

How to relate the IceCube Upgrade Basis of Estimates to the Cost Workbook

The basis of estimates are all of the same template. They briefly describe the scope of the element being costed, along with the WBS dictionary. There are three tables that form the heart of the BOE: one for Equipment (either Capital Expense – CapEx – or Materials and Supplies – M&S). Capitalized equipment does not have indirect charges, whereas M&S does. The WBS and Activity Columns can be found in the Cost Workbook.

Travel is divided into domestic and foreign. Deployment travel (to the South Pole) is considered foreign travel. The cost of travel is standardized as discussed in the “Key Assumptions Document” and backed up by analysis of recent travel (“Travel Analysis document”).

Labor is estimated in hours in the BOEs. These hours are then recorded in the cost workbook and costs are calculated according to the labor rate, fringe, and indirect at the respective institution. You can find these rates in the respective columns in the cost workbook.

Where available, quotes or invoices are used to back up the numbers in the BOEs. These can be found either in the body of the BOE or in the directory that the BOE is found.

The cost workbook is an excel spreadsheet and the formulas are visible that are used for calculating total costs, including labor rates, fringes, and indirect costs. Various pivot tables are used to populate the year-by-year 1030 forms, which are separate tabs in the cost workbook. In addition, stand alone 1030's have been made that remove the reference to the cost workbook pivot tables for convenience. These numbers come directly from the 1030 tabs in the cost workbook, so the information can be easily traced from the 1030's through the cost workbook.