

ACCESS <<<<<<<

By Patricia Cox

Master Budget Project: Direct Labor Budget

The techniques we used for the Direct Materials Report can be used to make five queries to get the data for the Direct Labor Budget Report (discussed in “Excel-Based Budgeting for Production” by Teresa Stephenson and Jason Porter, March 2010).

The Queries

The *first query* uses the first two records of the Direct Materials Budget to create the Direct Labor Budget table. Create a query and add the Category, Budget Item, and quarterly data fields to the grid. Enter “Required Production” as the criteria for Category and uncheck the Show box. Change the query type to Make Table. Add a new column that contains DLCategory: “1Required Production” in the Field (the 1 will help us sort the report). Save the query as “Make Direct Labor Budget Table,” run it, and then close it.

The *second query* is an append query using the Product table. In the first column, add Category: “2DL hours per bicycle” to the Field. From the Product table, add Product Name and Direct Labor Hours to the grid. Add Direct Labor Hours three more times—the values are the same for each quarter, so we’ll use the four Direct Labor Hours columns to append to each quarter. Set the other columns to append to the appropriate fields in the Direct Labor Budget table, as shown in Figure 1. Save the query as “Append DL Hours to Direct Labor Budget.” Run the query, and then close it.

The *third query* uses the Direct Materials Budget and Product tables. Link the tables between Budget Item and Product Name. From the Direct Materials Budget, add Category and Budget Item to the grid. Uncheck the Show box for the Category column. Add a column with DLCategory: “3Required Production” in

the Field. For the first quarter data, add a column with the following: 2012-1Q:[2012-1]*[Direct Labor Hours]. Create quarters 2 through 4 in a similar fashion (replacing “2012-1” with the appropriate quarter). Change the query to an append query, and append each column to the appropriate field in the Direct Labor Budget. Save the query as “Append Total DL Hours Needed,” run it, and then close it.

To append the cost per direct labor hour to the Direct Labor Budget table, the *fourth query* will be a bit different than what we have created before. It will take a value from a text box on a form. Open the Reports Menu form in Design view. Add a text box to the layout. Set its default value (on the Data tab of the property sheet) to 14. Change the name of the box (on the Other tab) to Cost per DL Hour. Change to Form view, and save the form.

Figure 1. Append DL Hours to Direct Labor Budget Query

Field:	Category: "2DL hours per bicycle"	Product Name	Direct Labor Hours	Direct Labor Hours	Direct Labor Hours	Direct Labor Hours
Table:		Product	Product	Product	Product	Product
Sort:						
Append To:	DLCategory	Budget Item	2012-1	2012-2	2012-3	2012-4
Criteria:						
or:						

Create an append query with these fields:

- ◆ Category: "4"
- ◆ Budget Item: "Cost per DL Hour"
- ◆ q1: [Forms]![Reports Menu]![Cost per DL Hour]

Add similar columns for q2, q3, and q4. Append the columns to the appropriate fields in the Direct Labor Budget table. Save the query as "Append Cost per DL Hour," run it, and close it. By using the Reports Menu form as the source of Cost per DL Hour instead of a table, we can vary our assumption for DL cost when we run the report.

The *fifth query* is an append query that uses the Direct Materials Budget and Product tables. Link the tables using Budget Item and Product Name. Create the following fields:

- ◆ DLCategory: "5"
- ◆ BudItem: "Total DL Cost"

- ◆ 2012-1Q: Sum([2012-1]*[Direct Labor Hours]*[Forms]![Reports Menu]![Cost per DL Hour])

Create similar columns for 2012-Q2, 2012-Q3, and 2012-Q4. Append each column to the appropriate fields in the Direct Labor Budget table. Save the query as "Append Total DL Cost," run it, then close it.

Direct Labor Budget Report

Use the report wizard to set up a report with the fields from the Direct Labor Budget table. Include a grouping level that uses DLCategory, and, on the Summary Options, sum the quarterly value fields.

Once you have the draft layout, you'll need to make a number of changes. Remove controls that aren't needed, such as the long concatenated text box and the report footer sum.

Then make appropriate headings for the report and data. Align and space the controls. Change the DLCategory Header control source property to =Mid([DLCategory],2,25). This will show the Categories without the first sorting digit. Change the DLCategory field in the DLCategory Footer to =If([DLCategory]= "3Total DL Hours Needed", "Total DL Hours Needed", ""), and change the value controls to =If([DLCategory]= "3Total DL Hours Needed", Sum([2012-1]), ""), altering the quarter number as needed (see Figure 2). Make the fields in the DLCategory footer an appropriate size for display, and change their Can Grow and Can Shrink properties to Yes.

As with the Direct Materials report last month, create a macro to run the queries in order, then add a button on the Report Menu form to run the macro and print preview the report.

Best Practice: When a value can change, such as Cost per DL Hour, add a text control to a form and set the default value to the one you want to begin with. Give it an appropriate name so you can find it when you use the expression builder. Then you can change the value on the form as needed and use it in a query or a report.

We quickly created five queries and a macro this month. For those following along, remember that you can always download the Access database each month from the Publications Article Reference Library in *LinkUp IMA*. **SF**

Patricia Cox has taught Excel and Access to management accounting students and other college majors and has consulted with local area businesses to create database reporting systems since 1998. She is also a member of IMA's Madison Chapter. To send Patricia a question to address in the Access column, e-mail her at kathrynmann@tds.net.

Figure 2. Direct Labor Budget Report Design View

