



**TMF**

*Stewarding Potential*

# TMF Cash Flow Model

**Resource Guide for Building Projects**

# Realistic Borrowing: Determining Safe Debt Levels

## CASH FLOW MODEL ASSUMPTIONS

While these guidelines help you calculate the absolute maximum amount your church should borrow, this does not mean you should borrow the maximum. It is in the best interest of the church to consider many factors before determining the amount of debt that is safe, including:

- Current budget items
- Available cash future growth
- Capital campaign pledges
- Amount of debt service available in the budget (loan payment)

TMF has developed a **Cash Flow Model** to help churches analyze their proposed project and their ability to pay for the associated expenses. Using this model, **the remaining loan balance should be equal to or less than the amount that the church's operating budget can service, after the completion of the capital campaign.**

To illustrate this model, an example of a Cash Flow Model is attached, using the following assumptions:

Operating Budget	\$625,000
Estimated Project	\$1,793,000
Cash for Project	\$125,000
Budget Growth	Year One – 2% Year Two – 3% Year Three – 2%
Outstanding Debt	\$88,275
Annual Debt Service	\$60,000
Capital Campaign (3-year)	\$937,500

# Cash Flow Model

## OVERVIEW OF MODEL

### The Cash Flow Model has three sections:

- Current financial position and estimates on campaign pledges and collection of those pledges
- Growth and interest rate assumptions
- Budget growth projections and growth in debt service

**The first section uses numbers provided by the church for budget, existing debt, annual debt service and cash on hand that can specifically be used for the upcoming project.** This section will also contain either an amount that was pledged on the capital campaign or an assumption for a future campaign. This model assumes that the church is raising 1.5 times the current budget for the campaign and that the campaign is collected at 85%. This section also contains the estimated cost of the new project.

**The second section contains the interest rate, growth and debt allocation assumptions.** In this model, the assumption is an interest rate of 5.00% with an annual increase in the operating budget of 2% for the first year, 3% for the year after construction is complete and 2% again for the third year. The assumption section for this model also reflects the “set-a-side” from each year’s growth to specifically increase debt service. In this model, it is assumed that 20% of each year’s growth will be used to increase debt service.

**The last section is a projection of growth based on the assumptions listed above.** The projections reflect growth in the budget (\$625,000 to \$643,750 is a 2% increase, \$643,750 to \$675,938 is a 3% increase and

\$656,625 to \$669,758 is a 2% increase) each year the campaign is being collected. The debt service within the operating budget is increased by 20% of each year’s growth (\$637,500 - \$625,000 = \$12,500. 20% of \$12,500 = \$2,500 and \$60,000 + \$2,500 = \$62,500 for 2020) and continues annually during the campaign so that debt service is increased from \$66,325 in 2021 to \$68,952 in 2022.

**The second page shows a month-by-month cash flow of the project.** This page will account for all the cash inflows and outflows of the project. This section also reflects cash on hand, existing debt, interest that is paid as well as the collection of the capital campaign. The main number of interest is the estimated remaining balance on the loan (lower right hand number).

**The purpose of this model is to compare the estimated remaining loan balance and the amount of annual debt service that will be gradually built into operating budget over a three-year period.** While this model will help determine if a project is feasible, the factors that have been included in the model must be evaluated. Many assumptions and projections affect the model – project size, capital campaign size, growth rate of budget, interest rate, collection of campaign, etc. The reasonableness of each one of the assumptions must be reviewed and discussed to properly evaluate the project the church has proposed. Overly aggressive assumptions will result in an excessive loan balance or will require the church to build debt service at a rate that will jeopardize existing missions and ministries.

# Cash Flow Model

## Projections

Financial Information and Projections for Example United Methodist Church as of 1/15/2018. This model solves for total maximum project amount with a 3-year capital stewardship program of 1.5x the 2018 annual income.

### **FINANCIAL INFORMATION (projected for 2019) 2018 Annual Income**

<b>Annual income</b>	<b>\$625,000</b>	
<b>Annual debt service in operating budget</b>	<b>\$60,000</b>	<b>9.60%</b>
<b>Cash on hand specifically for this project</b>	<b>\$125,000</b>	
<b>Capital Stewardship Program (May 2019 - April 2022)</b>	<b>\$937,500</b>	<b>1.50</b>
(Collected at 85%)	<b>\$796,875</b>	
<b>Total project cost* (August 2019 - July 2020)</b>	<b>\$1,793,000</b>	
(*Total project includes all costs associated with the project - architect/engineering fees, construction contract, landscaping, furnishings, contingency, change orders, etc.)		
<b>Existing debt (Parsonage loan balance as of 1/15/2019)</b>	<b>\$88,275</b>	

### **ASSUMPTIONS**

<b>If the interest rate is</b> Wall Street Journal Prime @ 1/15/2019 = 5.50%	<b>5.00%</b>	
<b>and the operating income grows</b> (Growth projections for planning purposes only.)	<b>2.00%</b>	<b>1st Year - 2020</b>
	<b>3.00%</b>	<b>2nd Year - 2021</b>
	<b>2.00%</b>	<b>3rd Year - 2022</b>
<b>and you set aside ___% of the new money for debt service.</b>	<b>20.00%</b>	

### **GROWTH PROJECTIONS**

<b>2020 Operating Income \$637,500 with Debt Service of \$62,500</b>	<b>9.80%</b>	
<b>2021 Operating Income \$656,625 with Debt Service of \$66,325</b>	<b>10.10%</b>	
<b>2022 Operating Income \$669,758 with Debt Service of \$68,952</b>	<b>10.29%</b>	
<b>Which will support a loan in the amount of</b>	<b>\$870,658 *(A)</b>	<b>1.30</b>
<b>The remaining loan balance is projected to be</b>	<b>\$870,532 *(B)</b>	<b>1.30</b>
<b>Which requires debt service of</b>	<b>\$68,942</b>	<b>10.29%</b>
	(20 year amortization)	

\*Look at (A) and (B). **IF (A) is equal to or greater than (B), this means that the budget can support the remaining debt without additional capital stewardship programs. IF (A) is less than (B), these figures indicate the operating budget cannot support the remaining debt on its own.**

If all of these figures are accurate, the operating budget can afford a total project of	\$1,793,000	
The highest loan balance will occur at the end of the construction phase	\$1,307,673	July 20
Estimated new funding amount	\$1,307,673	

*This is not a commitment for a loan. All rates, terms and other assumptions are for discussion purposes only. Final rate and terms will be outlined after loan committee approval and issuance of commitment letter.*

# Cash Flow Model

## Month-by-Month Cash Flow of the Project

Month	+ Cash	+ Pledges	+ Service	= Total	- Payment	= Reduction	- Draws	= Loan Amt
Jan-19	\$125,000	\$0	\$5,000	\$130,000	\$368	\$129,632	\$88,275	\$0
Feb-19	\$41,357	\$0	\$5,000	\$46,357	\$0	\$46,357	\$0	\$0
Mar-19	\$46,357	\$0	\$5,000	\$51,357	\$0	\$51,357	\$0	\$0
Apr-19	\$51,357	\$0	\$5,000	\$56,357	\$0	\$56,357	\$0	\$0
May-19	\$56,357	\$26,563	\$5,000	\$87,920	\$0	\$87,920	\$0	\$0
Jun-19	\$87,920	\$26,563	\$5,000	\$119,482	\$0	\$119,482	\$0	\$0
Jul-19	\$119,482	\$26,563	\$5,000	\$151,045	\$0	\$151,045	\$0	\$0
Aug-19	\$151,045	\$26,563	\$5,000	\$182,607	\$0	\$182,607	\$149,417	\$0
Sep-19	\$33,191	\$26,563	\$5,000	\$64,753	\$0	\$64,753	\$149,417	\$84,664
Oct-19	\$0	\$26,563	\$5,000	\$31,563	\$353	\$31,210	\$149,417	\$202,871
Nov-19	\$0	\$26,563	\$5,000	\$31,563	\$845	\$30,717	\$149,417	\$321,871
Dec-19	\$0	\$26,563	\$5,000	\$31,563	\$1,340	\$30,223	\$149,417	\$440,764
Jan-20	\$0	\$26,563	\$5,208	\$31,771	\$1,837	\$29,934	\$149,417	\$560,227
Feb-20	\$0	\$26,563	\$5,208	\$31,771	\$2,334	\$29,436	\$149,417	\$680,227
Mar-20	\$0	\$26,563	\$5,208	\$31,771	\$2,834	\$28,937	\$149,417	\$800,707
Apr-20	\$0	\$26,563	\$5,208	\$31,771	\$3,336	\$28,435	\$149,417	\$921,689
May-20	\$0	\$26,563	\$5,208	\$25,130	\$3,840	\$21,290	\$149,417	\$1,049,816
Jun-20	\$0	\$26,563	\$5,208	\$25,130	\$4,374	\$20,756	\$149,417	\$1,178,476
Jul-20	\$0	\$26,563	\$5,208	\$25,130	\$4,910	\$20,220	\$149,417	\$1,307,673
Aug-20	\$0	\$26,563	\$5,208	\$25,130	\$5,449	\$19,682	\$0	\$1,287,992
Sep-20	\$0	\$26,563	\$5,208	\$25,130	\$5,367	\$19,764	\$0	\$1,268,228
Oct-20	\$0	\$26,563	\$5,208	\$25,130	\$5,284	\$19,846	\$0	\$1,248,382
Nov-20	\$0	\$26,563	\$5,208	\$25,130	\$5,202	\$19,929	\$0	\$1,228,453
Dec-20	\$0	\$26,563	\$5,208	\$25,130	\$5,119	\$20,012	\$0	\$1,208,442
Jan-21	\$0	\$26,563	\$5,527	\$25,449	\$5,035	\$20,414	\$0	\$1,188,028
Feb-21	\$0	\$26,563	\$5,527	\$25,449	\$4,950	\$20,499	\$0	\$1,167,529
Mar-21	\$0	\$26,563	\$5,527	\$25,449	\$4,865	\$20,584	\$0	\$1,146,945
Apr-21	\$0	\$26,563	\$5,527	\$25,449	\$4,779	\$20,670	\$0	\$1,126,275
May-21	\$0	\$26,563	\$5,527	\$25,449	\$4,693	\$20,756	\$0	\$1,105,519
Jun-21	\$0	\$26,563	\$5,527	\$25,449	\$4,606	\$20,843	\$0	\$1,084,676
Jul-21	\$0	\$26,563	\$5,527	\$25,449	\$4,519	\$20,929	\$0	\$1,063,747
Aug-21	\$0	\$26,563	\$5,527	\$25,449	\$4,432	\$21,017	\$0	\$1,042,730
Sep-21	\$0	\$26,563	\$5,527	\$25,449	\$4,345	\$21,104	\$0	\$1,021,626
Oct-21	\$0	\$26,563	\$5,527	\$25,449	\$4,257	\$21,192	\$0	\$1,000,434
Nov-21	\$0	\$26,563	\$5,527	\$25,449	\$4,168	\$21,280	\$0	\$979,153
Dec-21	\$0	\$26,563	\$5,527	\$25,449	\$4,080	\$21,369	\$0	\$957,784
Jan-22	\$0	\$26,563	\$5,746	\$25,668	\$3,991	\$21,677	\$0	\$936,107
Feb-22	\$0	\$26,563	\$5,746	\$25,668	\$3,900	\$21,767	\$0	\$914,339
Mar-22	\$0	\$26,563	\$5,746	\$25,668	\$3,810	\$21,858	\$0	\$892,481
Apr-22	\$0	\$26,563	\$5,746	\$25,668	\$3,719	\$21,949	\$0	\$870,532
		<b>\$796,875</b>	<b>\$211,809</b>		<b>\$122,941</b>		<b>\$1,881,275</b>	