

# Cash Flow Projection for Operating Loan Determination



Department of Agricultural Economics — [www.agmanager.info](http://www.agmanager.info)

**Kansas State University Agricultural Experiment Station and Cooperative Extension Service**

**Michael R. Langemeier**  
Professor, Agricultural Economics

A cash flow statement can be simply described as a recording of the dollars coming in and the dollars going out of a business. It shows where the money comes from (the inflow of cash), and where the money goes (the outflow of cash).

## Actual and Projected Cash Flow

A record of cash inflow and outflow that has already occurred in a business is an actual or historical cash flow. An estimate or forecast of cash inflow and outflow into some future period is a cash flow projection. The actual cash flow of a business provides important information for making a cash flow projection into the future. The cash flow projection provides information on the cash-generating ability and the cash requirements of a business, and it indicates the timing of both.

## Total Business and Partial Business Cash Flow

A cash flow can be set up for either the entire farm business (including family living expenses and nonfarm income), or it can be set up to study only a segment of the business. For example, it may summarize all the cash expenses and income from a specific enterprise. A cash flow projection will often include only the cash inflow and outflow effect of a proposed business expansion.

## Long-Run Profitability vs. Short-Run Feasibility

Two management questions that need to be studied regarding proposed business changes are:

1. Will the changes be profitable in the long run?
2. Will the changes be feasible in the short run?

Long-run profitability refers to a period of 5 to 10 years or more. Long-run profitability is usually studied through the use of projected income statements. With an income statement, capital expenditures are prorated over the life of the assets using depreciation methods.

Short-run feasibility refers to the income-generating ability of a business in a short period of time, usually 1 to 5 years in length. Short-run feasibility is usually studied through the use of a projected cash flow. Capital expenditures are counted in the period they are actually paid.

Projected cash inflow and outflow during the period are compared, reflecting payment requirements from credit agencies as well as normal expenditures and receipts.

The Cash Flow Projection form inside this publication has been developed to project the operating loan balance of a farm business for each monthly period. Total farm and family cash flow projection is illustrated on the form.

## Preparing a Cash Flow Projection

Information for preparing a cash flow projection comes from many sources including:

1. Records of actual cash flow or other farm records from past years.
2. Tax returns.
3. Publications listing investment requirements for crops and livestock enterprises (to determine projected periodic cash payments).
4. Publications listing feed requirements for livestock enterprises.
5. Price and yield estimates.

A cash flow projection may be on a monthly, bimonthly, quarterly, semiannual or annual basis. The cash flow projection form on the next pages is designed to be used on a monthly basis; however, it can be used for periods other than one month in length. For example, it may be used on a quarterly basis by using the first four monthly columns as quarters changing the column headings to read: 1st, 2nd, 3rd and 4th quarters.

The "Annual Estimate" column should be filled in first. Then, the annual estimate may be allocated to the various months or periods. Directions for arriving at the "Total Cash Inflow," "Total Cash Outflow," "Net Cash Flow," and "Projected Operating Loan Balance" are given on the form.

## Interpretation of a Cash Flow Projection

To illustrate the use of the Cash Flow Projection form, a sample set of figures has been recorded on the provided form.

In the example, line 12 shows the total cash inflow (not including loan receipts) and line 34 shows the total cash outflow (not including operating loan payments). Net cash flow is the difference between cash inflow and cash outflow,

**CASH FLOW PROJECTION FOR OPERATING LOAN DETERMINATION**

			Annual Estimate	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
<b>CASH INFLOW ITEMS</b>																
	Livestock:															
	Beef	(1)	134,701	67,500										67,201		(1)
	Swine	(2)	16,457		4,115			4,114			4,114			4,114		(2)
	Dairy	(3)	18,741	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,561	1,561	1,561	(3)
	Crops:															
	Wheat, Corn, and Sorghum	(4)	172,748		43,187	43,187				43,187				43,187		(4)
	Soybeans	(5)	79,247	39,624										39,623		(5)
	Hay and Forage	(6)	11,424							5,712		5,712				(6)
	Agricultural Program Payments	(7)	22,102		11,051							11,051				(7)
	Crop Insurance Proceeds	(8)	16,136												16,136	(8)
	Miscellaneous Income	(9)	39,415				21,000							18,415		(9)
	Capital Asset Sales	(10)	5,469												5,469	(10)
	Off-Farm Income	(11)	13,642	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,137	1,136	1,136	(11)
<b>TOTAL CASH INFLOW (Add Lines 1 through 11)</b>		(12)	530,082	109,823	61,052	45,886	23,699	6,813	2,699	51,598	6,813	19,462	2,698	175,237	24,302	(12)
<b>CASH OUTFLOW ITEMS</b>																
	Feed	(13)	39,061	3,256	3,255	3,255	3,255	3,255	3,255	3,255	3,255	3,255	3,255	3,255	3,255	(13)
	Hired Labor	(14)	15,078						7,539	7,539						(14)
	Repairs	(15)	32,801	1,000	1,000	1,100	5,050	2,925	2,485	2,075	2,275	4,095	3,175	2,325	5,296	(15)
	Seed	(16)	35,156				35,156									(16)
	Fertilizer	(17)	53,471			42,971						10,500				(17)
	Machine Hire	(18)	13,470							6,735		6,735				(18)
	Veterinarian Expense	(19)	4,328			1,550	1,550						1,228			(19)
	Marketing	(20)	5,897	1,475	1,474					1,474				1,474		(20)
	Fuel and Utilities	(21)	33,027	4,475		14,550				5,450			8,552			(21)
	Property Tax	(22)	6,376						3,188						3,188	(22)
	General Farm Insurance	(23)	6,024					3,012						3,012		(23)
	Cash Rent	(24)	23,801			23,801										(24)
	Herbicide and Insecticide	(25)	25,666			12,833	12,833									(25)
	Miscellaneous Expense	(26)	17,792	1,483	1,483	1,483	1,483	1,483	1,483	1,483	1,483	1,482	1,482	1,482	1,482	(26)
	Interest	(27)	20,908		5,227			5,227			5,227			5,227		(27)
	Beef Purchases	(28)	70,522			13,250	13,250						44,022			(28)
	Swine Purchases	(29)	1,765	1,765												(29)
	Dairy Purchases	(30)	793	793												(30)
	Capital Asset Purchases	(31)	82,882												82,882	(31)
	Family Living Withdrawals	(32)	50,945	4,246	4,246	4,246	4,246	4,246	4,245	4,245	4,245	4,245	4,245	4,245	4,245	(32)
	Estimated Taxes	(33)	8,978		8,978											(33)
<b>TOTAL CASH OUTFLOWS (Add Lines 13 through 33)</b>		(34)	548,741	18,493	25,663	119,039	76,823	20,148	22,195	32,256	16,485	30,312	65,959	21,020	100,348	(34)
<b>NET CASH FLOW (Line 12 - Line 34)</b>		(35)	-18,659	91,330	35,389	-73,153	-53,124	-13,335	-19,496	19,342	-9,672	-10,850	-63,261	154,217	-76,046	(35)
<b>PROJECTED OPERATING LOAN BALANCE</b> (Operating Loan Carried Over from Last Period = 130,000)		(36)	XXXXXX	38,670	3,281	76,434	129,558	142,893	162,389	143,047	152,719	163,569	226,830	72,613	148,659	(36)

and is shown on line 35 for the annual estimate and for each monthly period.

The net cash flow may be positive or negative. If the cash inflow for the period is greater than the cash outflow for the period, the net cash flow is positive. If the opposite is true, the net cash flow is negative. For example, the January projected total cash inflow of \$109,823 is greater than the total cash outflow of \$18,493 so the net cash flow for January is \$91,330.

The projected operating loan balance for each month is calculated on line 36. The operating loan carried over from the last period should be written in the appropriate space after the caption on line 36. In the example on the inside fold, the operating loan carried over from the previous December is \$130,000. For each monthly period, the projected operating loan balance is determined by combining the previous balance with line 35 net cash flow for that period. A negative cash flow figure for a month increases the operating loan balance so it is added to the previous projected operating loan balance to determine the projected operating loan balance for that period.

A positive net cash flow for a month has the effect of reducing the previous month's projected operating loan balance. If the net cash flow for a month is greater than the projected operating loan balance for the previous month, the difference can be labeled surplus.

The projected operating loan balances (line 36) for each month can be used as a guide in projecting the approximate amount of loan funds needed and timing of the loan fund needs.

## What Will a Cash Flow Projection Do

As farm businesses grow and as larger quantities of cash are needed, a cash flow projection becomes a more essential tool in the financial management of farm businesses. A cash flow projection provides the farm operator with a basis for studying the financing of the business. It indicates how much needs to be borrowed and when it is needed.

A cash flow projection provides for "control" of the business. By comparing the projected cash flow to the actual cash flow that occurs, the variance of each item can be noted. If receipts are less than expected or expenses more than expected, the cash flow will alert the manager to a possible problem.

A cash flow projection provides the basis for planning additional investments in the farm business. To be sound, an investment must be profitable in the long run. It must also be able to generate enough cash to make the payments on principal and interest.

MF-275a, *Worksheet — Cash Flow Projection for Operating Loan Determination*, contains a blank form to use for preparing a cash flow projection.

For further information on other farm financial management topics, see the following Farm Management guides: MF-270 *Financial Ratios Used in Financial Management* MF-291 *Balance Sheet—A Financial Management Tool* MF-294 *Income Statement—A Financial Management Tool*

Publications from Kansas State University are available on the World Wide Web at: [www.ksre.ksu.edu](http://www.ksre.ksu.edu)

Publications are reviewed or revised annually by appropriate faculty to reflect current research and practice. Date shown is that of publication or last revision. Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit Michael R. Langemeier, *Cash Flow Projection for Operating Loan Determination*, Kansas State University, November 2011.

**Kansas State University Agricultural Experiment Station and Cooperative Extension Service**

MF-275

November 2011

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Gary Pierzynski, Interim Director.