	Rent or Lease	10,918	2,350	-	-	-	-
30	Repairs and Maintenance	28,408	332	327	2,638	10,584	3,806
31	Seeds and Plants	15,912	-	-	15,283	-	-
32	Storage and Warehousing	1,547	-	-	-	-	-
33	Supplies	163	-	-	163	-	-
34	Taxes	3,332	1,647	-	-	-	-
35	Utilities	1,320	110	110	110	110	110
36	Veterinary, Breeding and Medicine	1,251	26	166	48	107	-
37	Miscellaneous	607	-	-	-	-	-
38	Marketing Expenses	2,465	595				
39		-	-				
40	Cost of Livestock Purchased for Resale	85,000					
41	TOTAL CASH EXPENSES (Sum 17 thru 40)	257,420	27,773	2,239	22,725	27,388	14,355
	CAPITAL EXPENSES						
42	Non-Real Property	155,000	-	-	155,000	-	-
43	Land, Buildings & Improvements	-	-	-	-	-	-
44	Non-Farm Property	-	-	-	-	-	-
	OTHER OUTFLOWS						
45	Family Living	53,000	4,417	4,417	4,417	4,417	4,417
46	Income & Social Security Taxes	10,350	-	-	-	-	-
47		-	-	-	-	-	-
48		3,000	250	250	250	250	250
	SCHEDULED LOAN PAYMENTS						
49	Current Short Term -Interest	3,186	3,186	-	-	-	-
50	-Principal	85,000	85,000	-	-	-	-
51	Non-Real Estate -Interest	2,605	51	1,208	48	46	44
52	-Principal	10,767	208	4,183	211	213	215
53	Real Estate -Interest	11,376	-	-	2,232	-	-
54	-Principal	11,592	-	-	3,000	-	-
55	Non-Farm Loan -Interest	3,739	342	336	331	326	320
56	-Principal	8,104	645	651	656	661	667
57	TOTAL CASH OUTFLOWS (Sum 41 thru 56)	615,139	121,872	13,284	188,870	33,301	20,268
	NEW BORROWING						
58	Short Term	85,000	-	-	-	-	-
59	Non-Real Estate	150,000	-	-	150,000	-	-
60	Real Estate	-	-	-	-	-	-
	CASH FLOW SUMMARY						
	Interest Rate: 7.00%						
	Minimum Cash Balance: 1500						
61	Beginning Cash Balance		3,421	1,500	12,870	1,500	1,500
62	Inflows - Outflows (16 - 57)		7,397	73,596	(186,990)	(2,749)	37,212
63	Cash Position (Sum 58 thru 62)		10,818	75,096	(24,200)	(1,249)	38,183
64	New Borrowing, Line of Credit		-	-	25,720	2,749	-
65	Interest Accrued, Line of Credit Accrued Interest = 2,331		2,731	361	-	150	316
66	Line of Credit - Interest Payments	3,838	2,731	361	-	-	316
67	Line of Credit - Principal Payments		9,287	61,965	-	-	28,469
68	Ending Cash Balance		1,500	12,770	1,500	1,500	9.927
	OUTSTANDING LOAN BALANCES	Feb 14					
69	Outstanding Credit Line Loans	68,552	61,965	-	25,720	28,469	-
70	Outstanding Short Term Loans	85,000	-	-	-	-	-
71	Outstanding Non-R.E. Loans	28,085	27,877	23,695	173,483	173,270	173,056
72	Outstanding Real Estate Loans	130,962	130,962	130,962	127,962	127,962	127,962
73	Outstanding Non-Farm Loans	41,624	40,979	40,328	39,672	39,011	38,344

74	TOTAL OUTSTANDING LOANS	(sum 64 thru 68)	354,223	261,783	194,985	366,837	368,712	339,362	

STATEMENT

Name: James and Dolly Madison
Date Prepared: 3/1/2015

Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	2
-	-	34,592	-	-	-	-	3
-	17,975	43,375	17,975	17,975	17,975	-	4
-	-	-	-	-	-	-	5
-	-	-	-	-	7,567	-	6
-	-	-	-	280	-	-	7
-	-	-	-	-	-	-	8
-	17,975	77,967	17,975	18,255	17,975	-	9
-	-	-	15,000	-	-	-	10
-	-	-	-	-	-	-	11
-	-	-	-	-	-	-	12
1,800	1,800	1,800	1,800	1,800	1,800	1,800	13
-	-	-	-	-	-	-	14
80	80	80	80	80	80	80	15
1,880	19,855	79,847	34,855	20,135	27,422	1,880	16
							17
							18
							19
-	-	-	-	-	-	-	20
							21
-	-	48	1	3,249	3,249	3,249	22
-	7,861	-	-	-	-	7,552	23
-	-	-	-	-	-	-	24
3,668	4,550	248	223	223	223	223	25
-	-	-	-	1,385	-	26	
2,727	3,166	-	-	-	-	-	27
							28
-	8,568	-	-	-	-	-	29
4,246	4,940	307	307	307	307	307	30
-	629	-	-	-	-	-	31
-	-	1,547	-	-	-	-	32
-	-	-	-	-	-	-	33
-	-	-	-	1,647	38	-	34
110	110	110	110	110	110	110	35
-	-	904	-	-	-	-	36
-	-	-	-	107	100	400	37
			1,870				38
							39
		85,000					40
10,751	29,824	88,164	2,511	7,628	4,027	11,867	41
-	-	-	-	-	-	-	42
-	-	-	-	-	-	-	43
-	-	-	-	-	-	-	44
2,630	2,630	2,630	2,630	2,630	2,630	2,630	45
-	-	-	-	-	-	10,350	46
-	-	-	-	-	-	-	47
250	250	250	250	250	250	250	48
-	-	-	-	-	-	-	49
-	-	-	-	-	-	-	50
42	41	989	37	35	33	31	51
217	218	4,402	222	224	226	228	52
7,244	190	187	2,277	182	179	176	53
5,925	335	338	3,341	343	346	349	54
122	119	116	114	111	108	105	55
340	343	345	348	351	354	357	56
29,308	35,737	99,208	13,517	12,941	9,940	28,130	57
-	-	85,000	-	-	-	-	58
-	-	-	-	-	-	-	59
-	-	-	-	-	-	-	60
9,927	1,500	1,500	31,942	53,856	61,050	78,532	61
(27,428)	(15,882)	(19,361)	21,914	7,194	17,482	(26,250)	62
(17,501	(14,382)	67,169	53,856	61,050	78,532	52,282	63
19,001	15,882	-	-	-	-	-	64
-	111	314	-	-	-	-	65
-	-	314	-	-	-	-	66
-	-	-	-	-	-	-	67
1,500	1,500	34,883	53,856	61,050	78,532	52,282	68
19,001	34,883	-	-	-	-	-	69
-	-	85,000	85,000	85,000	85,000	85,000	70
172,839	172,621	168,218	167,996	167,772	167,546	167,318	71
145,726	145,391	145,053	141,712	141,369	141,023	140,674	72
14,315	13,972	13,627	13,279	12,927	12,573	12,216	73
350,881	366,867	411,898	407,987	407,068	406,142	405,208	74

CASH FLOW

Business ☐ Consolidated ☐ Personal ☐

Actual ☐ Projected ☐

Covering the period: ____________ through ____________

		Totals	March	April	May	June	July	
	CASH RECEIVED FROM OPERATIONS							
1	Sale of Livestock Bought for Resale:							
2	Sale of Livestock Products							
3	Livestock Sales (raised)							
4	Crop Sales: Wheat							
6	Ag Program Payments							
7	Other Farm Income							
8	Patronage Dividends							
9	TOTAL CASH RECEIVED FROM OPERATIONS (Sum 1 thru 8)							
	CASH RECEIVED FROM CAPITAL SALES							
10	Non-Real Property							
11	Land, Buildings & Improvements							
12	Non-Farm Property							
	OTHER INFLOWS							
13	Wages and Salaries							
14	Other Contributed Capital							
15	Royalty Income							
16	TOTAL CASH INFLOWS (Sum 9 thru 15)							
	OPERATING EXPENSES							
17	Car and Truck Expenses							
18	Chemicals							
19	Conservation Expenses							
20	Custom Hire (machine work)							
21	Employee Benefits							
22	Feed							
23	Fertilizers and Lime							
24	Freight and Trucking							
25	Gasoline, Fuel, and Oil							
26	Insurance							
27	Labor Hired							
28	Pension and profit-sharing							
29	Rent or Lease							
30	Repairs and Maintenance							
31	Seeds and Plants							
32	Storage and Warehousing							
33	Supplies							
34	Taxes							
35	Utilities							
36	Veterinary, Breeding and Medicine							
37	Other Expenses							
38								
39								
40	Cost of Livestock Purchased for Resale							
41	TOTAL CASH EXPENSES (Sum 17 thru 40)							
	CAPITAL EXPENSES							
42	Non-Real Property							
43	Land, Buildings & Improvements							
44	Non-Farm Property							
	OTHER OUTFLOWS							
45	Family Living							
46	Income & Social Security Taxes							
47								
48								
	SCHEDULED LOAN PAYMENTS							
49	Current Short Term -Interest							
50	-Principal							
51	Non-Real Estate -Interest							
52	-Principal							
53	Real Estate -Interest							
54	-Principal							
55	Non-Farm Loan -Interest							
56	-Principal							
57	TOTAL CASH OUTFLOWS (Sum 41 thru 56)							
	NEW BORROWING							
58	Short Term							
59	Non-Real Estate							
60	Real Estate							
	CASH FLOW SUMMARY							
	Interest Rate:							
	Minimum Cash Balance:							
61	Beginning Cash Balance							
62	Inflows - Outflows (16 - 57)							
63	Cash Position (Sum 58 thru 62)							
64	New Borrowing, Line of Credit							
65	Interest Accrued, Line of Credit Accrued Interest =							
66	Line of Credit - Interest Payments							
67	Line of Credit - Principal Payments							
68	Ending Cash Balance							
	OUTSTANDING LOAN BALANCES							
69	Outstanding Credit Line Loans							
70	Outstanding Short Term Loans							
71	Outstanding Non-R.E. Loans							
72	Outstanding Real Estate Loans							
73	Outstanding Non-Farm Loans							
74	TOTAL OUTSTANDING LOANS (Sum 64 thru 68)							

STATEMENT

Name: ____________________________

Date Prepared: ______________________

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.		

Supplies (line 33) are likely to be less predictable than some other expenses. Last year's figures should be a reasonable starting point. One way to avoid making inaccurate estimates is to use this line only for supplies rather than as a catch-all for every small expense item. Try to include most small items in other more descriptive lines. By limiting the sort of items typically included in Supplies, the estimate will be much improved. For James Madison, most of the planned supply costs are for baler twine.

Utilities (line 35) refers to the business portion of the expected utility bills. If this figure has been budgeted in the past, simply adjusting for expected changes in price and use is adequate. It is important to identify the business portion of the utility bill for tax purposes and to prevent double-counting in family living expenses. Since no major changes are planned in James Madison's operation, utilities were marked up 10 percent from last year and rounded to the nearest dollar.

Although *Veterinary, Breeding, and Medicine* (line 36) may vary from year to year, certain procedures like vaccinations, insect control, worming, and artificial insemination may be done each year and the projected costs will be based primarily on animal numbers and cost per unit. For less predictable veterinary and medicine expenses, an inflation adjusted typical or average from the past several years is useful.

Any unused lines from 17 to 40 can be relabeled and used for a specific purpose. If you minimize the items included in the *Miscellaneous* line, analyzing the plan and presenting it to outsiders (e.g. lenders) will be less difficult. In the Madison case, *Miscellaneous* includes tax consulting fees, producer magazine subscriptions, and memberships in a farm organization and a cattlemen's association. Because sales commissions are not subtracted from cattle sales, line 39 is used for *Sale Commission* in the Madison example. Line 41 is used to sum monthly requirements for cash operating expenses, lines 17 to 40.

Cash Paid for Items for Resale

Any livestock purchased for resale, such as stockers and feeder cattle, should appear on line 40, Livestock Purchased for Resale. Although it is difficult to predict these figures due to the uncertainties of prices, weights, numbers purchased, feed and pasture availability, and the timing of the purchase, the plan should be based on the best information available at the time.

Cash Paid to Purchase Capital Assets

Lines 42 and 43 are for cash outlays to acquire assets with a productive life typically longer than one year, e.g. breeding livestock, machinery, equipment, buildings, fences, land, and major repairs or improvements that depreciate. Entry for these items is straight forward. Simply enter whatever cash outlay is necessary for the appropriate periods of the year. In the Madison example, a used combine purchase is planned in May for $155,000 (line 42). The down payment of $5,000 will come from this year's cash flow and the remaining $150,000 will be recorded as new term debt (line 59).

Line 44 is used to record the purchase of nonfarm capital assets.

Other Cash Payments

Cash Withdrawals for Family Living (line 45) and Income and Social Security Taxes (line 46) are intended to be used by those completing a consolidated business and personal cash flow. If this is a business-only cash flow, these lines could be used to reflect salary withdrawals in a partnership. A corporation may want to separate out dividends and salary paid to officers or stockholders and enter these flows on line 47.

Cash Withdrawals for Family Living can be based on past cash withdrawals, adjusted for general increases in costs, and any major changes in expenditures (child starting college, major furniture or appliance purchases, non-typical medical expenses, etc.). The checkbook or farm records supply important information for this estimate. James Madison keeps a separate checking account for family expenditures, which makes estimation easier as well as more accurate. The Madisons expect to use $53,000 in cash during the upcoming year. Although the flows will not be the same every month, an average of $4,417 per month was considered sufficiently accurate.

The ability to accurately predict Income and Social Security Taxes (line 46) likely will depend on the time of year the cash flow is completed. Because James Madison's cash flow estimates start in March, income and self employment tax estimates can be based on last year's income.

Line 47 will be used to enter dividends and capital distributions if the farm or ranch is incorporated and payments are made to stockholders or if cash generated by the farm will be channeled to an off-farm business. Line 48 shows a transfer of $250 per month to the Madison's savings account.

Scheduled Loan Payments

Lines 49 to 56 list scheduled interest and principal payments on loans. In projecting these payments, the previous year's balance sheet, current loan schedules, or a liabilities schedule (OSU Extension Fact Sheet AGEC-792) should be useful in determining balances of principal and interest due by the end of the year. Check your loan schedule to see if the interest portion of payments due is listed separately from principal payments. If other than annual payments are to be made, the amounts must be prorated to the proper periods. A loan schedule or a copy of the original note should indicate the exact amount and timing of the payments.

To estimate payments for this coming year on new term loans, review capital asset purchase plans and expense categories. If financing payments are expected on new loans for capital purchases, make the proper entry(s). A discussion with the lender and use of OSU Extension Fact Sheet AGEC-792 "Liabilities Schedule," should increase the accuracy of this estimate.

Total Cash Outflow

Line 57 represents the Total Cash Outflow expected for each period. This line is calculated by adding lines 41 to 56 for each column. If you have been entering estimated year totals only (last column) for some outflows, you should prorate those totals among the months before calculating line 57.

This is a good point to check arithmetic. The sum of lines 17 to 41 in the Totals column should equal the sum across all periods for line 41. In the example, $248,652 checks as the sum of each set of figures. To check Total Cash Outflow, add the Totals for lines 41 through 56 then compare this figure to the sum across periods for line 57. Both equal $606,371 for James Madison.

New Borrowing

Lines 58 through 60 summarize money flowing into the operation from new loan obligations. New short term notes of less than one year are entered on line 58, new non-real estate debt is entered on line 59, and new real estate debt is entered in line 60.

Cash Flow Summary

The cash flow summary section is used to calculate expected line of credit borrowing (if any). The cash position at the end of the month (line 63) is equal to new borrowing plus the beginning cash balance plus monthly net cash flow (the sum of lines 58 to 62).

If the Cash Position is positive but less than the minimum desired ending cash balance, money must be borrowed to bring the Ending Cash Balance up to the minimum level. The amount borrowed is listed in line 64, New Borrowing: Line of Credit. If the Cash Position is positive and greater than the minimum desired cash balance, funds are available to apply to Line of Credit: Interest Payments (line 66) and Line of Credit: Principal Payments (line 67). At times, only enough cash to pay accrued interest and part of principal may be available. Before the amount of principal payment is determined, interest payable should be calculated. If there is no line of credit debt, excess funds are added to the cash balance.

For planning purposes, it may be assumed that all line-of-credit transactions are made at the end of each month. A running total of interest accrued to the line of credit is recorded on line 65. To calculate the interest accrued, multiply the previous month's balance (line 69) by the interest rate and divide by 12 to estimate the accrued interest for the current month. Add this amount to the interest accrual recorded in the previous month. The Madison's accrued interest is $2,331 at the beginning of the fiscal year (line 65), the principal balance is $68,552 (line 69), and the interest rate is 7 percent. An additional $400 interest is accrued during March (68,552 x .07/12); hence, accrued interest on the line of credit is $2,731 at the end of March. Subtracting the interest payment and $1,500 desired minimum balance from the March cash position (10,818 - 2,731 - 1,500) allows $6,587 to be paid on the loan principal balance (line 67).

When the Cash Position is at least as large as the minimum desired balance, the negative Inflows - Outflows are simply covered from the Beginning Cash Balance. No new borrowing occurs and the difference is the Ending Cash Balance. When the Beginning Cash Balance is greater than the minimum desired but not enough to offset a negative net cash flow (outflows exceed inflows) additional capital must be borrowed.

To complete the cash flow summary, begin at the first period and repeat the calculations for each successive period. The Ending Cash Balance from one period becomes next period's Beginning Cash Balance.

Debt Outstanding

When principal payments are made for notes and term debt (lines 50, 52, 54, and 56) or line of credit loans (line 67), the debt outstanding at the end of the period is reduced by that amount. In the James Madison example, principal payments of $208 for non-real estate notes and $645 for nonfarm, are made on term debt in March. Additional principal payments are made in April. New term debt is added when the combine is purchased in May.

Uses of Cash Flow Plan

Projecting the cash flow establishes a plan for the coming year. The farm business operator knows which months borrowing or withdrawal from savings will be necessary and when loan payments or new investments can be made. The cash flow plan provides information needed to establish a loan or line of credit with the lender. If no major operational changes are planned, the lender may expect that the operating loan will be completely paid off at some point during the year. While operations with several enterprises that have overlapping seasonal financing requirements may never completely pay off an operating loan, the projection should indicate the ability for one enterprise's marketing to substantially reduce the financing attributable to that enterprise.

Projecting the cash flow may point out potential liquidity problems. Liquidity refers to the ability of the business to meet its financial obligations as they come due. One indicator of liquidity from the completed cash flow plan is the Current Credit Line balance (line 69). A comparison of the operating loan balance at the beginning and the end of the projection period may also signal potential problems. If the cash flow projection indicates that the operator cannot pay all operating expenses, previous debt commitments, taxes, and family living expenses without an increase in the ending operating loan balance, then liquidity problems exist. The operator should consider, and the lender may suggest, changes in the production plan, reductions in family living expenses, delaying a planned machinery purchase, or refinancing existing debt to reduce the liquidity problem.[2] James Madison's cash flow projects the ability to reduce the line of credit loan to zero in March and doesn't require new line of credit borrowing during the plan year.

Projecting the cash flow can also indicate when cash is available for investment purposes. It helps analyze the feasibility of capital purchases and major changes in the farm or ranch operation. Although cash is certainly not the only aspect of investment analysis, it is extremely important in today's business world. One may wish to project cash flows for several years when considering a substantial capital outlay, such as a land purchase.

As capital requirements increase, more farm investments and operating inputs are being financed with borrowed funds. Increases in the level of debt add to risk for both the operator and the lending institution. Thus, it is important that both the farmer or rancher and the lender know when outstanding debts can be paid and the amount of additional debt that the farm or ranch business can support. By projecting the flow of cash in and out of the business, the farm operator can estimate when and how much annual operating debt will be required, make provisions for its repayment, and determine the business' loan repayment capacity for longer term debt obligations. Finally, the lender can determine how much credit the borrower needs month by month during the year and when the borrower plans to make payments on the operating loan.

Cash flow information is especially useful when the debt repayment schedule is being negotiated at the time a loan is

[2] See OSU Fact Sheet AGEC-208 "Farmers in Transition: Evaluating Options for Change" for additional suggestions.

made. For example, if James Madison were using the projected cash flow to establish fixed repayment dates with the lender (rather than the line of credit arrangement portrayed in the example), payments ought to be scheduled in March in conjunction with cattle sales, in July with wheat sales or in October with wheat and cattle sales. Each individual should review the cash flow plan with the lender to establish the best timing for repayment. Also, the manager should discuss with the lender the possibility of modifying repayment dates if, as the year progresses, changes occur in expected prices or market readiness of livestock and crops.

Care should be taken in projecting inflows, particularly when they rely on uncertain yields and prices. The ultimate success of cash flow planning depends upon the accuracy of the information and the effort that goes into it. Cash flow planning helps avoid cash flow crises.

Computerized Farm Financial Statements

Estimating costs and returns for each farm enterprise and making the calculations necessary to summarize the cash flows take a considerable amount of time. An OSU spreadsheet program, "Integrated Farm Financial Statements (IFFS)," facilitates calculation of farm enterprise cash flows as well as balance sheets and income statements (see agecon.okstate.edu/iffs). The computer program utilizes data from farm enterprise cost and return budgets and additional information from input forms completed by the farm or ranch operator. For additional information, contact the Department of Agricultural Economics, Room 515 Agricultural Hall, Oklahoma State University, Stillwater, Oklahoma 74078-6026 or Cooperative Extension area agricultural economics specialists.

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Developing an Income Statement

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The income statement indicates whether a business has earned money or suffered a loss. Actual financial statements help evaluate past performance so that improvements can be made as needed. Projected financial statements allow for evaluating options from production to marketing strategies to risk management. It is important to keep good farm records throughout the year to help ease the burden of financial statement preparation and planning.

To be useful, analysis needs to be done at regular intervals using consistent reporting techniques. Annual reviews should be standard, but for some businesses monthly, quarterly, and/or semi-annual evaluations are necessary. Most people prepare tax information on a calendar year. Therefore, financial planning is often done on the same calendar year basis. The balance sheet, cash flow, and income statement planning periods need to align to be effective. The instructions that follow are generally consistent with the Farm Financial Standards Council recommendations.[1]

The Income Statement

The income statement shows whether the farm operation returns a profit or a loss to unpaid labor, management, and equity. Profitability is defined as the extent to which an entity generates revenue over and above expenses with the available assets. Assets include land, capital, labor and management. Information from the income statement is also used to evaluate repayment capacity, capital investment potential, and financial efficiency (see OSU Extension Fact Sheet AGEC-790, Evaluating Financial Performance and Position).

This OSU Fact Sheet explains how to prepare the income statement. Information, like that found in balance sheets and a cash flow statement, is required to develop the income statement.[2] The cash flow statement should cover the same accounting period as the income statement. Balance sheets are required for the beginning and ending of the accounting period.

Two basic accounting methods exist for determining net income. Both the cash and accrual methods are acceptable in tax reporting for farmers, and each has its advantages and disadvantages. Most farmers use cash accounting to compute income taxes. Cash accounting requires only single entry record keeping, which is achieved through maintaining receipts for income and expenses. Under the cash method, receipts and expenses are reported for the period during which cash or money actually changes hands. If feed is purchased and used during one accounting period, but not paid for until the next accounting period, the feed expense is not recorded until it is paid in the next accounting period. Here, profits are overstated during the first period and understated during the next accounting period. Reliance on cash income figures can delay recognition of financial problems.

The accrual method more accurately reports net income and is better for financial analysis. However, accrual accounting requires double-entry bookkeeping, which is more complicated. Accrual accounting "matches" associated expenses to revenue as they are earned. The Farm Financial Standards Council recommends that farm financial statements be developed using "accrual adjusted" accounting, a compromise between cash and accrual methods. Accrual adjusted financial statements are based on cash records with accrual adjustments to revenue (e.g., changes in inventories, accounts receivable, and prepaid expenses) and expenses (e.g., accounts payable, accrued taxes, and interest).

Example

A case study involving James and Dolly Madison is used in the examples of this fact sheet.[3] The accrual adjusted income statement is being prepared for the fiscal year March 2014 through February 2015. The primary sections of the income statement are Gross Farm Revenue, Total Operating Expenses, Interest Expense, Net Farm Income From Operations, Gain/Loss on Sale of Farm Capital Assets, Gain/Loss Due to Change in General Base Values of Breeding Livestock, Net Farm Income, Nonfarm Revenue, Nonfarm Expenses, Gain/Loss on Sale of Capital Assets and Marketable Securities, Income Before Taxes and Extraordinary Items, Income Tax Expense, Extraordinary Items, and Net Income. Some key components for evaluation are Gross Revenue, Total Expenses, Net Farm Income From Operations, Net Farm Income, and Net Income.

1 "Financial Guidelines for Agricultural Producers: Recommendations of the Farm Financial Standards Council (Revised)," January 2008.
2 OSU Extension Fact Sheets AGEC-751, Developing A Cash Flow Statement and AGEC-752, Developing a Balance Sheet, discuss information requirements and include sample statements.

3 The FFSC recommends that income from nonfarm sources should not be shown on the farm income statement. Because the OSU forms are used for a variety of purposes, we have chosen to include them.

Note: The most efficient way to develop an accrual adjusted income statement is to have a completed cash flow statement and balance sheets for the beginning and end of the accounting period at hand. References to line numbers in the OSU Cash Flow and Balance Sheet forms (Extension Fact Sheets AGEC-751 and AGEC-752) are given both in the text that follows and on the income statement forms. For instance, CF 1 means information can be transferred from line one of the cash flow; BS 6 C means numbers can be taken from the balance sheet, line 6, column C.

Warning: If you customize the cash flow statement lines, be careful when transferring information to the appropriate lines in the income statement.

Revenue

Revenue is income generated by the farm operations. Not all cash inflows are income. Cash proceeds from an operating loan are an example of a cash receipt that is not income. Revenue includes proceeds from the sales of market livestock, livestock products and crops, plus government payments. Changes in inventories of market livestock, raised crops, and feed, gains or losses from the sale of culled breeding stock, changes in accounts receivable, and prepaid expenses are also recorded in the revenue section.

Gross Revenue from Market Livestock Sales. Sale of raised market livestock, livestock purchased for resale, and livestock products are recorded in the Gross Revenue section. Raised market livestock may include stockers, feeder pigs, and broilers. Livestock purchased for resale may include purchased stocker steers and heifers or feeder pigs. Examples of livestock products are milk, eggs, wool, and mohair. Note that sales of breeding livestock are not included in this section.

In the Madison example, sales of livestock purchased for resale are $126,489 (CF 1), Livestock Product Sales are zero (CF 2), and Market Livestock Sales (raised livestock) are $34,592 (CF 3). The accrual adjustment to livestock sales is the difference in the value of market livestock inventories at the beginning and ending of the accounting period. In other words, this is the change in Market Livestock Inventories (BS 5 C). Since the value of market livestock at the end of the year is the same, the change in market livestock inventories for the Madison example is zero. Decreases in inventory are subtracted from the cash sales figure when calculating gross revenue. This adjustment to revenue may result from either a decrease in the market value of livestock, a reduced number of animals, or both. Increases in market livestock inventories are added to the cash sales figures, increasing gross revenue. A positive change in inventory would suggest that more revenue was generated either due to an increase in market value and/or an increase in the number of livestock on hand. Gross Revenue from Market Livestock/Products is found by adding lines 1 through 5 on the Income Statement. The Madisons have gross revenue from market livestock products of $161,081 (calculated from 34,592 + 126,489).

Gross Revenue from Crops. Total crop sales should be broadly interpreted to include income from the sales of raised crops: wheat, corn, soybeans, fruits and vegetables, as well as hay, straw, and silage. Revenue from sales of crops or feed purchased for resale would also be included in this section. The Madisons have Crop Sales of wheat and alfalfa hay, $166,075; and prairie hay, $5,700 (CF 4 and CF 5). The Change in Stored Crop and Feed inventories is an accrual adjustment to the crop revenue (BS 6 C), summarizing the differences between beginning and ending values of raised crop and feed inventories. The Madisons recorded an increase in the value of inventories of $200. An increase in inventory increases revenue for the accounting period. Gross Revenue from Crops sums the lines 7, 8, and 9 of this income statement section. The Madison total is $171,975 which is 166,075 + 5,700 + 200.

Other Revenue and Accrual Adjustments to Revenue. Ag Program payments, cash rent for farm property, crop insurance claim proceeds, interest earned from farm savings and loans, patronage dividends from farm related entities (cooperatives, rural electric cooperatives, etc.), and custom work are other sources of farm revenue. Ag Program Payments, on line 10, include SURE, ACRE, CRP, disaster, and diversion payments (CF 6). The total for Other Farm Income is entered on line 11 (CF 7). Patronage dividends from farm related entities are entered on line 12 (CF 8). Custom work is farm-related use of machinery, equipment, or labor for pay (e.g., baling hay, harvesting wheat, hauling grain). The Madisons have other farm income of $28,952 from custom work.

Gain/Loss from the Sale of Culled Breeding Stock sums gains and losses from sales of raised and purchased breeding animals culled (line 13). For raised breeding livestock, the gain/loss is calculated by subtracting the base value from the sale proceeds; for purchased breeding stock, subtract the cost basis from the sale proceeds to determine the gain or loss.[4] A positive number indicates a gain on the sale; a negative number indicates a loss on the sale. Only the gain from the sale, not the gross revenue, is recorded; otherwise, the revenue will be overstated. The Madisons plan to cull 10 raised cows from the breeding herd. The raised cows are expected to net $15,000, a loss of $3,000 when compared to their base value (Table 1). If a material downsizing or complete liquidation of the herd occurs, the gain/loss on sale should be recorded on the income statement after Net Farm Income from Operations and before accrual adjusted Net Farm Income (line 61).

Change in Value Due to Change in Quantity of Raised Breeding Stock is the sum of the changes in value of raised livestock that are being retained for possible future use in the breeding herd, but for which the related cash costs have been expensed in the income statement.[5] Raised livestock for breeding are not depreciated if using a base-value method. Instead, revenue is recognized each period when the animals are at a transfer point such as changing from market livestock to replacement heifer, replacement heifer to bred heifer, or bred heifer to cow. The value recorded on line 14 of the income statement is the gain in value (no cash exchanged) of market livestock as they change livestock classes within the breeding herd.

Table 1. Gain or loss on Sale of Raised Breeding Stock.

Animals	Number of Animals	Base Value	Total Base Value	Total Cash Recieved	Net Sold Gain/Loss
Cows	10	$1,800	$18,000	$15,000	($3,000)

4 See OSU Extension Fact Sheet AGEC-791, Schedules of Assets, for more information on valuing assets and calculating gains and losses when assets are sold.

5 Changes in the value of purchased livestock (calves, chicks, etc.) that are purchased young to be raised for breeding should also be included.

Table 2 (columns 1 through 10) summarizes the Madisons raised breeding stock activities for the year and lists the base values (group approach) used for livestock.[6] Replacement heifers are assigned a base value of $1,150; bred heifers, $1,500; and cows, $1,800. This year the Madisons will transfer 10 calves into the raised replacement heifers class, 10 replacement heifers into bred heifers, and 10 bred heifers into cows. Because there was no change in the number of head in any category, and no change in the base value, no entry is needed on line 14 for the Income Statement.

The **Change in Accounts Receivable** (BS 2 C) is an accrual adjustment to the cash revenue, where accounts receivable represent the value of cash not yet received for sales made or custom work done during the accounting period that are likely to be collected. During the year, accounts receivable might increase as a result of the increase in money due from the sale of hay. Income due from the sale of livestock products, crops, supplies, or perhaps machine work could also be recorded. The net change in accounts receivable (BS 2 C) is reflected on line 15 of the income statement.

Accrual adjustments to other assets are recorded on lines 16 through 21 of the income statement. The values of these items are adjusted similarly to other inventories. The change in values (ending values minus beginning values) for prepaid expenses, cash investment in growing crops, supplies, other current assets, contracts and notes receivable, and investments in cooperatives can come from corresponding lines of the balance sheet. Prepaid Expenses include production input items or services paid for during the accounting period, but not yet received. The change in Prepaid Expenses (BS 4 C) is recorded on line 16 of the income statement.

Inventory changes associated with Cash Investment in Growing Crops, Supplies, or Other Current Assets can result from changes in quantities or prices. Inventory changes (ending values minus beginning values) are recorded on lines 17 to 19 of the income statement. All inventory adjustment figures are computed from the current asset section of the balance sheet.

Contracts and Notes Receivable might include farm rent on a long-term lease or income from a land sale that is expected to be earned in future years. The change in Investment in Cooperatives is the change in the value of stock owned in cooperatives (BS 20 C).

Gross Revenue is the total farm revenue including accrual adjustments. Gross Revenue from Market Livestock and Products (line 5) and Gross Revenue from Crops (line 9) is summed with Other Farm Revenue (line 22) to determine Gross Farm Revenue. The Madison farm has gross revenue of $366,305.

Expenses

Operating Expenses are those expenses incurred to generate revenue. An expense is the amount of goods or services (cash or non-cash) used to produce a revenue generating item or service. Cash expenditures do not always constitute an expense. For example, principal payments on farm loans are cash expenditures and are recorded on the Cash Flow Statement; however, they are not operating expenses. Only the interest portion of a loan payment is recorded as an expense for the income statement.

6 See OSU Extension Fact Sheet AGEC- 323, Valuation of Raised Breeding Livestock, for more detail.

Table 2. Schedule of Raised Breeding Livestock, 3/1/2015.

	1	2	3	4	5	6	7	8	9	10	11	12
Raised Description	Number of Animals 3/1/14	Base Value per head	Total Base Value 3/1/14	Transferred In	Transferred Out	Sold	Died	Number of Animals 3/1/15	Base Value per Head	Total Base Value 3/1/15	New Base Value per Head Inventory	New Base Value of Beginning Inventory (Col. 1xCol.11)
Repl. Heifers	10	$1,150	$11,500	10	10	0	0	10	$1,150	$11,500	1,165	$11,650
Bred Heifers	10	$1,500	$15,000	10	10	0	0	10	$1,500	$15,000	1,515	$15,150
Cows	80	$1,800	$144,000	10	0	10	0	80	$1,800	$144,000	1,815	$145,200
			$170,500							$170,500		$172,000

MADISON INCOME STATEMENT

Business ☐
Consolidated ☐
Personal ☐

Actual ☐
Projected ☐

For the period: March 2014 through Feb 2015

REVENUE		Line		
Sales of Livestock Bought for Resale	CF 1	1	126,489	
Sale of Livestock Products	CF 2	2		
Livestock Sales (raised)	CF 3	3	34,592	
Change in Market Livestock inventories	BS 5C	4	0	
Gross Revenue from Market Livestock and Products	(1+2+3+4)	5		161,081
Crop Sales				
a. Wheat and Alfalfa	CF 4	6	166,075	
b. Hay	CF 5	7	5,700	
Change in Stored Crops/Feed Inventories	BS 6 C	8	200	
Gross Revenue from Crops	(6+7+8)	9		171,975
Ag Program Payments	CF 6	10	7,567	
Other Farm Income	CF 7	11	28,952	
Patronage Dividends	CF 8	12	280	
Gain or Loss from Sale of Culled Breeding Stock		13	(3,000)	
Change in Value Due to Change in Quantity of Raised Breeding Livestock		14	0	
+/- Change in Accounts Receivable	BS 2 C	15	(900)	
+/- Change in Prepaid Expenses	BS 3 C	16	0	
+/- Change in Cash Investment Growing Crops	BS 4 C	17	0	
+/- Change in Supplies	BS 8 C	18	0	
+/- Change in Other Current Assets	BS 9 C	19	0	
+/- Change in Contracts & Notes Receivable	BS 19 C	20	0	
+/- Change in Investment in Cooperatives	BS 20 C	21	350	
Other Farm Revenue	(sum 10 thru 21)	22		33,249
GROSS FARM REVENUE	**(5+9+22)**	**23**		**366,305**

Name: James and Dolly Madison
Date Prepared: Mar 1, 2015

EXPENSES		Line			
Purchased Market Livestock	CF 40	24	85,000		
Car, truck	CF 17	25	0		
Chemicals	CF 18	26	5,768		
Custom Hire	CF 20	27	1,066		
Purchased Feed/Grain	CF 22	28	9,796		
Fertilizers, Lime	CF 23	29	38,018		
Freight, Trucking	CF 24	30	935		
Gas, Fuel, Oil	CF 25	31	29,938		
Insurance	CF 26	32	7,001		
Labor Hired	CF 27	33	13,975		
Rents, Leases	CF 29	34	10,918		
Repairs, Maintenance	CF 30	35	28,408		
Seeds, Plants	CF 31	36	15,912		
Storage, Warehousing	CF 32	37	1,547		
Supplies	CF 33	38	163		
Taxes (Ad Valorem)	CF 34	39	3,332		
Utilities	CF 35	40	1,320		
Vet, Breeding Feeds, Medicine	CF 36	41	1,251		
Other Expenses	CF 37	42	607		
Marketing Expenses	CF 38	43	2,465		
Sale Commission	CF 39	44	0		
+/- Change in Purchased Feed Inventories	BS 7 C	45	0		
+/- Change in Accounts Payable	BS 30 F	46	0		
+/- Change in Ad Valorem Taxes	BS 34 F	47	0		
+/- Change in Employee Payroll Witholding Taxes	BS 35 F	48	0		
+/- Change in Other Accrued Expenses	BS 38 F	49	0		
+/- Change in Other Current Liabilities	BS 39 F	50	0		
+/- Change in Other Non-Current Liabilities	BS 47 F	51	0		
Depreciation Expense		52	39,517		
Total Operating Expenses	(Sum lines 24 through 52)	53		296,937	
Cash Interest Paid	CF (49+51+53+66)	54	21,005		
+/- Change in Accrued Interest	BS 33 F	55	6,991		
Total Interest Expense	(54+55)	56		27,996	
TOTAL FARM EXPENSES	(53+56)	57			324,933
NET FARM INCOME FROM OPERATIONS	(23-57)	58			41,372
Gain/Loss on Sale of Farm Capital Assets		59	42,451		
Gain/Loss Due to Change in Base Values of Breeding Livestock		60	0		
NET FARM INCOME, Accrual Adjusted	(58+59+60)	61			83,823
NONFARM REVENUE					
Wages, Salaries	**CF 13**	**62**	**21,600**		
Other Non-Farm Income	**CF (14+15)**	**63**	**960**		
+/- Change in Nonfarm Assets	**BS (11+12+13+25+26+27)**	**64**	**4,893**		
Total Nonfarm Revenue	**(62+63+64)**	**65**			**27,453**
NONFARM EXPENSES					
Cash Interest Paid	CF 55	66	3,739		
+/- Change in Accrued Interest	BS 41 F	67	(33)		
Depreciation Expense		68	1,200		
Other Cash Payments	CF 48	69	3,000		
Total Nonfarm Expenses	(66+67+68+69)	70			7,906
Gain/Loss on Sale of Nonfarm Capital Assets & Marketable Securities		71			0
Total Nonfarm Income	(65-70+71)	72			19,547
INCOME BEFORE TAXES & EXTRAORDINARY ITEMS	(61+72)	73			103,370
Cash Income Taxes Paid	CF 46	74	10,350		
Change in Accrued Income Taxes	BS 36 F	75	0		
Change in Current Portion of Deferred Taxes	BS 37 F	76	121		
Total Income Tax Expense	(74+75+76)	77		10,471	
Income Before Extraordinary Items	(73-77)	78			92,899
Extraordinary Items (Net of Tax)		79		0	
NET INCOME	(78+79)	80			92,899

INCOME STATEMENT

Business ☐ Consolidated ☐ Personal ☐ Actual ☐ Projected ☐ For the period: ____________

REVENUE			
Sales of Livestock Bought for Resale	CF 1	1	
Sale of Livestock Products	CF 2	2	
Livestock Sales (raised)	CF 3	3	
Change in Market Livestock inventories	BS 6 C	4	
Gross Revenue from Market Livestock and Products	(1+2+3+4)	5	
Crop Sales			
a.	CF 4	6	
b.	CF 5	7	
Change in Stored Crops/Feed Inventories	BS 6 C	8	
Gross Revenue from Crops	(6+7+8)	9	
Ag Program Payments	CF 6	10	
Other Farm Income	CF 7	11	
Patronage Dividends	CF 8	12	
Gain or Loss from Sale of Culled Breeding Stock		13	
Change in Value Due to Change in Quantity of Raised Breeding Livestock		14	
+/- Change in Accounts Receivable	BS 2 C	15	
+/- Change in Prepaid Expenses	BS 3 C	16	
+/- Change in Cash Investment Growing Crops	BS 4 C	17	
+/- Change in Supplies	BS 8 C	18	
+/- Change in Other Current Assets	BS 9 C	19	
+/- Change in Contracts & Notes Receivable	BS 19 C	20	
+/- Change in Investment in Cooperatives	BS 20 C	21	
Other Farm Revenue	(sum 10 thru 21)	22	
GROSS FARM REVENUE	**(5+9+22)**	**23**	

Name: ____________________
Date Prepared: ______________

EXPENSES

Purchased Market Livestock	CF 40	24		
Car, truck	CF 17	25		
Chemicals	CF 18	26		
Custom Hire	CF 20	27		
Purchased Feed/Grain	CF 22	28		
Fertilizers, Lime	CF 23	29		
Freight, Trucking	CF 24	30		
Gas, Fuel, Oil	CF 25	31		
Insurance	CF 26	32		
Labor Hired	CF 27	33		
Rents, Leases	CF 29	34		
Repairs, Maintenance	CF 30	35		
Seeds, Plants	CF 31	36		
Storage, Warehousing	CF 32	37		
Supplies	CF 33	38		
Taxes (Ad Valorem)	CF 34	39		
Utilities	CF 35	40		
Vet, Breeding Feeds, Medicine	CF 36	41		
Other Expenses	CF 37	42		
Marketing Expenses	CF 38	43		
Sale Commission	CF 39	44		
+/- Change in Purchased Feed Inventories	BS 7 C	45		
+/- Change in Accounts Payable	BS 30 F	46		
+/- Change in Ad Valorem Taxes	BS 34 F	47		
+/- Change in Employee Payroll Witholding Taxes	BS 35 F	48		
+/- Change in Other Accrued Expenses	BS 38 F	49		
+/- Change in Other Current Liabilities	BS 39 F	50		
+/- Change in Other Non-Current Liabilities	BS 47 F	51		
Depreciation Expense		52		
Total Operating Expenses	(Sum lines 24 through 52)	53		
Cash Interest Paid	CF (49+51+53+66)	54		
+/- Change in Accrued Interest	BS 33 F	55		
Total Interest Expense	(54+55)	56		
TOTAL FARM EXPENSES	(53+56)	57		
NET FARM INCOME FROM OPERATIONS	(23-57)	**58**		
Gain/Loss on Sale of Farm Capital Assets		59		
Gain/Loss Due to Change in Base Values of Breeding Livestock		60		
NET FARM INCOME, Accrual Adjusted	(58+59+60)	61		
NONFARM REVENUE				
Wages, Salaries	**CF 15**	**62**		
Other Non-Farm Income	**CF (14+15)**	**63**		
+/- Change in Nonfarm Assets	**BS (11+12+13+25+26+27)**	**64**		
Total Nonfarm Revenue	**(62+63+64)**	**65**		
NONFARM EXPENSES				
Cash Interest Paid	CF 55	66		
+/- Change in Accrued Interest	BS 41 F	67		
Depreciation Expense		68		
Other Cash Payments	CF 48	69		
Total Nonfarm Expenses	(66+67+68+69)	70		
Gain/Loss on Sale of Nonfarm Capital Assets & Marketable Securities		71		
Total Nonfarm Income	(65-70+71)	72		
INCOME BEFORE TAXES & EXTRAORDINARY ITEMS	(61+72)	73		
Cash Income Taxes Paid	CF 46	74		
Change in Accrued Income Taxes	BS 36 F	75		
Change in Current Portion of Deferred Taxes	BS 37 F	76		
Total Income Tax Expense	(74+75+76)	77		
Income Before Extraordinary Items	(73-77)	78		
Extraordinary Items (Net of Tax)		79		
NET INCOME	(78+79)	80		

The cost of Purchased Market Livestock such as stocker steers and feeder pigs purchased for resale are recorded on line 24 of the income statement. The Madisons purchased stocker steers for $85,000 (CF 40).

Other cash operating expenses (lines 25 through 44) include costs associated with operating the farm business such as car/truck; chemicals; gas/fuel/oil; insurance; and utilities. Purchased Feed/Grain is the value of supplements, hay, corn, silage, etc. purchased during the reporting period (CF 22). Labor hired includes all employer costs: wages, social security, unemployment taxes, medical premiums, and pension costs. Repairs and maintenance should not include items that are a capital improvement. Capital improvements should be capitalized and be expensed through a depreciation schedule. Rents and leases record payments made under an operating agreement. If a capital lease is made, the depreciation expense and the interest portion of the capital lease payments are recorded.[7] The line item for taxes is for personal property and real estate taxes only. (Taxes related to labor hired are recorded on line 33, as stated above.)

Accrual adjustments (lines 45 through 51) record differences in beginning and ending balances of an asset (purchased feed) and several liabilities (accounts payable, ad valorem taxes, and so on). The Change in Purchased Feed Inventories (BS 7 C) adjusts the cash expense (an increase in inventory is a negative expense, hence the negative sign) to better match feed purchases to the time period in which they are used to generate revenue.

Accounts Payable include the value of accounts payable to others for operating inputs purchased on credit, accrued property tax, accrued interest, and other expenses such as unpaid cash rent.

Ad valorem taxes include property and real estate taxes due (BS 34 F). The amount of Other accrued expenses payable did not change from the previous years levels, hence no adjustment is necessary. Note again that changes in operating loan principal balances, personal and self-employment tax due is not recorded on the income statement. These items are not farm production expenses.

Depreciation is considered an operating expense and it is reported on a separate line (line 52) in the income statement. Economic depreciation is used for the income statement because it tends to better estimate the useful life of assets.[8] It differs from depreciation used for tax purposes. Economic depreciation is a systematic and rational method of allocating the non-recoverable cost of breeding stock, machinery, and buildings over the estimated number of years that the item will generate revenue. Economic depreciation is based on a known quantity and cost, an estimate of the useful life of an asset, and the salvage value at the end of the useful life. As an example, the Madisons have a hoedrill bought in April 2014 at a cost of $31,750. The estimated useful life is 12 years, and the estimated salvage value is $6,000. The annual depreciation expense, calculated using the straight line method, is:

$$\text{Depreciation } \frac{\$31{,}750 - 6{,}000}{12} = 2{,}146 \text{ per year}$$

Only the appropriate amount of depreciation for the reporting period is recorded. For instance, if a new piece of equipment is purchased mid-year, only one-half the annual farm depreciation is recorded. The Madisons have several pieces of equipment and machinery. For the Madisons, the total depreciation expense for this time period is $39,517 (includes depreciation on assets owned March 1 and held through the year, plus a partial year for the combine purchased). Only the depreciation expense for farm assets is recorded on this line. Land is not depreciated, since it is assumed that land will not be depleted and will continue to generate revenue.

Interest Expenses include cash interest expenses plus the change in accrued interest. Cash Interest Paid on line 56 is the sum of cash interest payments for farm loans, including operating notes, line of credit, machinery and equipment notes, and real estate loans (CF 49, 51, and 66). Accrued interest is the amount of interest outstanding at the reporting date from all farm notes and loans. The Change in Accrued Interest is the accrued interest at the end of the accounting period minus the accrued interest at the beginning of the accounting period (BS 33 F). Principal payments are not a farm operating expense; rather they are repayment of cash that was received from loan proceeds and so are not included on the income statement. (Principal payments are a cash expenditure on the cash flow statement.) The Madisons project cash interest payments of $21,005 plus an increase in interest accrued of $6,991; thus, total interest expense is $27,996.

Total Farm Expenses are the sum of operating expenses (line 53) and interest expenses (line 56). In the Madison case, total expenses equal $324,933.

Net Farm Income From Operations (NFIFO) is the amount of profit (loss) strictly from the farm operations not including gains or losses on the sale of farm capital items or personal and income tax. Thus, net farm income from operations equals Gross Farm Revenue (line 23) minus Total Farm Expenses (line 57). NFIFO is useful for comparisons over time periods as it focuses on the net returns to normal farm operations (capital sales are expected to be occasional).

Gain/Loss on Sales of Farm Capital Assets (line 59) sums gains and losses from the sale of farm vehicles, machinery, equipment, buildings, etc. While not a routine operating item, sales of capital assets and marketable securities are used to determine the overall farm profit or loss for the accounting period. The difference between the value for which the item is sold and the adjusted cost or basis is the amount of depreciation that was over or under expensed in previous time periods. The Madisons plan to sell a combine and expect a $42,451 gain.

Gain/Loss Due to Change in Base Values of Breeding Livestock sums changes in the base values of the raised breeding livestock from the beginning to the end of the accounting period if the base value method has been used. Base values are expected to remain constant for several years, but when costs of raising livestock change significantly, an adjustment in base values is appropriate. The adjustment to income for the change in general level of base values of one or more of the age categories will be based on the change in value of the raised breeding livestock on hand at the beginning of the accounting period. For example, if the base values of raised livestock increased to the values shown in column 11 of Table 2, the herd would have a beginning value of $172,000 (column 12) rather than $170,500 (column 3). The difference between

7 See OSU Extension Fact Sheet AGEC-935, Capital Leases.

8 More information on valuing assets and estimating depreciation is in OSU Extension Fact Sheet AGEC-791, Schedules of Assets.

these two values ($1,500) would be entered as the gain/loss due to change in general base values of breeding livestock in the income statement (line 60). Because the Madisons did not change their values, zero is entered in line 60 of their income statement.

Net Farm Income is a standard measure of profitability for a farm business, calculated by matching revenue with expenses incurred to generate the revenue, plus the gain or loss from the sale of farm capital assets, before taxes. It is a residual return to the unpaid labor and management and owner equity. Net Farm Income equals Net Farm Income from Operations (line 58) plus/minus Gains or Losses on Sales of Farm Capital Assets (line 59) and Gains or Losses Due to Changes in Base Value of Breeding Livestock (line 60). Net farm income must be positive for the farm to be profitable. A profit shows that operating expenses and debt interest are paid and that owner and family labor and management have earned a positive return. Generating profits over time allows the farm business to expand, replace capital, and reduce debt. The Madison net farm income is $82,823.

Nonfarm Revenue includes all sources of cash and non-cash income attributable to something other than farm production: income from wages or salaries, interest, dividends, rents and cash profits realized from nonfarm businesses, changes in the cash value of the life insurance policy, gifts and inheritances, nonfarm capital gains and losses, and accrual adjustments.

Change in Current Assets (line 64) includes changes in the value of marketable stocks, bonds, securities, and other personal assets.

Although farm creditors may focus on net farm income as they prefer to lend to farms able to generate a profit, they may also be interested in the net income to further validate the borrowers ability to repay. Nonfarm income is often looked at as a source of funds for family living which can supplement the farm if necessary. The Madisons have off-farm wages of $21,600. Other nonfarm income is $960 from royalty payments received. The nonfarm accrual adjustments are an increase in savings, cash value of life insurance, and investments in other entities of $4,893.

Nonfarm Expenses are the expenses incurred to generate the nonfarm revenue. For the Madisons, items that must be deducted from nonfarm income are cash interest paid on the health care business loan of $1,447, cash interest paid on the house loan of $2,292, a decrease in non-farm interest of $33, and withdrawals for savings of $3,000.

Gain/Loss on Sale of Nonfarm Capital Assets and Marketable Securities (Line 71) sums gains and losses from the sale of nonfarm assets (home, rental houses, stocks, bonds, etc.). As with farm capital assets, the difference between the value for which the item is sold and the adjusted cost or basis determines the gain or loss and reflects the amount of depreciation that was over- or under-expensed in previous periods.

Income Before Taxes and Extraordinary Items (line 73) is the sum of net farm income (line 61) and nonfarm income (line 72). The Madisons' income before taxes and extraordinary items is $103,370.

Total Income Tax Expense is then subtracted from the income before taxes and extraordinary items. Income taxes are based on the profit (loss) of the reporting entity. The Madisons have a cash income tax expense of $10,471. As with interest, accrual adjustments must be recorded to note changes in accrued income taxes (BS 36 F) and the current portion of deferred taxes (BS 37 F) and the non-current portion of deferred taxes (BS 46 F). The Madisons have an increase in the current portion of deferred taxes of $121. Thus, the total income tax expense is $10,471 (line 77).

Income Before Extraordinary Items is the income before taxes and extraordinary items less income tax expense.[9] In the Madison example, income before extraordinary items is $103,370 - $10,471 = 92,899.

Extraordinary Items are revenue or expenses that are unusual in nature and infrequent in occurrence. Both criteria must be met to qualify as extraordinary. The amount is net of tax because the tax liability should have been accounted for earlier. An example of extraordinary items would be the gains or losses from an extinguishment of debt or proceeds from winning the lottery. Extraordinary items should be noted. Losses are entered as a negative number and will be added to the previous section to arrive at Net Income. The Madisons do not have any extraordinary items.

Net Income (line 80) is calculated by subtracting extraordinary items (net of tax) (line 79) from Income Before Extraordinary Items (line 78). Net income is the amount of income available for paying personal income and social security taxes, family living expenses, and reinvesting in the business. The amount of income reinvested in the business is equal to retained earnings on the balance sheet. A reduction in owner equity occurs when Net Income (line 80) is not adequate to pay the combined taxes and family living expenses. The Madisons have a net income of $92,899.

The income statement is one of the most commonly used financial tools. The income statement indicates the progress of the business for a particular period of time, usually a year, and is used to analyze the financial success of the business. It summarizes the effects of activities, transactions, and events on the business. The income statement (also known as profit and loss statement or operating statement) measures profitability.

Computerized Farm Financial Statements

An OSU spreadsheet program, "Integrated Farm Financial Statements (IFFS)," facilitates calculation of farm enterprise cash flows, balance sheets, and income statements. The computer program utilizes data from farm enterprise cost and return budgets and additional information from input forms completed by the farm or ranch operator. For additional information, contact the Department of Agricultural Economics, Room 515 Agricultural Hall, Oklahoma State University, Stillwater, Oklahoma 74078-6026 or the local Cooperative Extension area agricultural economics specialist, or see agecon.okstate.edu/iffs.

Related Publications

AGEC-752, Developing a Balance Sheet
AGEC-751, Developing a Cash Flow Statement
AGEC-302, Farm Record Systems Available to Oklahoma Farmers
AGEC-323, Valuation of Raised Breeding Stock

9 Note that a reduction in accured taxes could result in a negative tax expense. Subtracting a negative tax expense is equivalent to adding the amount to income before taxes and extraordinary items.

The Oklahoma Cooperative Extension Service
Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of 75 cents per copy. Revised 1015. GH

Step 3 Worksheet: Future Viability

Profitability

Financial Position

Family Expenses

Family Savings

Management Practices

Revenue Growth

Cost Control

Resource Availability

Set up a business entity separate from family?

Step 4 Worksheet: Business Meeting Agenda Template

Agenda

Date: Time

Call to Order: (Presiding officer/facilitator) Bring the meeting to a start and record time

Attendance: Assure there is an agreed upon quorum (enough involved voting parties to make a legitimate decision when voting).

Reading and approval of the Minutes of the previous meeting: Make sure items were recorded correctly, if additions or corrections make sure vote on the approval "as corrected"

Reading of Correspondence: Correspondence that has been received that needs to be shared with all involved. No action taken at this time, any decisions should be added to the business items on the agenda as needed.

Reports of Standing Committees/Managers/supervisors: Updates such as production, financials, and other operations. Assigned tasks to be reported on progress/adjust timelines

Reports of Special Committees/others: Someone may have been appointed to handle some special project that is in progress.

Unfinished Business and General Orders: Items that require decisions to be voted upon. If not completed they should be tabled to a specific meeting date to be on record and recalled to prepare for a vote.

New Business: New items for vote, be sure to as for additional items that may have arisen or been missed. Agree to add to this meeting agenda or next.

Set next meeting Date, time, and place: Having a meeting in the books makes it a priority and keeps business moving.

Adjournment:

Recorded by: ________________________________

Step 4 Worksheet: Partnership Quiz

Take the following test to help you determine if you have the personal characteristics to successfully farm together with a partner or joint business operator/manager. Rate your answers using the following point scale:

Your Answer	Your Points
Yes! Yes! Yes!	10
Yes	8
Maybe Yes	6
Don't Know	4
Probably No	2
Very Unlikely	1
Definitely No!	0

Everyone planning to farm together should take Test A. If you are the son, daughter, or another member of the junior generation, take Test A and B. Tests A and C should be given to the senior generation if they are planning to farm with son, daughter, or someone else from the junior generation.

Test A – For any and all Parties to the Potential Agreement:

Question	Answer Pts
1. Do you prefer to work and plan together vs. work alone and plan independently?	_______
2. Are you willing to talk things over and make joint management decisions vs. "do it your way"?	_______
3. Are you willing to listen and accept ideas/suggestions from others with less experience, less training, or less education?	_______
4. Are you able to make suggestions and recommendations versus giving orders and believing "my way is best"?	_______
5. Are you willing to give others credit for things well done and accept responsibility for failures?	_______
6. Can you discuss business and family issues with your potential business partner without getting angry?	_______

7. Do you prefer to figure out how to get things done more effectively versus "do it like you always have done it"? _______

8. Do you like to recruit, hire, train, supervise, and evaluate employees? _______

9. Are you willing to monitor and analyze the farm business and financial records; production records; and recommend changes based on your analysis? _______

10. Are you willing to arrange and attend a weekly meeting? _______

11. Are you willing to develop a written business agreement?

12. Are you willing to review the business agreement and update it when necessary? _______

Total Points _______

Test B – Additional Questions for the Junior Generation

Question	Answer Pts
1. Do you have the patience to grow into the business over a period of time—say 5 to 8 years?	_______
2. Are you ready and willing to take on additional labor and management responsibilities to operate a farm business in which you have minor ownership?	_______
3. Are you willing to accept and try advice based on the senior generation's experience? Do you have a plan that will continue to involve your senior partner in management of the business?	_______
4. Do you understand that the senior generation has different goals based on retirement needs and that the farm may have to help pay for these needs? Are you willing to help them identify and plan for these needs?	_______

5. Can you accept advice from the senior generation about life, raising a family, and family relationships? Are you willing to ask them for help in resolving family and business problems? _______

Total Points _______

Test C – Additional Questions for the Senior Generation

Question	Answer Pts
1. Are you ready to turn over specific management responsibilities to the younger generation and are you willing to encourage and help them develop their management expertise?	_______
2. Do you have a feasible plan for transferring the ownership of the farm business to the junior generation? Are you willing to recognize their earned equity as part of this plan?	_______
3. Are you willing to borrow additional capital to build up the business to support two generations?	_______
4. Are you willing to accept a junior partner with a different living style? Can you let his/her family have their own life yet help them to get through family crises with praise, encouragement, and care?	_______
5. Are you willing to plan and hold a family conference to discuss goals, roles, differences, and expectations? Are you ready to help the younger generation identify their farming future and help them get there?	_______

Total Points _______

Answer Key—Total your score from the appropriate tests.*

Total Points Test A	Total Points Test A + B or C	Level of Qualification for farming together
91 – 120	135 – 170	You will make a fine partner
71 – 90	101 – 134	You can make it work
51 – 70	71 – 100	It will be difficult
31 – 50	41 – 70	Don't try it just yet
11 – 30	16 – 40	Little chance of success
0 – 10	0 – 15	No chance!

Note: Sometimes it is more helpful to discuss the areas in which you are the weakest rather than just focusing on the score.

* Concept and ideas for this test are from "Farm Business Arrangements: Which One for You?", North Central Regional Publication 50, pp. 21-22; Test Yourself…Would you be a Good Partner?, by Claude W. Gifford, Farm Journal, Inc.

OTHER A.E.M. EXTENSION BULLETINS

EB No	Title	Fee (if applicable)	Author(s)
2016-04	Dairy Farm Business Summary, Western New York Region, 2015	($16.00)	Knoblauch, W., Dymond, C., Karszes, J., Howland, B., Hanchar, J., Petzen, J., Overton, R., and Kimmich, R.
2016-03	Dairy Farm Business Summary, New York Large Herd Farms, 300 Cows or Larger, 2015	($20.00)	Karszes, J., Knoblauch, W. and Dymond, C.
2016-02	Potential Impacts of Minimum Wage Increases on New York Dairy Farms		Ifft, J. and Karszes, J.
2016-01	Cost of Establishment and Production of Cold Hardy Grapes in the Chautauqua Region of New York - 2015		Oh, D., Kananizadeh, S., Gomez, M., Martin, K.
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