



## Cash Management

A business's estimation of cash flow during upcoming months of operation is even more critical than its projected budget of revenues and expenses. This indicates whether a business will have the cash it needs to pay employee wages/salaries and other operating expenses, along with financial payments of loans or purchases of new equipment. If a business's initial projected cash flow is negative (which means there's not enough cash to cover necessary costs), it is likely the business will fail.

To create the budgeted cash flow of the business, a business must identify its estimated inflows and outflows of cash. All inflows of cash like cash revenue, credit card revenue collections or gains from equipment sale are called **Cash Receipts**. All uses of cash are called **Cash Disbursements** or **Cash Payments**. The key to these problems is reading carefully to determine when cash will be collected and paid out.

IMPORTANT: \*Prepaid expenses and depreciation are NOT included in cash disbursements\*.

The general setup for a budget cash flow is shown below with examples for each section:

Beginning Cash Balance	
Cash Receipts, Operating	
... <i>Cash sales revenue</i>	
... <i>Credit card sales collected</i>	
... <i>Accounts receivable collected</i>	
Total Cash Receipts, Operating	
Cash Receipts, Financing	
... <i>Interest income</i>	
... <i>Sale of equipment</i>	
Total Cash Receipts, Financing	
Total Cash Receipts	
Cash on Hand	
Cash Disbursements, Operating	
... <i>Wages expense</i>	
... <i>Utilities expense</i>	
Total Cash Disbursements, Operating	
Cash Disbursements, Financing	
... <i>Loan payment</i>	
... <i>Equipment purchase</i>	
Total Cash Disbursements, Financing	
Total Cash Disbursements	
Ending cash balance	



Example: A business is planning to open in September. It projects that Sept, Oct, and Nov revenues will be \$45,000, \$46,700 and \$48,200 respectively. Of revenues, 40% will be cash; the remaining 60% will be credit card receivables. Of the credit card revenue, 75% is collected during the month of sales while the remainder is collected in the following month. Show the cash receipts for October and November.

Cash Receipts	October	November
Current month cash sales	$46,700 \times 0.40 = 18,680$	$48,200 \times 0.40 = 19,280$
Current month CCR collections	$46,700 \times 0.60 \times 0.75 = 21,015$	$48,200 \times 0.60 \times 0.75 = 21,690$
Previous month CCR collections	$45,000 \times 0.60 \times 0.25 = 6,750$	$46,700 \times 0.60 \times 0.25 = 7,005$
Total cash receipts	46,445	47,975

## Practice Problems

1. The following projected income statement shows the estimated first two months of operation (March–April) of a dumpling food truck. Of the revenue, 72% is collected in cash with the remainder on credit card. CC receivables are collected 80% in the month of sales and the remaining 20% in the month after the sales. The cost of goods sold is paid 90% in the month incurred and 10% in the following month. The wages, operating, and license expenses are paid in full in the month incurred. The owner must begin repaying a bank loan in the second month of operation at \$3,000/month. The owner has \$600 on hand at the beginning of March.

- Calculate the cash inflow for the months of March and April
- Calculate the cash outflow for the months of March and April
- Find the ending cash balance for the month of April.

	March	April
Sales Revenue	\$56,000	\$57,000
Cost of Goods Sold	(21,280)	(21,660)
Gross Margin	34,720	35,340
Wages expense	22,400	22,800
Other operating expense	6,960	7,120
License expense	200	0
Depreciation expense	2,500	2,500
Interest expense	750	750
Total operating expenses	(32,810)	(33,170)
Net Income/Loss	1,910	2,170

2. You own a new bubble tea shop that opens on July 1, 2015. The shop expects to take in \$1,800 a day in sales revenue and will be open for 27 days of the month. Sales revenue is estimated to be 45% cash and 55% on credit card receivables. You project that 80% of credit card receivables will be collected in the actual month of sales and the balance will be collected in the following month. Wages and salaries expense is expected to be 40%



and cost of sales is 37% of sales revenue. These expenses will be on a cash basis. Other operating costs are estimated to be 10% of sales revenue and are paid in the month following. Depreciation is \$1,600 a month; rent is \$1,800 a month paid on the first of each month. Principal payments on your financial loan to start up the business are \$2,750 a month. The first payment is due on July 15. Interest expense of \$250 will be paid each month. You have \$1500 cash on hand on July 1 and know that you won't be able to borrow any more money. You prepaid your restaurant license fee in March of \$1000 for the whole year. If the tea shop is your only source of income, (a) produce the budgeted income statement for the month of July and (b) the tea shop's cash budget for the month of July.

## Answers

1. (a)

<b>Cash Receipts</b>		<b>March</b>		<b>April</b>
Cash Sales revenue	[1]	\$40,320	[3]	\$41,040
CC sales revenue	[2]	12,544	[4]	12,768
CC sales revenue, previous		<u>0</u>	[5]	<u>3,136</u>
Total cash receipts		52,864		56,944

$$[1] \$56,000 \times 72\% = 40,320$$

$$[2] \$56,000 \times 28\% \times 80\% = 12,544$$

$$[3] \$57,000 \times 72\% = 41,040$$

$$[4] \$57,000 \times 28\% \times 80\% = 12,768$$

$$[5] \$56,000 \times 28\% \times 20\% = 3,136$$

(b)

<b>Cash Payments</b>		<b>March</b>		<b>April</b>
Cost of Goods	[1]	\$19,152	[2]	\$41,040
Cost of Goods, previous			[3]	12,768
Wage expense		22,400		22,800
Operating expense		6,960		7,120
License expense		200		
Interest expense		750		750
Loan repayment				3,000
Total cash payments		49,462		55,292

$$[1] \$21,280 \times 90\% = 19,152$$

$$[2] \$21,660 \times 90\% = 19,494$$

$$[3] \$21,280 \times 10\% = 2,128$$

(c) \$5,654



2.  
(a)

**a. Budgeted Income Statement for the month of July 2015**

Sales revenue [27 days × \$1,800]	\$48,600
Cost of sales [\$48,600 × 37%]	<u>( 17,982)</u>
Gross margin	\$30,618

**Operating expenses**

Wages & salaries expense [\$48,600 × 40%]	\$19,440	
Rent expense	1,800	
Interest expense	250	
Other operating expenses [\$48,600 × 10%]	4,860	
Depreciation expense	<u>1,600</u>	
Total operating expenses		<u>( 27,950)</u>
Operating income		<u>\$ 2,668</u>

**b. Cash Budget for the Month of July 2015**

Beginning cash balance \$ 1,500

***Cash receipts, operations***

Cash sales revenue [\$48,600 × 45%]	21,870
Credit card sales revenue [\$48,600 × 55% × 80%]	<u>21,384</u>
Total cash available	\$44,754

***Cash disbursements, operations***

Cost of sales [\$48,600 × 40%]	\$19,440
Wages & salaries expense [\$48,600 × 37%]	17,982
Rent expense	1,800
Loan interest expense	<u>250</u>
<b><i>Total cash disbursements, operations</i></b>	<b><u>(39,472)</u></b>

Cash excess (deficiency) \$ 5,282

***Cash disbursements, Financing***

Loan repayment	<u>( 2,750)</u>
Ending cash balance	<u>\$ 2,532</u>

