



Identifying Process Costs

Leveraging Process Maps

March 15, 2018

Learning Objectives

1

To understand components of a cross-functional process

2

To identify salary expenditures associated with process steps

3

To recognize potential relationship for high audit

Process mapping:

- Doesn't require expensive software
- Provides critical insight in audit planning
- Allows auditors to identify:
 - Who does what
 - Control activities
 - Manual / automated controls
 - Process risks & design issues
 - Process costs

Potential process inefficiencies can be identified through associated labor expenditures

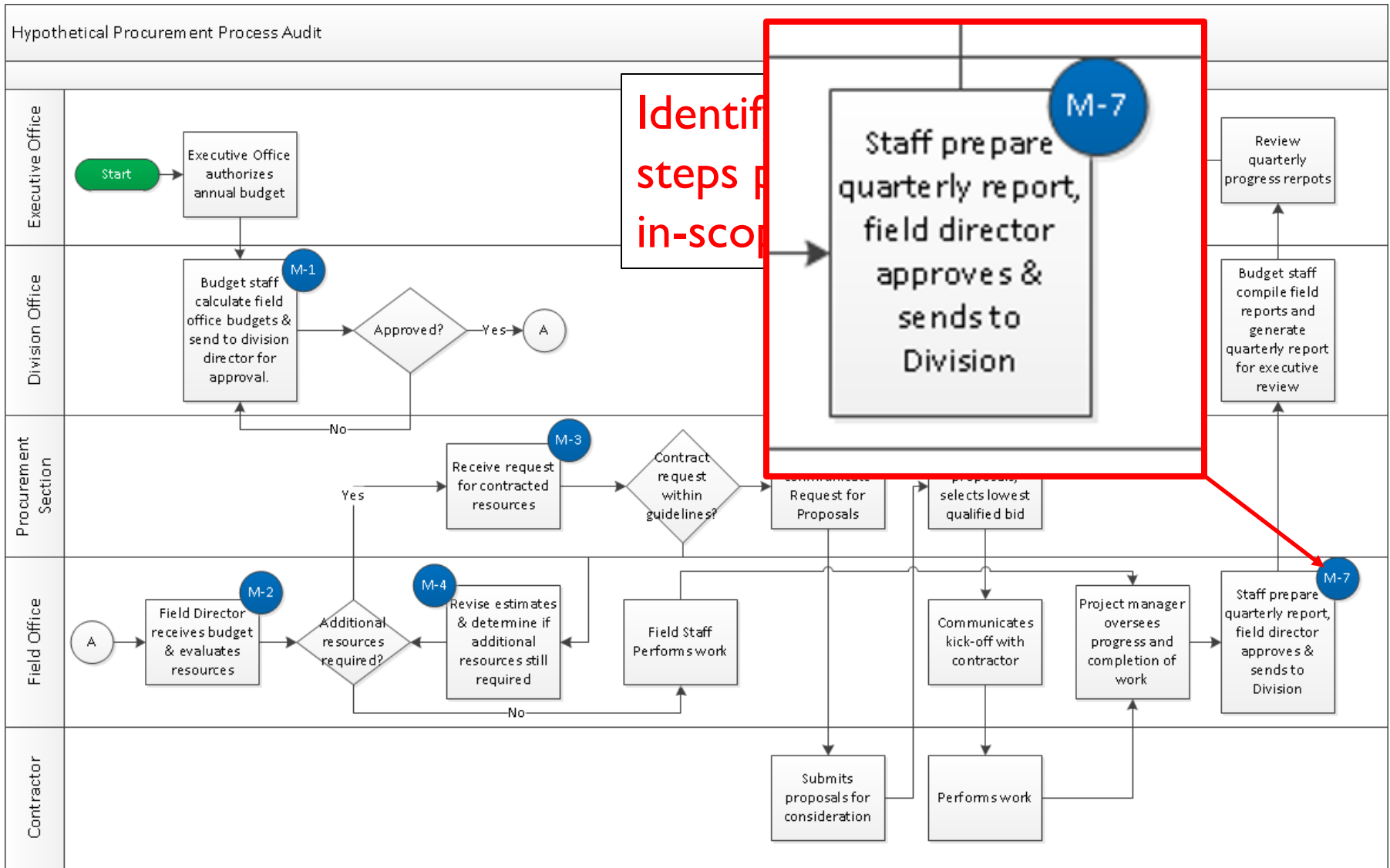
Audit Objective:

To determine the efficiency and effectiveness of managing and monitoring statewide third-party engineering contracts.

Challenges:

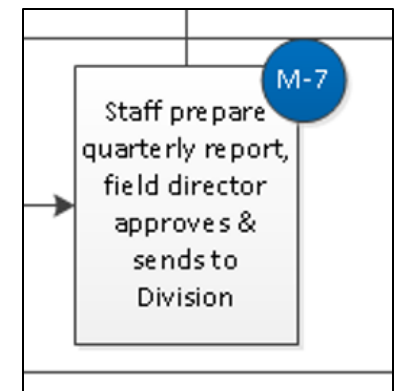
- Broad objective
- Decentralized
- Complex

Example Process Map



Process Cost Estimate Methodology

1. Identify employees involved in process
 - a. Determine pay-grade & associated salary range
 - b. Determine how many employees at each level
2. Identify hours spent per employee per step
3. Multiply: hours **x** salary **x** number of employees



Example Process Cost Methodology

Quarterly Report Preparation Expense (Salary)					
Employee	Annual Hours	Hourly Rate	Annual Cost	Total Staff	Process Total
Field Director	24	\$78	\$1,880	15	\$28,206
Field Project Staff	240	\$24	\$5,652	30	\$169,571
Total M-7 Cost					\$197,777

1. Identify employees involved in process
2. Identify hours spent per employee per step
3. Hours \times salary \times number of employees

Example Process Cost Results

Total Annual Cost of Hypothetical Procurement Process: \$391,385

Process Step	Annual Cost	Process Map Link
<u>Quarterly Report Preparation</u> Field office staff prepare quarterly project reports, submit to field director for approval and send to division office.	\$197,777	M-7
<u>Field Resource Analysis</u> Field director receives budget allocation, analyzes office projects, and determines resource needs	\$84,617	M-2 / M-4
<u>Contractor Selection</u> Procurement staff compile and score all responses received and submit to manager for review/approval.	\$55,478	M-6

Total Cost of Identified Process Steps: \$337,872

Example Process Cost Methodology

Job Title	Position	Salary Range (Monthly)	Salary Mid-Point	Work Hours per Month	Hourly Rate	Total Staff in Job Title
Division Director	1	\$11,272.41 - \$19,064.58	\$15,168.50	160	\$94.80	1
Budget Analyst	2	\$3,512.05 - \$5,083.47	\$4,297.76	160	\$26.86	4
Field Director	3	\$9,316.08 - \$15,755.75	\$12,535.92	160	\$78.35	15
Procurement Manager	4	\$6,018.85 - \$8,603.62	\$7,311.24	160	\$45.70	1
Procurement Analyst	5	\$3,512.05 - \$5,083.47	\$4,297.76	160	\$26.86	6
Field Project Staff	6	\$2,815.20 - \$4,721.29	\$3,768.25	160	\$23.55	30

Process Step	Position	Hours Spent (Estimated Monthly)	Annual Hours Spent	Hourly Rate	Staff Total	Process Total
M-1	1	0.2	2.4	\$94.80	\$227.53	\$227.53
M-1	2	3	36	\$26.86	\$967.00	\$3,867.98
M-2	3	4	48	\$78.35	\$3,760.78	\$56,411.64
M-3	4	8	96	\$45.70	\$4,386.74	\$4,386.74
M-3	5	15	180	\$26.86	\$4,834.98	\$29,009.88
M-4	3	2	24	\$78.35	\$1,880.39	\$28,205.82
M-5	4	1	12	\$45.70	\$548.34	\$548.34
M-5	5	8	96	\$26.86	\$2,578.66	\$15,471.94
M-6	4	13	156	\$45.70	\$7,128.46	\$7,128.46
M-6	5	25	300	\$26.86	\$8,058.30	\$48,349.80
M-7	3	2	24	\$78.35	\$1,880.39	\$28,205.82
M-7	6	20	240	\$23.55	\$5,652.37	\$169,571.03
Grand Total of Hypothetical Procurement Process						\$391,384.98

Tax Expenditures

The Less Visible Costs of Policy

Learning Objectives

- To identify tax expenditures
- To understand their significance
- To establish how they relate to direct spending

Tax expenditures – what are they?

Tax expenditures are exceptions allowed for under the tax code of a jurisdiction resulting in:

- Forgone tax revenues to the government there, within a fiscal year
- Reduced taxes for some taxpayers within that same period

Other terms used can include:

- Tax exemptions, tax concessions, tax reliefs, tax preferences, implicit tax subsidies

Examples

In general:

- Exemptions from paying any tax
- Deductions from the value of what is to be taxed
- Lower tax rates
- Deductions from calculated taxes payable
- Deferrals of tax (without a booked tax liability)

Some examples from BC:

- Property tax exemptions for religious institutions
- Property tax homeowner grant
- The lower corporate income tax rate for qualifying small businesses
- Non-refundable income tax credits
- Accelerated depreciation of some asset types against taxable income

Why should we care?

- Tax expenditures can add up to billions of dollars in a given year. In 2016/17, BC reported over \$7 billion in tax expenditures.
- Unlike direct spending, tax expenditures may not be subject to:
 - An annual budget cap
 - Annual debate and approval by legislators
 - An annual audit (as these numbers are not directly reported in the financial statements)
- They may not be effective in achieving policy goals or may no longer be relevant

How are they currently reported?

- No generally accepted standards for reporting of tax expenditures.
- Public sector accounting guidelines do not permit separate presentation as an offset to revenues (revenues must be shown as net amount)
- IMF and OECD have both issued guidelines on the annual reporting of tax expenditures (including reporting of the purpose of the tax expenditure)
- OECD recommends “tax expenditures be subjected to budgetary control in the same way as regular expenditures”

How are they currently reported?

- Based on a sample of nine national or subnational jurisdictions:
 - Usually reported annually and timed for the same fiscal period as a budget
 - Typically as a standalone document in association with the annual direct spending budget
 - In general, not in comparison with or reconciled to budgeted or actual direct spending

Other considerations

- Trends in reporting
- Non-tax expenditures

Questions?

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