## JKAM

The excel spreadsheet is designed so that the columns are periods over time with rows being the line item (cost, capacity, etc.). We broke down the cash inflows on a per quarter basis and discounted them appropriately based upon the calculated Weighted Average Cost of Capital (WACC).

Project A has a positive NPV while Project B has a negative NPV. With a WACC of 2.664% we are able to calculate the return in todays dollars in excess of the cash outflow. Project A has an initial cash outflow of $570,480 with a PV of $626,868.43 in cash inflows thus a NPV of $56,388.43. In addition Project B has an initial cash outflow of $422,784 with a PV of $332,214.51 thus a NPV of ($90,569.49). In order for Project B to be a positive NPV the WACC would have to be negative, essentially being paid to take out loans – something we’ll never see. The only other way the NPV of Project B would be more than 0 would be if taxes were non-existent and a WACC of 0.549% or less.

Management must accurately plan for the long-term sustainability of the firm by making sure that a project has a positive net present value (NPV) with the appropriate discount rate (WACC). Management should disregard Project B due to the negative NPV.

