



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

## Reporting with Confidence and Ease: Using Excel to Provide Financial Reports to Researchers

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# Introductions

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# Objective

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- Provide you with Excel tools and ideas to assist in reporting to Researchers
- Goals:
  - Reduce errors by reducing manual entries
  - Increase transparency to Researchers
  - Provide clear and concise financial information for Researchers to make decisions
  - Reduce financial questions from Researchers

# History of Report Development

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- Reason?
- Ryan
- Shared Services

# Tools

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- Reporting Structure
- Reporting Content
- Formulas

# Reporting Structure

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- Summary
- Personnel Forecasting
- Non-Personnel Forecasting
- Budget Forecasting
- InfoPorte Transactions
- Subcontracts

# Reporting Contents

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- Summary

- Key facts/dates/information

- Examples: PI Name, Project ID, Title, Budget Period, Project Period, Reconciling Period, Sponsor Info, F&A Rate, Progress Report Due, Financial Report Due, IDC Method

PROJECT REPORT - SUMMARY							
PI :	Professor Tar Heel					F&A Rate:	55.5%
PROJECT ID :	5000000					Award Term Description	Expanded Authority
TITLE :	UNC Study: Measuring Reporting Satisfaction					Encumber Indirect:	Yes
BUDGET START :	1/1/2018			PROJECT START:	1/1/2018	Indirect Type:	TDC
BUDGET END :	12/31/2018	<= Forecast Thru		PROJECT END:	12/31/2024	Progress Report	10/1/2018
RECONCILING PERIOD :	7/1/2018	7/31/2018		VARIANCE %		Financial Report	3/31/2019
SPONSOR :	Federal Agency XYZ			SPONSOR NO:	12345	Last Day to Request Bud. Rev	N/A

# Reporting Contents (continued)

## ■ Summary (continued)

### - Budget/Expenses Rows

- Direct Costs
- Indirect Costs
- Subcontracts

### - Budget/Expenses Columns

- Current Budget
- Pending Budget
- Expenses
- Forecasts
- Unobligated Balance

	Account	Account	Current Budget	Pending	Period Expenses	Expenses LTD	All	Unobligated
Personnel expenses :	Start	End	OSR_BUD	Budget	OSR_EXP	OSR_EXP	Forecasts	Available
Salary Expenses	Subtotals :		164,242.00	0.00	0.00	166,034.20	0.00	(1,792.20)
Fringe Expenses	Subtotals :		49,564.00	0.00	0.00	46,906.13	0.00	2,657.87
<b>Non-Personnel expenses :</b>								
Study Subjects	514800	514999	0.00	0.00	0.00	1,255.89	0.00	(1,255.89)
Travel	526000	526999	7,170.00	0.00	0.00	4,392.78	0.00	2,777.22
Postage and Freight	527400	527499	0.00	0.00	0.00	114.54	0.00	(114.54)
Printing and Binding	527500	527599	11,788.51	0.00	0.63	2,213.30	2.07	9,573.14
Registration Fees	528300	528399	0.00	0.00	0.00	714.16	0.00	(714.16)
Supplies and Materials	530000	539999	774.00	0.00	0.00	101.21	0.00	672.79
Meetings, Misc, Other	550000	558999	3,230.00	0.00	0.00	15,003.91	0.00	(11,773.91)
Tuition and Awards	568796	569310	10,509.00	0.00	0.00	10,509.00	0.00	0.00
	Subtotals :		33,521.51	0.00	0.63	34,304.79	2.07	(785.35)
<b>TOTAL DIRECT COSTS :</b>			<b>247,327.51</b>	<b>0.00</b>	<b>0.63</b>	<b>247,245.12</b>	<b>2.07</b>	<b>80.32</b>
<b>Other Non-Operating :</b>								
Indirects	559000	559099	113,673.42	0.00	0.30	113,633.53	0.99	38.90
	Subtotals :		113,673.42	0.00	0.30	113,633.53	0.99	38.90
<b>TOTAL PROJECT COSTS :</b>			<b>361,000.93</b>	<b>0.00</b>	<b>0.93</b>	<b>360,878.65</b>	<b>3.06</b>	<b>119.22</b>
<b>Summary of Subcontracts</b>								
			<b>Budget</b>			<b>Expenses</b>		<b>Funds Availab</b>
<b>Subcontract</b>								
Duke University			\$ 200,208.00			\$ 199,568.22		\$ 639.78
Johns Hopkins University			\$ 39,194.00			\$ 39,193.99		\$ 0.01
University of Rhode Island			\$ 104,903.00			\$ 104,883.32		\$ 19.68



# Reporting Contents (continued)

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- Personnel Forecasts
  - Broken out by Future Forecasts and Retroactive Forecasts as well as changes in funding (i.e. effort fluctuations)
  - Editable Fields
    - Pay Cycle
    - Total Salary
    - Forecast Begin and End Dates
    - FTE
    - Applicable Fringe (Y/N)
  - Calculated Fields
    - Project Rate
    - Bi-Weekly/Monthly Rate
    - Forecasted Salary
    - Forecasted Fringe
    - Forecasted Salary and Fringe
  - Legend of all fringe rates and maximum salaries



# Reporting Contents (continued)

- Non-Personnel Forecasts

- Detailed information of each expected transaction
- Most important fields for Researchers:
  - Date
  - Account
  - Amount
  - Description/Comments

Date	Reference	Business Unit	Fund	Source	Account	Dept	Project ID	Program Code	CC1	CC2	CC3	Amount	Vendor / Description	Notes	Cleared
6/5/2018	JE000012345	UNCCH	25210	49000	527510	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	2.07	Printing Allocation		
6/8/2018	V51234567	UNCCH	25210	49000	537210	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	21.00	Supplies Reimbursement Prof Tar Heel		
6/9/2018	T123456	UNCCH	25210	49000	526120	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	500.00	Travel to Conference		
6/10/2018	C123456	UNCCH	25210	49000	526260	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	350.00	Airfare to Conference		
6/11/2018	10000012345	UNCCH	25210	49000	537210	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	250.00	Staples Project Supplies		

# Reporting Contents (continued)

- Budget Forecasts
  - Detailed information of changes in Budget
  - Most important fields for Researchers:
    - Date
    - Account
    - Amount
    - Description/Comments

Date	Reference	Business Unit	Fund	Source	Account	Dept	Project ID	Program Code	CC1	CC2	CC3	Amount	Vendor / Description	Notes	Cleared
6/5/2018	NOA Y2	UNCCH	25210	49000	510000	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	50,000.00	Y2 Salaries Budget		
6/5/2018	NOA Y2	UNCCH	25210	49000	515000	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	12,500.00	Y2 Fringe Budget		
6/5/2018	NOA Y2	UNCCH	25210	49000	537210	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	500.00	Y2 Supplies Budget		
6/5/2018	NOA Y2	UNCCH	25210	49000	559000	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	34,965.00	Y2 Indirect Budget		
6/11/2018	Budget Revision	UNCCH	25210	49000	510000	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	250.00	Moving Budget from Supplies to Salaries		
6/11/2018	Budget Revision	UNCCH	25210	49000	537210	123456	500000	PROGR	COSTCODE01	COSTCODE02	COSTCODE03	(250.00)	Moving Budget from Supplies to Salaries		

# Reporting Contents (continued)

- InfoPorte Transactions
  - Data exported from InfoPorte (less cost share)
  - Copied and Pasted into Report

Bus Unit	Ledger	FY	Acct Prd	Account	Acct Desc	Project	Description	Trans Type	Trans ID	Reference 1	Reference 2	Amount	Acct Dt
UNCCH	OSR_EXP	2018	11	527510	Printing and Binding Design	5000000	Machine 8TB567793	GL_JOURNAL	0000443222_01-MAY-2018			\$ 0.50	5/1/2018
UNCCH	OSR_EXP	2018	11	527510	Printing and Binding Design	5000000	Machine 8TB567793	GL_JOURNAL	0000443222_01-MAY-2018			\$ 0.10	5/1/2018
UNCCH	OSR_EXP	2018	11	527510	Printing and Binding Design	5000000	Machine 8TB567826	GL_JOURNAL	0000443222_01-MAY-2018			\$ 0.03	5/1/2018
UNCCH	OSR_EXP	2018	11	559010	CG F&A Cost	5000000		GM_FA				\$ 0.01	5/4/2018
UNCCH	OSR_EXP	2018	11	559010	CG F&A Cost	5000000		GM_FA				\$ 0.24	5/4/2018
UNCCH	OSR_EXP	2018	11	559010	CG F&A Cost	5000000		GM_FA				\$ 0.05	5/4/2018

# Reporting Contents (continued)

- Subcontracts
  - Each Subcontract has their own tab
  - Lists the Subcontracts beginning budget
  - Shows current unobligated balance
  - Lists each invoice as a reduction in balance

Project ID	500000X	Subcontractor	Duke University	
Invoice Period	Invoice Number	Voucher Number	Invoice Amount	Project Balance
	<b>UNC's Direct Total Budget for Subcontract</b>			<b>\$ 200,208.00</b>
Mar-10	2200026710	50731740	\$ 10,328.81	\$ 189,879.19
Apr-10	2200026206	50711708	\$ 6,623.19	\$ 183,256.00
May-10	2200027143	50763262	\$ 13,138.84	\$ 170,117.16
Jun-10	2200027951	50796846	\$ 13,797.91	\$ 156,319.25
Jul-10	2200028541	50832916	\$ 13,797.91	\$ 142,521.34
Aug-10	2200029009	50853028	\$ 13,797.91	\$ 128,723.43
Sep-10	2200029663	50894204	\$ 13,824.32	\$ 114,899.11
Oct-10	2200030443	50935441	\$ 14,311.81	\$ 100,587.30
Nov-10	2200031178	50964651	\$ 13,824.32	\$ 86,762.98
Dec-10	2200032659	51028615	\$ 8,936.13	\$ 77,826.85
Jan-11	2200032070	51009326	\$ 11,434.55	\$ 66,392.30
		<b>CURRENT ENDING BALANCE</b>		<b>\$ 66,392.30</b>

# Formulas

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## ■ Summary

- Indirects MTDC or TDC
  - IF MTDC is selected it is  $F\&A\ Rate \times Total\ DC - Tuition/Rent/Equipment$ , if not TDC  $\times F\&A\ Rate$
- Current Budget
  - IF Ledger=OSR\_BUD AND Account is in range Amount is pulled into cell
- Pending Budget
  - IF Budget Forecast has entry AND Account is in range Amount is pulled into cell
- Period Expenses
  - Part 1: IF Ledger=OSR\_EXP AND Account is in range Amount is pulled into cell
  - Part 2: IF Transaction is within the date range for the period being reconciled (part of the Summary page) amount is pulled into cell
- Expenses LTD
  - IF Ledger=OSR\_EXP AND Account is in range Amount is pulled into cell

# Formulas (continued)

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- Summary (continued)

- All Forecasts

- Personnel

- Salaries

- Pulled straight from Salaries total on Personnel Forecasting Tab

- Fringe

- Pulled straight from Fringe total on Personnel Forecasting Tab

- Unobligated Balance

- =Current Budget + Pending Budget – Expenses LTD – All Forecasts

- Subcontracts

- Available Budget = Direct Total from Subcontract Tab

- Total Expenses = SUM of Invoice Amounts from Subcontract Tab

- Unobligated Balance = Current Ending balance from Subcontract Tab



# Formulas (continued)

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## ■ Personnel Forecasts

- Project Rate (Annual amount charged to the project if charged for full 12 months) = FTE x Total Salary
- Bi-weekly/Monthly Rate
  - IF Statement to determine Denominator (Bi-weekly v. Monthly)
    - IF Bi-Weekly = Project Rate / Hours at 1.0 FTE (2080 in general)
    - IF Monthly = Project Rate / 12 Months
- Forecasted Salary
  - =Project Rate x (Amount of Days Forecasted/Annual Days)
    - IF Statement to determine Annual Days
      - IF Bi-weekly denominator is 365 to count every day
      - IF Monthly denominator is 360 so that it is an even pay per month
    - Amount of Day Forecasted = End Date – Start Date
      - We use the Formula DAYS for Bi-Weekly and DAYS360 for Monthly
      - Make sure to add a +1 to the end date to account for effort on that day

# Formulas (continued)

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- Personnel Forecasts (continued)
  - Forecasted Fringe
    - Forecasted Fringe=SUM of all the detailed Fringe calculations
    - Detailed Fringe calculations
      - SPA Severance
      - Clinical Supp Life
      - Clinical Supp Retirement
      - Clinical Supp Disability
      - Clinical Supp Health
      - Social Security (OASDI)
      - Social Security (Health & Hospitalization)
      - State Retirement
      - Medical Insurance
      - ORP Retirement
      - Longevity
      - Staff Composite Benefit
      - Terminal Leave Payout
      - Core Data Services
      - Transit Fees

# Formulas (continued)

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- Subcontracts

- Project Balance as of each Invoice
  - Beginning Balance – Invoice Amount *OR* Last Invoice's Balance – Invoice Amount
- Current Unobligated Balance
  - = Beginning Balance – SUM of all Invoice Amounts

# Conditional Formatting

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- Draw the users attention towards or away from a particular cell or value
- Point out to Research Administrators any data entry errors
- Examples:
  - Account cell on Non-Personnel and Budget Forecast turns red if an amount is entered
  - Direct Balance cell turns red when the balance is less than \$0
  - FTE text is white if 0% and black if greater or less than 0%

# Data Validation

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- Prevents errors on cells that are referenced in formulas
- Provides users lists to choose from
- Examples:
  - MTDC or TDC choice that will automatically calculate F&A
  - Set list that allows users to choose from different employment types
  - Restrict users from entering anything other than Y/N for fringes so that fringe calculation is automated and no #REF error is given

# Questions

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