COMPUTER DECISION AIDS

USER'S GUIDE FOR

FINTRAN

A Computerized 3—Year Transition
Financial Budgeting Procedure

By Kenneth H. Thomas, Charles H. Cuykendall

ᄔᝑ UNIVERSITY OF MINNESOTA Department of Agricultural and Applied Economics
St. Paul, Minnesota 55101

October, 1973

Dear Mr. Farm Manager,

One of the basic questions you must continually ask yourself as you attempt to compete in today's agriculture, is How can I best get from where I am to where I want to be? FINTRAN, a computerized 3-year transition financial budgeting procedure, is designed to help you take a first step toward answering this question. With the budgeting results from the computer, you can decide whether the projection for the next 3 years permits you to move toward your longer term objectives for your business in an effective manner. You may wish to also use FINFLO (CDA 204), a computerized monthly cash flow and financial budgeting procedure, in taking a more detailed look at the first year of the plan.

This User's Guide is designed to assist you in doing an accurate job of gathering the necessary information to be analyzed and in making a correct interpretation of the analysis results printed out from the computer. A brief index of major portions of the guide follows:

There are two other major questions the manager must ask about his business: Where Am I? and Where Do I Want To Be? There are similar computerized analysis procedures available for answering these latter two questions:

CDA-201-FINAN - A Computerized Annual Farm Financial Analysis Procedure
CDA-202-FINLRB - A Computerized Long-Range Budgeting Procedure

We hope this kit of computerized tools proves useful to you as you attempt to improve your competitive position in today's agriculture.

With best regards,

The Authors

UNIVERSITY OF MINNESOTA, U.S. DEPARTMENT OF AGRICULTURE, AND MINNESOTA COUNTIES COOPERATING

Introduction [1]

FINTRAN is a computerized budgeting procedure for use in making a transition plan for your farm business. It permits you to make a 3-year [2] projection of cash flow, profit and loss, and net worth, as well as providing various measures of profitability, debt servicing and financial solvency.

Since computers are little more than high-speed calculating machines, you can make wrong decisions based on information from computer printouts if: (1) the computer is not given correct and accurate information to work with and (2) the meaning of the figures on the computer printout are not interpreted correctly.

Therefore, the purpose of this User's Guide is to help you complete the FINTRAN computer input form properly and to interpret the printout information from the computer correctly. Part I provides a detailed set of instructions for gathering and inputting the necessary information properly. Part II interprets the results of the computer printout in terms of "how was it computed?" and "what does it really mean?". Part III provides instructions for completing a set of supporting schedules (CDA-203S) for gathering necessary production, investment and debt servicing information to be used in the input form, CDA-203. If you are planning to use this supporting schedule, complete it before attempting to complete the basic input form CDA-203.

Part I

Instructions for Completing FINTRAN Input Form - Computer Decision Aid #203

A Brief Look at the Input Form

To use the FINTRAN computer program you, the farm manager, must provide certain financial information about your business. Input form CDA-203 is designed so that the required information can be gathered in an orderly fashion. The form is divided into three parts:

1. Cash inflow items (page 2)
2. Cash outflow items (page 3)
3. Capital assets, liabilities and other information (page 4)

A supplementary form (CDA-203S) is available for use as an aid in gathering much of this information. It should prove helpful in thinking through the production process and in calculating the related income, expense, investment and debt servicing items. Instructions for completing this form are contained in Part III of this Guide. Special note will be made in this part of the Guide as to when and where selected pieces of information can be obtained from the supplement form.

Step #1 - Indicate Your Name, Address and Business Years (page 1)

On page 1, enter your name and mailing address. Also, indicate the beginning year of the period for which the analysis is being made. Special reminder: Though the form has only space for inputting information for three years, the computer program is written to accommodate a fourth year.

Step #2 - List, Code and Estimate Cash Inflows (page 2)

The next step in completing the FINTRAN input form is to identify and code the sources of cash inflows for the business and project the yearly totals for each inflow item.

First, make a list of cash flow sources. In developing this list, a review of your past year's accounts and the code list of items at the bottom of page 2 of the input form should be helpful. Completion of supplemental form 203S will also help you in forming the list.

Once the list has been developed, then each inflow item must be given an item code number, using the item code numbers shown on page 2 of the input form. In the example, we see that corn, beans and market hogs are three sources of income for this farm. The item codes for these are 11, 12 and 31, respectively. The names of each of these income items are stored in the computer under their respective code numbers. These codes, in turn, are used in sorting the information in the ensuing analysis (see discussion Part III.

CASH INFLOW ITEMS	ITEM Code	ANNUAL TOTALS Year 1	Year 2	Year 3
Corn	11	10000 ,	11500 ,	12600
Beans	12	5000 ,	5500 ,	7000
Market Hogs	31	21000 ,	22000 ,	26000
		,	,	
		,	,	
		,	,	
		,	,	
		,	,	
		,	,	
		,	,	
		,	,	
Loans, other – operating exp.	66	,	,	
Loans, other – intermediate	67	,	,	
Loans, other – long-term	68	,	,	
Nonfarm income	78	,	,	

Loans, other sources for operating, intermediate and long-term investment purposes and nonfarm income items were inserted permanently on the input form to insure proper accounting. The cash flow procedure contained in this program focuses upon transactions with your major or primary lender. The major lender is defined as the one who provides the bulk of your operating and intermediate-type credit. The computer program calculates the additional amount you will need to borrow or the amount you can pay back to that lender each year. Therefore, loans from other lenders are the only borrowed fund amounts that need to be projected at this juncture. The amount of money to be borrowed from other lenders for operating, intermediate and long-term purposes must be reported separately. Include any real estate or longer term capital loans from the major lender in your line 68 total.

The nonfarm income item should reflect gross earnings before taxes. If you wish to be more specific, you can use other item code numbers to more accurately reflect the actual nonfarm income source (see item codes 71 to 79). You can input more than one nonfarm code if you wish to identify more than one source.

Next, estimate the expected total inflows for each of the years for each of the items. Supplementary form 203S should prove particularly helpful. Crop and livestock sales can be obtained from Schedules A and B, pages 2 and 3, respectively. Other farm income and nonfarm income can be obtained from Schedules D and E, page 5. Projected loans from other lenders are found in Schedule H, page 6.

Step 3 - List, Code and Estimate Cash Outflows (page 3)

Next, consider the expected outflow of cash from the business during these same years. Again, you must list and code these outflow items and project the expected total yearly outflows.

In developing a list of expense items use as a guide your past year's accounts, the expense item code list on page 3 of the input form, and expense items in supplemental form 203S. To facilitate the accounting process a series of expense lines have already been labeled in the input form on page 3.

When making your list, do not include principal payments to your major lender (except on long-term loans which should be included under other lenders) nor interest on carryover debt to the major lender. These items will be calculated internally by the computer.

CASH OUTFLOW ITEMS	ITEM Code	ANNUAL TOTALS Year 1	Year 2	Year 3
		,	,	
		,	,	
		,	,	
		,	,	
		,	,	
		,	,	
		,	.	
		,	,	
Interest paid – other lenders	160	,	,	
Interest, major operating*	161	,	,	
Breeding livestock purchased	173	,	,	
Machinery & equip. purchased	174	,	,	
Bldg. & imp. purchased – move.	175	,	,	
Bldg. & imp. purchased – perm.	176	,	,	
Land purchased	177	,	,	
Principal pay, others, current	182	,	,	
Principal pay, others, intermed.	183		,	,
Principal pay, others, long-term	184		,	,
Family living expense	190	,	,	
Income tax & social security	191	,		
Other nonfarm expenses	192	,	,	

* Include interest on new capital purchases due in year purchased.

The expected yearly total outflows for each of the years should then be estimated for each outflow item. If you use supplemental form CDA-203S in calculating these items, direct crop and livestock expense items and feed purchases can be obtained from Schedules A, B and C on pages 2, 3 and 4, respectively. Related overhead expenses are detailed in Schedule G, page 5.

The total interest paid to other lenders (item code 160) can be calculated in Schedule I, page 6. Interest on operating-major lender, should be your estimate of the interest you will likely pay on funds borrowed for operating expenses from your major lender and repaid during the same year. Include interest due (if any) on capital purchases during the year in which the purchase was made.

The cost of breeding livestock purchased (item code 173, input) can be obtained from Schedule B, page 3. Machinery, equipment, building and land purchases (item codes 174 to 177) are detailed in Schedule F, page 5. Building and improvement investments should be divided between those items which are relatively moveable (item code 175) and more permanent structures (item code 176).

Principal payments to other lenders (input lines 182, 183 and 184) on current, intermediate and long-term debt can be obtained from Schedule H, page 6. Note in the first year that all principal payments are listed as current thus assuming that intermediate and long-term beginning liabilities have been adjusted for amounts due in that year. In succeeding years report the portion due by category (current, intermediate and long-term). The computer will use this information in adjusting respective end of year net worth statement balances. Be sure to project intermediate and long-term payments due in the fourth year, so that the net worth statement for the end of the third year can be adjusted properly.

Family living expense (input line 190) should represent your estimate of what you plan to spend for family living purposes. Income tax and social security payments (input line 191) that will be made in the first year must be reported, as this is the tax to be paid on the previous year's business. Taxes paid in succeeding years will be calculated by the computer. Other nonfarm expenses (input line 192) can be obtained from Schedule E, page 5.

Step #4 - Gather Asset, Liability and Other Business and Family Information

The final step in completing the FINTRAN input form is the completion of page 4. This involves gathering information from your net worth statement and elsewhere regarding your assets, liabilities and other business and family information.

Selected Capital Assets: Inventory and Depreciation

First, provide beginning inventory and annual depreciation amounts for each of the selected capital asset items noted. The beginning inventory information can be taken from your net worth statement if its date coincides with the beginning date of your transition plan. Be sure to adjust annual levels of depreciation for any purchases or sales of that form of asset.

Selected Capital Assets: Inventory and Depreciation

	Begin Invent Year 1	Annual Depreciation Year 1	Year 2	Year 3
201 Purchased breeding livestock	XXX	_____ ,	_____ ,	_____
202 Machinery and equipment	_____ ,	_____ ,	_____ ,	_____
203 Building & improvements - movable	_____ ,	_____ ,	_____ ,	_____
204 Building & improvements - permanent	_____ ,	_____ ,	_____ ,	_____
205 Farm land	_____ ,	_____ ,	_____ ,	_____

Some Special Notes: (1) The purchased breeding livestock items should include only a depreciation amount on purchased breeding stock. The total inventory of purchased and raised items are to be inputted at line 206; (2) Buildings and improvements should be divided into two classes, relatively moveable items and permanent. The relatively moveable items appear as intermediate assets on your financial statement, permanent, as long-term assets; (3) Annual depreciation rates for each of the items should reflect the amount of depreciation that you would use for tax purposes taking into account beginning inventories, sales and purchases. (4) If you want to reflect appreciation in land values put the amount of increase under depreciation with a minus sign in front of the amount to reflect "negative depreciation" or appreciation.

Other Asset and Accounts Payable Information

Next, provide a beginning inventory for each of the transition years for all other assets owned by the parties involved in the analysis. The beginning inventory for year 1 can be obtained from your current net worth statement, if the starting dates coincide. Remaining inventories must reflect internal changes, purchases and sales.

Other Asset and Accounts Payable Information

	Beginning Inventory		
	Year 1	Year 2	Year 3	Year 4
206 All breeding livestock	_____ ,	_____ ,	_____ ,	
207 Market livestock.	_____ ,	_____ ,	_____ ,	
208 Crops for sale, feed	_____ ,	_____ ,	_____ ,	
209 Farm receivables, supplies, etc	_____ ,	_____ ,	_____ ,	
210 Cash value life insurance	_____ ,	_____ ,	_____ ,	
211 Savings and securities.	_____ ,	_____ ,	_____ ,	
212 Other current nonfarm assets	_____ ,	_____ ,	_____ ,	
213 Nonfarm equipment, etc.	_____ ,	_____ ,	_____ ,	
214 Nonfarm real estate.	_____ ,	_____ ,	_____ ,	
215 Accounts payable.	_____ ,	_____ ,	_____ ,	

The breeding livestock inventory should include both raised and purchased stock and should reflect internal growth in inventories as well as possible inventory sell off. These inventories plus those for market livestock and crops can be secured from Schedules A and B, pages 2 and 3 of CDA-203S, Supporting Schedules. Remaining asset item inventories (input lines 209 to 214) must be estimated taking into consideration beginning inventories, internal growth or depletion and projected purchases and sales. The Accounts Payable item (215) should reflect the expected handling of open accounts, etc.

Liabilities Information and Debt Repayment Schedules

To complete the net worth statement and debt repayment analysis of the financial

summary requires information on liabilities and a schedule of debt payments. Since this computer program balances cash inflows and outflows with funds paid to or borrowed from the major lender, details on how debts owed other lenders as well as the major lender are to be serviced need to be specified. The next portion of the input form indicates the items of information that will be necessary.

But first, two reminders regarding the _major lender_:

1. The major lender should normally be thought of as the lender who supplies the major portion of your operating and intermediate asset-type credit for your business.

2. If the major lender is also financing some of your long-term debt, then payments and balances on that long-term portion of the debt must be included in the other lender section. (The analysis focuses on servicing major lender operating and intermediate-type debt, thus, the long-term portion must be excluded.)

Liabilities Information

Other Lenders:	Current	Intermediate	Long-Term
216 Beginning liabilities, year 1	_____,	_____,	▬▬▬▬▬
Major Lender:			
217 Beginning liabilities, year 1	_____,	_____,	
Accumulated interest due, begin. of year 1	_____,		
Average interest rate on old & new debt . .	_____,		
Desired % repay of end of year intermed. debt	▬▬▬▬▬		

Other Lenders: Beginning Liabilities

Information required regarding other lenders includes a listing of beginning liabilities for the first year. (New loans from and principal payments to other lenders were recorded on pages 2 and 3.) The beginning liabilities, year 1, should reflect the amount of debts owed other lenders at the end of the past year's business. The portion of intermediate and long-term debt that is due during the coming year should be reported as a current debt and the other debt categories reduced accordingly. Include in the long-term any long-term debts owed your major lender.

Major Lender Debts and Schedule of Repayments

Information required regarding the handling of major lender debt includes a listing of beginning liabilities for year 1, accumulated interest due at the beginning of year 1, the average interest rate on old and new borrowings and the desired percentage rate of repayment of end of year intermediate debt. Complete as follows:

Beginning liabilities for year 1 must be divided between current and inter-
mediate portions. That portion of the intermediate debt due during the
coming year should be included as a current liability. In succeeding years,
the computer will calculate this amount automatically, using the desired
percent repay figure described below. Remember, if the major lender is
also financing long-term debt, then payments and balances on that portion
of the debt should be handled in the Other Lender section (input line 216).

The accumulated interest due, beginning of first year, represents the
amount of interest that was payable at the end of this past year's business
to the major lender. The interest rate on new and old debt should repre-
sent the estimated average interest rate (in percent) on short- and inter-
mediate-term debt outstanding to the major lender during the years to be
analyzed. The desired percent repayment of end of year intermediate debt
is an estimate of the portion of accumulated or carryover intermediate-
term debt at the end of each year that you or your credit agency would want
repaid during the following year. For example, if the balance is due in 5
years, then 20% would be the portion due the following year.

Other Business and Family Information

To complete the financial summary analysis and to calculate the projected income
taxes on each year's business requires several additional items of information as noted
on lines 218 through 221 below.

Other Business and Family Information

	Year 1	Year 2	Year 3
218 Beginning cash & checking balance	_____,		
Desired minimum cash, checking balance .	_____,		
Value operator labor and management . . .	_____,	_____,	————
219 Net nonfarm income.	_____,	_____,	_____,
Cost of feeder stock sold . . . . . . :	_____,	_____,	————
220 Net taxable gains, Schedule D.	_____,	_____,	_____,
Number of families involved	_____,	_____,	_____,
Total number of tax exemptions.	_____,	_____,	————
221 Investment credit	_____,	_____,	_____,
Taxable nonfarm income	_____,	_____,	————

The beginning cash and checking balance is the amount listed in your financial statement at the end of the past business year. The desired minimum cash and checking balance is the checking and cash balance that you and/or your creditor desire to have on hand during each year. The value of operator's labor and management should reflect what the operator(s) would expect to receive in wages for doing a similar managerial job in a nonfarm business.

Net nonfarm income is the income you expect to receive from nonfarm jobs or businesses after paying all related expenses except income tax and social security. This amount can be calculated by subtracting total non-farm expense in Schedule E, page 5 of CDA-203S, from the total nonfarm income. Cost of feeder stock sold should represent the original purchase cost of any feeder stock to be sold during each year. This amount is needed for tax purposes and does not represent double counting in those instances where you have a feeder livestock purchase entered under outflows on page 3 of the input form.

The net taxable gains should represent the actual amount of capital sales that is taxable. That is, items such as breeding stock which are taxable at a 50% rate should be reported at 50% of the total sales value. The number of families or taxable units involved in the business should be noted. Also, indicate the number of tax exemptions that will be claimed for tax purposes in each of the years. The computer will calculate total exemptions by multiplying this number by the standard exemption allowed. Deductions will be calculated using the standard deduction and adjusted gross income.

The total net amount of investment credit allowable on capital purchases and carryovers should be specified. Taxable nonfarm income, should be the total of wages and other income received less allowable business expense for tax purposes. This total should be greater than the net non-farm income amount entered in 219 by the amount of any expenses that cannot be deducted when calculating taxes. Using the information in Schedule E, page 5, CDA-203S, subtract the tax deductible expenses from total nonfarm income.

Part II

Interpreting Your FINTRAN Computer Printout

The computer printout of the FINTRAN program is divided into three sections: (I) A Projected Cash Flow and Financial Measures Summary; (II) Detailed Statement of Projected Financial Measures and (III) Net Worth Statement.

The first section (the Projected Cash Flow and Financial Measures Summary) is printed out with each computer run. The other two sections are optional. The computer can be instructed to print out one, both or none of the optional statements.

Section I – Projected Cash Flow and Financial Measures Summary

The printout for FINTRAN begins by first printing the farmer's name, address and the business years for which the projection is made. It next prints out a projected cash flow summary for each year.

Projected Cash Flow Summary

Total **farm income** for each year is determined by the computer adding together each farm income item (code numbers 11 through 64). **Nonfarm income** is calculated in the same way and includes code items 71 to 79.

PROJECTED CASH FLOW SUMMARY	1973	1974	1975
FARM INCOME	75045	91615	100262
NFARM INCOME	2500	2500	2500
LOANS, MAJOR	32134	0	0
LOANS, OTHER	1000	1000	1000
BEG CASH BAL	900	100	100
CASH AVAILABLE	111629	95215	103362
FARM EXPENSES	41665	48421	55225
NFARM EXPNSES	1000	1000	1000
INTEREST MAJOR	2160	4855	4573
INTEREST OTHER	2004	1733	1641
FARM CAP PURCH	46000	15000	0
PRINC PAY MAJOR	0	3523	17953
PRINC PAY OTHERS	3500	3500	3500
FAM LIV&TAX	15200	17073	19365
END CASH BAL	100	100	100
CASH USED	111629	95215	103362

Annual amounts of money borrowed from sources other than the major lender involves adding together input items 66, 67 and 68. Money from savings and life insurance was an input item reported at input line 69. (In this example, no funds were secured from these sources.)

To arrive at the total cash available, the manager must also know how much money, if any, had to be borrowed each year from the major lender. This amount, Loans, Major, is determined by the computer in a fairly complex manner. This procedure will be easier to follow once the cash outflow items have been discussed.

The cash farm expenses for each year include expense code items 101 through 159. Similariiy, nonfarm expenses are from code item 192. In calculating total cash used, the program adds to these the annual amount of interest paid to other lenders (code item 160); the interest paid to the major lender which includes code item 161 (interest on operating) plus the interest on carryover major lender debt (the latter amount is calculated by multiplying beginning debt for the year times interest rate inputted at line 217); farm capital purchases (code items 173 to 177); nonfarm capital purchases (codes 194 to 196); principal payments to other lenders (code items 182 to 184); family living and income tax and social security (code items 190 and 191) and the desired minimum cash balance which was inputted at line 218.

To determine the total cash used also requires information on principal payments made to the major lender. To arrive at these principal payment totals as well as the new loans needed from the major lender (see above discussion of inflow items) the computer makes the following series of calculations:

#1. It totals all of the cash inflow items for the year, except new loans from the major lender.

#2. It totals all of the outflow items, except the principal payments to the major lender.

#3. It then calculates the balance between these two totals (totals #1 - #2).

In any given year, this resultant balance (#3) can take on one of two forms: (1) the balance can be negative or the (2) balance can be positive. If this balance situation is negative (outflows exceed inflows) then no principal payments can be made to the major lender. In fact, new loans from the major lender will have to be made to the extent of the negative balance. This new loan amount would show on the Loans, Major, line of the cash flow summary (see above). The principal (PRINC PAY MAJOR) line, in turn, will show a zero -- no payment can be made. (This was the situation for the year 1973 in the example.)

If the balance is positive (inflows exceed outflows) then no new loans would be needed. Principal payments made to the major lender would equal the positive balance. (See years 1974 and 1975 in the example.)

Projected Financial Measures Summary

The remainder of Section I of the printout displays a summary of projected financial measures. The first eight items relate to the profitability of the business.

PROJECTED FINANCIAL MEASURES SUMMARY

	1973	1974	1975
CASH FARM INCOME.................	75045.	91615.	100262.
CASH FARM EXPENSE.................	45829.	55014.	61439.
NET CASH FARM INCOME.............	29216.	36601.	38823.
PROFIT OR LOSS...................	24461.	29496.	37128.
LABOR AND MGT EARNINGS...........	16147.	20435.	27081.
RETURN PER $100 FARM INVEST...	6.60	8.87	11.61
RETURN PER $100 NET WORTH.....	7.19	9.27	12.32
CHANGE IN NET WORTH.............	10861.	14018.	18863.
NET NON FARM INCOME.............	1500.	1500.	1500.
FAMILY LIVING EXPENSE...........	14000.	15000.	16000.
INC&SS TAX ON PREV YEAR........	1200.	2078.	3865.
INC&SS TAX ON LAST YEAR OF ANALYSIS....................			6057.
TOTAL SCHEDULED DEBT PAYMENTS.	8000.	13537.	12832.
EXCESS $$ AFTER SCHLD MAJ DEBT	7516.	7486.	7626.
MAJ LENDER CURR DEBT:END......	0	0	0
MAJ LENDER INTRM DEBT:END.....	50184.	46661.	28703.
OTHER LENDER DEBT:END..........	31550.	29050.	26550.
CURR&INTRM LIAB/ASSET PCT(END)	41.11	35.49	22.35
TOTAL LIAB/ASSET PCT(END).....	36.21	32.39	23.80

```
TYPE 1 FOR FINANCIAL SUMMARY
     2 FOR NET WORTH STATEMENT
     3 FOR BOTH STATEMENTS
     4 TO STOP
```

Cash farm income includes crop and livestock sales, other farm income and sales of breeding stock (code items 11 through 58). (Sales of capital items such as machinery and land have been excluded.) Cash farm expenses include crop and livestock expenses, related operating expense and farm interest expense (code items 101 through 161, plus interest paid on major lender carryover debt). Net cash farm income is the difference between cash farm income and expenses as defined above. The profit or loss represents the projected return to labor, management and equity capital. Labor and management earnings are residual earnings after paying cash costs for borrowed funds and 6% on the farmer's equity. The next two are measures of residual returns to total farm investment and total net worth. The computer also prints out the projected net worth change between the beginning and ending net worth statements for each year. This change in net worth indicates the amount by which you will likely be able to increase your equity each year. Details as to how each of the profit ability measures were calculated will be discussed in the next section.

The middle portion of the summary shows the debt servicing ability of the plan under consideration, the key item being the excess $ available after paying scheduled debt. Net nonfarm income is listed to show the amount of off-farm income that will be available to service debt. Internally, this amount is added to net cash farm income to give the total cash available. From this amount is subtracted family living expense (input line 190) income tax and social security payments and total scheduled debt. The income and social security taxes on the previous year was inputted at line 191 for the first year. For each succeeding year the tax is an estimate of the amount of Federal and State (Minnesota) income plus social security tax that will have to be paid on the previous year's business. (If projected taxes appear particularly high or low you may deem it necessary to shift income between years. If the projection has been made on a business year other than that corresponding to your normal tax year, ignore this tax information or make necessary adjustments to a tax year basis.) Scheduled debt for other lenders was inputted at lines 182, 183 and 184 of form CDA-203. Scheduled debt for the major lender is equal to the amount of current liabilities appearing in the manager's net worth statement at the beginning of a given year.

The remaining measures in the summary reflect the solvency position of the business. The first three items indicate the projected load of indebtedness the manager will have with the major and other lenders. Since the major lender is treated as the residual claimant in the analysis the trend in the current debt load relative to the major lender is a critical factor. If the balance each year is zero or declining from previous years, then debt servicing is progressing favorably. If the level is increasing, then a careful study should be made to determine why debts are not being serviced. The detailed procedure for calculating major lender debt balances will be discussed in the third section relating to net worth. Special note: the current major lender debt balances reported here do not include the portion of major lender debt that would be scheduled to be paid in the following year. Rather, it reflects how well scheduled current debt would be serviced in the year of scheduled payment. The ending balances for other lenders was calculated by adding loans from other lenders to the beginning liabilities for the year and subtracting scheduled principal payments. The general solvency position of the business as reflected in current and intermediate and liabilities/asset ratios is also reported. The procedure for calculating each of these measures will be discussed in the next section.

Once you have reviewed this summary, you must then decide whether you want the analysis to continue, and, if so, what additional information you wish to have printed out. The list of options open are printed at the end of the first portion of the printout (see above).

Section II - Projected Financial Measures: Details (Output Option #1)

Output option #1 provides you with a projected profit and loss statement as well as calculation details regarding various other profitability, debt servicing and financial solvency measures for the transition years being analyzed. The following is a brief description of how these measures have been calculated and how they should be interpreted.

Profit and Loss Statement

The printout first provides an abbreviated projected profit and loss statement for the business (see below). A description of how the calculations were made follows:

PROJECTED FINANCIAL MEASURES: DETAILED

**** PRØFIT AND LØSS ****	1973	1974	1975
1 CASH REC, INCL BREED	75045	91615	100262
2 CASH FARM EXPENSES ...	45829	55013	61438
3 NET CASH FARM INCØME .	29216	36601	38823
4 FEED+GRAIN INV CHANGE	715	-5675	-4365
5 MKT LVSK INV CHNGE ...	-185	0	0
6 ØTHER INC+EXP ADJUST .	465	0	0
7 NET ØPERATING PRØFIT .	30211	30926	34458
8 BRD LVSK INV CHGE-PUR	3275	8100	12200
9 DEPREC: MACH,BLDG,IMPR	9025	9530	9530
10 PRØFIT ØR LØSS	24461	29496	37128

Line 3: Net cash farm income is determined by subtracting cash farm expenses from cash farm receipts. Cash farm receipts are calculated by adding together the income associated with code items 11 through 58. Cash farm expenses include expense codes 101 to 159, the total of interest charges for other lenders (code item 160) and the amount of interest paid to the major lender as reported in Section I.

Line 7: Net operating profit is determined by adjusting net cash farm income (line 3) for changes in crop and market livestock inventories and for other income and expense adjustments. Changes in feed, grain and market livestock inventories are calculated by subtracting the beginning inventory value from the ending for each of these items. These items were inputted at lines 207 and 208, input form. In calculating the other income/expense adjustments line, the beginning inventory of farm accounts receivable and supplies is subtracted from the ending inventory. For accounts payable, the ending inventory was subtracted from the beginning inventory. These two items were inputted at lines 209 and 215, respectively.

Line 10: Profit (or Loss) is determined by adjusting net operating profits (line 7) for changes in breeding livestock inventories and subtracting a depreciation charge for machinery, buildings and improvements. The breeding livestock inventory change minus purchases line (line 8) is calculated by subtracting the beginning breeding livestock inventory (line 206, input) and breeding livestock purchases (line 173, input) from the ending livestock inventory (line 206). Depreciation on machinery, buildings (moveable and permanent) and improvements was inputted at lines 202, 203 and 204.

The profit and loss figure indicates the expected return for use of your labor and management and equity capital. You can compare the projected level of profits for each year with those of past years. If projected profits appear to be particularly high or low, you should check your projections. If these figures appear to be reasonable, then you may have to change the plan if you are still not satisfied.

Other Profitability Measures

The other profitability measures portion of the financial measures section reports the expected labor and management earnings (line 12), returns per $100 of farm investment (line 17), and of net worth (line 21) and the projected change in net worth (line 22).

```
**** OTHER PROFITABILITY MEASURES ****

11 INTEREST ON NET WORTH      8314      9060     10047
12 LABOR & MGT EARNINGS      16146     20435     27080

13 FARM INTEREST PAID ..      4164      6592      6213
14 VAL OPER LABOR & MGT      16000     17000     18000
15 RETURN TO FARM INVEST     12625     19088     25341
16 AVERAGE FARM INVEST .    191299    215236    218336
17 RET/$100 FARM INVEST       6.60      8.87     11.61

18 NET NONFARM INCOME ..      1500      1500      1500
19 RET TO TOT NET WORTH       9961     13996     20628
20 AVERAGE TOT NET WORTH    138574    151014    167454
21 RETURN/$100 NET WORTH      7.19      9.27     12.32
22 CHANGE IN NET WORTH .     10861     14018     18862
```

Line 12:   Labor and Management Earnings are calculated by subtracting a 6% interest charge on average total net worth (line 11) from the business's profit or loss (line 10). (Note: If you have a substantial nonfarm net worth, then your labor and management earnings will be understated. This can be corrected by multiplying your nonfarm net worth by 6% and adding the result to the reported labor earnings.)

Line 17:   Return per $100 of farm investment is calculated by dividing the return to farm investment by the average farm investment. Return to farm investment is calculated by adding the farm interest paid (line 13) to profit or loss (line 10, above). From this amount is subtracted an allowance for the operator's labor and management (line 218, input). The average farm investment is calculated by adding beginning and ending inventories of farm assets together (input lines 201 through 209, plus cash balances) and dividing the result by 2.

Line 21:   Return per $100 net worth is calculated by dividing return to total net worth
           by the average total net worth. Return to total net worth is calculated by
           adding the net nonfarm income (input line 219) to the return to farm invest-
           ment (line 17), and subtracting farm interest paid. Average total net worth
           is determined by subtracting total beginning and ending liabilities (input
           lines 215, 216, 217 and cash flow summary) from beginning and ending
           total assets (input lines 201 through 214) and dividing by 2.

Line 22:   Change in net worth is determined by subtracting beginning total net worth
           from the ending amount for each year. The input lines for these items were
           detailed at line 21, above.

Over the years, labor and management earnings have been a useful measure of the
residual earnings of the operator after paying going rates for the use of capital. For the
labor-oriented manager, the man who looks upon farming as a means of self-employment,
it remains a useful measure.

However, in this rapidly changing agriculture the labor-oriented manager, like his
capital-oriented counterpart (the man who views himself as a manager of capital and men),
should also be interested in the rate of return he is receiving from his investment in the
business. Such calculations allow him to estimate how well he will be able to compete for
funds with other farms or businesses over time (return per $100 farm investment) and
whether or not he is receiving a return to his own investment (Net Worth) equal to or
greater than other investments of similar risk that could have been made.

Over the years the return per $100 farm investment for your business should be at
least equal to and preferably greater than the going rate of interest on borrowed funds.
In any given year, returns could be low due to factors such as unusual production condi-
tions (weather, disease, price breaks, etc.). However, if your projected investment
returns tend to run below the interest rate on borrowed funds, your ability to compete
effectively for funds is in serious doubt.

Return per $100 of total net worth is the calculation that includes nonfarm income
and nonfarm assets and liabilities. If it is higher than your return to farm investment, it
would indicate that your returns on farm investment are above going interest rates and/or
your nonfarm business activities are enhancing your total financial well-being.

Debt Servicing, Major Lender

The debt servicing portion of the financial measures section focuses upon your
ability to service major lender debt. It also indicates the extent to which you will have
sufficient current assets at the beginning of the year to cover selected liabilities due in
12 months.

**** DEBT SERVICING, MAJOR LENDER ****

23 ADJ NET CASH INCOME .	30716	38101	40323	
24 FAM LIV+IN TAX & SS .	15200	17073	19365	
25 SCHED PRIN PAY OTHER	3500	3500	3500	
26 OTHER CASH COMMIT .	18700	20578	23365	
27 CASH AVAIL MAJ DEBT .	12016	17523	16957	
28 SCHED MAJOR LEND DEBT	4500	10036	9332	
29 EXCES OVER MAJ DEBT .	7516	7486	7625	
30 CHAN CROP&LVSK INVENT	530	-5675	-4365	
31 BRD LVSK INV CHGE-PUR	3275	8100	12200	
BEGINNING OF YEAR	1973	1974	1975	1976
32 CURRENT ASSETS	22200	21530	15955	11690
33 CURRENT LIABILITIES .	7965	12536	11832	8240
34 CURR LIAB/ASSET PCT..	35	53	74	70

Line 27: The cash available for major lender debt service is determined by subtracting other cash commitments (line 26) from the adjusted net cash income available (line 23). Adjusted net cash income is determined by adding together net cash farm income (line 3) and net nonfarm income (line 18). Other cash commitments include family living (code item 190, page 3); income tax and social security payments due (code item 191, page 3, for year 1 and previous year's projected taxes [see cash flow summary] in each succeeding year) and scheduled principal payments to others (input lines 182 through 184).

Line 29: Excess cash over major debt is calculated by subtracting the scheduled major lender debt payments (current major lender debt) from line 27 (above), the cash available for major lender debt servicing. Changes in crop and livestock inventories (line 30) are shown at this point to indicate whether an inventory build-up or sell-off was responsible for the resultant balance at line 29. The production costs of building up breeding livestock inventories can also cause repayment problems. Thus, the projected change in this item is reported on line 31. (Both lines were reported earlier at lines 4, 5 and 8 of the Profit and Loss.)

Line 32-34: These lines show how effectively ending current assets would cover current liabilities, should a cash or credit crunch occur. Items contained in each of these categories are displayed in the net worth statement, Section III, of output.

Financial Solvency Measures

The financial solvency section provides a capsule view of the farmer's projected

net worth statement for the coming year. Key percentages or ratios are also displayed.

**** FINANCIAL SØLVENCY ****

35	CURR AND INT ASSETS .	102771	130711	140066	139331
36	CURR AND INTER LIAB .	23015	53734	49710	31253
37	TØTAL ASSETS	186159	225739	233734	232139
38	TØTAL LIABILITIES ...	53015	31734	75710	55253
39	NET WØRTH	133144	144005	158023	176385
40	CHANGE IN NET WØRTH .		10861	14018	18862
41	C & I LIAB/ASSET PCT	22	41	35	22
42	L T LIAB/ASSET PCT ..	35	29	27	25
43	TØTAL LIAB/ASSET PCT	28	36	32	23
44	PCT ASSET IN C & I ..	55	57	59	60
45	PCT LIAB C & I	43	65	65	56

Lines 35-38:   The items comprising the current and intermediate and total assets and liabilities can be seen in the detailed net worth statement discussed in the next section. Most of these items were taken directly from the input form.

Line 40:   The projected <u>change in net worth</u> is calculated by subtracting the beginning net worth from the end-of-year amount. It indicates the extent to which the business can cover business and personal expenses as well as have excess earnings to cause a growth in the manager's equity in the business.

Lines 41-43:   These financial ratios are determined by dividing the respective liabilities categories in the net worth statement by the comparable asset items. Expressed in percent, they indicate the extent to which the farm manager is loaned up.

Total liabilities/asset pct (line 43) is the most common solvency measure, indicating how well the manager could cover all debts if creditors "blew the whistle" at the beginning or end of a given year. However, line 41 (current and intermediate liabilities/asset pct) is undoubtedly the most critical ratio under today's farming conditions. A relatively unprofitable business or poor matching of asset acquisition and financing methods can cause serious problems in this area. Eventually, the point is reached where the business cannot get financed for its operating expenses and working tools and, thus, is forced out of business.

Lines 44 & 45:   These lines help shed light on one of the possible causes of the problems noted above, namely, poor balancing of asset acquisition and financing. The calculation is made by dividing current and intermediate assets and

liabilities (lines 35 and 36, above) by their counterpart total assets or liabilities for the business (lines 37 and 38, above). If the percentage for the current and intermediate liabilities (line 45) is considerably higher than for assets (line 44), then a poor job of financing has been done, and repayment problems will likely emerge.

Section III - The Projected Net Worth Statement (Output Option #2)

The FINTRAN program also provides a detailed projected net worth statement, sorting assets and liabilities into current, intermediate and long-term categories. This information (with the exception of ending major lender liabilities) was inputted at lines 201 to 218. The ending liabilities for the major lender was calculated internally (see discussion of Section I).

Two aspects of the statement will receive particular attention in this discussion. First, is the intermediate asset item of buildings and improvements - moveable. As was indicated in the discussion of page 4 of the input form, this category is for those buildings and improvements which are relatively moveable -- thus, the intermediate asset categorization. This categorization, in turn, makes the ensuing financial ratios more reasonable. Otherwise, if all buildings were placed under long-term assets but a portion were financed with intermediate credit then the ratios could show a more marked imbalance than their disposability would necessitate.

PROJECTED NET WORTH STATEMENT

BEGINNING OF YEAR ASSETS	1973	1974	1975	1976
CURRENT				
CASH, CHECKING	900	100	100	100
SAVINGS, SECURITIES	0	0	0	0
LIVESTOCK HELD FOR SALE	185	0	0	0
CROPS HELD SALE & FEED .	19265	19980	14305	9940
RECEIVABLES & SUPPLIES .	500	0	0	0
OTHER CURRENT ASSETS ...	1350	1450	1550	1650
TOTAL CURRENT ASSETS	22200	21530	15955	11690
INTERMEDIATE				
BREEDING LIVESTOCK	46025	64300	78400	90600
MACHINERY,EQUIPT,& VEHIC	34546	37346	31146	24946
BLDG & IMPROV (MOVEABLE)	0	7535	14565	12595
NONFARM EQUIPMENT,OTHER	0	0	0	0
TOT INTERMED ASSETS	80571	109181	124111	128141
TOT CUR & INT ASSETS	102771	130711	140066	139831
LONGTERM				
FARMLAND	50000	50000	50000	50000
BUILD & IMPR (PERMANENT)	20333	32028	30663	29303
NONFARM REAL ESTATE	13000	13000	13000	13000
LONG TERM ASSETS ..	83333	95028	93663	92303
TOTAL ASSETS	186159	225739	233734	232139

The second key item in this net worth statement relates to your <u>current and intermediate debt</u> position at the end of each year with respect to the <u>major lender.</u> The method used in determining these balances is discussed below.

```
                    LIABILITIES
     CURRENT
MAJØR LEND-SCHED REPAYM     4500      10037      9332      5741
ØTHER LENDERS ..........    2500       2500      2500      2500
ACCØUNTS PAYABLE ........     965          0         0         0
     TØT CURR LIABILITIES    7965      12537     11832      3241

     INTERMEDIATE
MAJØR LENDER ...........    13500      40147     37329     22962
ØTHER LENDERS ..........     1550       1050       550        50
     TØT INTERMED LIAB ..   15050      41197     37879     23012
     TØT CUR & INT LIAB .   23015      53734     49711     31253

     LØNGTERM                               .
ØTHER LENDERS ..........    30000      28000     26000     24000
     TØT LØNG TERM LIAB .   30000      28000     26000     24000
     TØT LIABILITIES ....   53015      81734     75711     55253
     NET WØRTH .........   133144     144005    158023    176886
```

<u>If new loans from the major lender were necessary</u> to balance inflows and outflows (see earlier cash flow summary discussion), the following calculations were made to determine <u>current and intermediate</u> major lender debt balances. The computer first determined whether earnings were great enough to cover current debt commitments to the major lender. To do this, the amount of new loans from other lenders was subtracted from total capital purchases. This difference was then subtracted from the beginning current major lender debt balance.

If the current debt to the major lender could be reduced to zero or below (earnings were sufficient so that if no capital purchases or other loans had been involved all current debt could have been paid) then the computer added all new loans to the major lender to the total of the beginning current and intermediate major lender debt. This total debt was then multiplied by the desired percentage repayment specified at input line 217 to determine the <u>ending current debt balance.</u> This latter amount was then subtracted from the total major debt to give the <u>ending intermediate debt</u>.

If, however, the major current debt <u>could not be reduced to zero,</u> then the amount of current debt that could not be covered was left in the current debt balance. This current debt balance was, in turn, subtracted from total major lender debt. (The total would include the beginning current and intermediate debt balances plus new loans from the major lender.) This adjusted total debt balance was then multiplied by the desired annual

rate of repayment. The resultant current debt portion was then added to the carryover current debt balance noted above. The remaining portion of the adjusted total major debt was allocated to the intermediate debt category.

However, if no new loans were necessary to balance yearly inflows and outflows and principal payments could be made, the computer made the following series of calculations to arrive at the ending current and intermediate debt balances. It first determined whether earnings were great enough to cover current debt commitments to the major lender. In this case, the amount of new loans from other lenders was subtracted from total capital purchases. This difference plus principal payments to the major lender was then subtracted from the beginning major lender current debt balance.

If major lender current debt could be reduced to zero or below, then the computer subtracted principal payments to the major lender from total beginning current and intermediate debt. The resultant debt balance was then multiplied by the desired annual rate of repayment. This amount was allocated to current debt, the residual to intermediate major lender debt.

If major lender current debt could not be reduced to zero in step #1, then the remaining current debt was left as a balance. This recurring amount plus principal payments was subtracted from the total beginning current and intermediate major lender debt. The resultant adjusted total major lender debt was then multiplied by the desired annual rate of repayment. The resultant current portion was added to the residual current debt to give the ending current debt. This current portion was also subtracted from adjusted total major debt to give the ending intermediate debt balance.

The current and intermediate ending balances reported in the financial summary in Section I were calculated in this manner. However, they represent the current and intermediate debt balances before the desired repayment for the next year is added to current balances.

PART III

Instructions for Completing FINTRAN Supplemental Planning Form - CDA 203S

Supplemental form CDA-203S provides a set of supporting schedules for working out the production, investment and revising of other lender debt plans for the transition farm plan you are considering. With this form you can accomplish three things. You can work out the production details and thus check the technical feasibility of the plan. Second, you can check the physical plan to see if it is going to fit within your management, labor and capital limits. Finally, it provides basic income, expense, inventory investment and debt servicing values for the core input form - CDA-203, described in Part I.

Step #1 - Develop and Balance Crop and Livestock Programs

Pages 2, 3 and 4 of the form provide space for detailing and balancing the crop and livestock program for the next three years. Consider the alternative under study. If it is oriented toward livestock, then work out the livestock program first and develop a cropping program to meet feed needs. If crop production is dominant, then develop the cropping program first, with livestock included as needed or desired.

To project the cropping program (Schedule A, page 2) begin by noting the year, the beginning inventory of crops on hand, and crops to be grown.

SCHEDULE A - PROJECTED CROPPING PROGRAMS

Year _____ Crop	Begin Inv.		Crops Raised			Total Non Feed	Sales			End. Inv.		Crop Expenses				
	Amt	Value	Acres	Yield	Total	Feed	Amt	Price	Value	Amt	Value	Seed	Fert	Chem	Fuel	Mach Hire
	XX			XX	XX	XX	XX	XX		XX						

The beginning inventory in the first year would come from your present financial statement or from other records and represents the amounts presently on hand. The crops raised category includes the acreage, yields, and total production of growing crops or crops to be grown during the year noted. Remember that existing inventories and projected livestock feed requirements till harvest time of the next planning year should be considered in setting cropping patterns for feed crops in any given year. Add beginning inventory and production of nonfeed crops for the total supply of these crops. These nonfeed crop supplies, in turn, should be sold or noted and valued in the ending inventory.

In developing a plan that includes a livestock program, livestock numbers and feed requirements must be projected before possible sales of feed crops can be determined in Schedule A.

Projecting the livestock programs (Schedule B, page 3) is largely a matter of balancing livestock numbers. Beginning inventory, purchases, transfers in and raised determine the total number of animals to be accounted for. Death loss, transfers out, sales and ending inventory represent the disposition of this supply. Thus, the numbers to the left of the double line must equal the number to the right of the line for each livestock category.

SCHEDULE B - PROJECTED LIVESTOCK PROGRAMS

Year _____ Livestock	Begin Inv.		Purchases		Transf In	No. Raised	Died, Transf Out	Sales				End. Inv.		Livestock Expenses		
	No.	Value	No.	Value				Units	Wt.	$/U	Value	No.	Value	Breed & Vet	Sup-plies	Truck & Mktg
	XX		XX		XX	XX	XX	XX	XX	XX		XX				
Year _____ Livestock	Begin Inv.		Purchases		Transf In	No. Raised	Died, Transf Out	Sales				End. Inv.		Livestock Expenses		
	No.	Value	No.	Value				Units	Wt.	$/U	Value	No.	Value	Breed & Vet	Sup-plies	Truck & Mktg
	XX		XX		XX	XX	XX	XX	XX	XX		XX				

As with crops, the first year's beginning inventory would come from your Financial Statement or other records. For other years, the beginning inventory is the same as the ending for the preceding year. Estimate selected livestock expenses and make inventory, purchases, sales and expense totals for each year. These totals can then be transferred to the appropriate pages in the input form CDA-203. Sales go to page 2, expenses to page 3 and inventories to page 4.

Having made these tentative projections of the livestock program, the next step is to check the balance of feed requirements and supply, Schedule C, page 4.

SCHEDULE C - LIVESTOCK FEED REQUIREMENTS AND SUPPLY BALANCE

		Year 19___				Year 19___		
Feed Required.................................... Kind of Livestock	No.	Corn Equiv.	Hay Equiv.	Supp. $	No.	Corn Equiv.	Hay Equiv.	Supp. $
1. Total feed required				$___				$___
Am't needed before harvest								
Am't needed after harvest								
Feed Balance								
2. Beginning feed inventory								
3. Am't needed before harvest								
4. Balance (2 - 3)				$___				$___
5. If minus, am't purchased								
6. If plus, am't sold								
7. Balance - carryover (4 - 6)								
8. Crop raised								
9. Supply available (7 + 8)								
10. Am't needed rest of year								
11. Balance (9 - 10)								
12. If minus, am't purchased				$___				$___
13. If plus, am't needed till harvest next year								
14. Balance (11 - 13)								
15. If minus, line 11 to inventory								
16. If plus, am't sold this year								
17. Balance to inventory (11 - 16)								
18. Am't feed bought (1 + 5 + 12)				$___				$___

Here, you must first estimate the feed required by kind of livestock, determining first the total corn and hay equivalents required for the year and then indicating the portion needed before and after harvest. Second, enter the beginning inventory of feed crops from Schedule A on line 2 of Schedule C and the amount to be raised on line 8.

Since the feed requirements are specified in terms of corn and hay equivalents, the following is a listing of equivalents for each of the crops noted:

Corn Equivalents		Hay Equivalents	
Corn	1.0	Alfalfa Hay	1.00
Oats	.5	Haylage	.60
Barley	.8	Hay Silage	.35
Wheat	1.10	Corn Silage	.35
		Oat Silage	.30

Then complete the calculations in lines 2 through 18. Sales (lines 6 and 16) and inventory (line 17) amounts for crops are entered in Schedule A. Where purchases of feed are necessary, note the cost of this feed in the column labeled supplement and total these purchases on line 18. The cost of these feed purchases should be transferred to page 3 of input form CDA-203.

Once the feed supply is balanced off against the feed requirements of livestock the projected cropping program, Schedule A, can be completed. Note and value the sales and ending inventory amounts for each crop, and estimate the total of the listed expenses for each crop. Then total each of the inventory, sales and expense columns. Transfer them to input form CDA-203, sales going to page 2, expenses to page 3 and inventories to page 4.

Moving to the second year, the beginning inventory for each of the crops is the same as the ending inventory in the first year. (The same is true for the third year: its beginning inventory is the same as the ending for the second year.) Complete remaining portions of the second and third year in the same fashion as the first year, keeping in mind that the following year's livestock feed requirements may influence a given year's cropping program.

Step #2 - Estimate Other Farm and Nonfarm Income and Expenses

In Schedule D, page 5, estimate for each year other farm income you expect to receive. This would include custom work done, government payments (if they were not included in crop income), etc. This total should be transferred to page 2 of input form CDA-203.

In Schedule E, page 5, record any nonfarm business or personal income which you expect to receive in each of the years. This might include salaries, rents, dividends, etc. These should be reported on a before-income-tax basis, the total being inserted at item line 78, page 2 of input form CDA-203. Also, record the total expenses associated with this nonfarm income, the totals being transferred to page 3, CDA-203.

Step #3 - Project Changes in Investment and Total Related Overhead Expenses

In Schedule F, page 5, estimate changes in investment. Describe the capital items such as machinery, equipment, buildings, improvements and land that must be purchased or sold. Insert totals in the appropriate sales code lines on page 2 of input form CDA-203, purchases on page 3. Since feed and livestock purchases were noted in Schedules B and C, they do not have to be itemized here.

In Schedule G, page 5, estimate all other farm related overhead expenses not included in Schedules A, B and C. A partial listing is provided. Use the past year's amount as a guide. Make adjustments from this benchmark in line with changes in the crop and livestock program and in investments. Be sure to indicate the total expense in each year, not just the change. Transfer the amounts for each of these items to page 3 of input form CDA-203.

Step #4 - Project New Loans, Principal Payments and Interest on Debt for Other Lenders

The computer program for FINTRAN calculates automatically the loans, principal

and interest payments going to the major lender each year. The major lender is defined as your primary source of operating and intermediate type credit. To do this the computer needs to know the nature of transactions that you plan to carry out with other lenders. This includes what new loans do you plan to make? What are scheduled principal payments? And how much interest will you be paying?

Schedule H, page 6, is designed to assist you in estimating the amount of new loans and principal payments you plan to transact with your other lenders over the planning period. First, adjust your beginning liabilities for year 1 so that the portion of intermediate and longer-term debt due during the first year is included under current debt. Then add new loans that will be incurred during the first year, allocating the amounts into current, intermediate and longer-term categories. From this amount subtract scheduled payments in year 1. (For this first year payments should appear under current debt only, as the beginning liabilities had all been adjusted for the portion due in twelve months). Also, if any portion of the new intermediate and long-term loans are due in this first year then that portion of the loan should appear in the current portion only and the scheduled current debt increased by that amount.

In succeeding years merely indicate the amount of the loans and principal payments by debt categories. The computer will take these amounts and adjust liabilities in the appropriate fashion.

The beginning liabilities for year 1 should be inputted at line 216, page 4 of CDA-203. Input new loan amounts at code lines 66, 67 and 68, page 2; principal payments at code lines 182, 183 and 184, page 3 of CDA-203.

In Schedule I, calculate the interest due other lenders on the amount of debt noted in Schedule H. Transfer the yearly totals to code line 160, page 3 of CDA-203.

For additional copies of this User's Guide or the FINTRAN input form, contact your County Extension Agent, or write to:

Extension Farm Management
Department of Agricultural and Applied Economics
University of Minnesota
St. Paul, Minnesota 55101