



## MEATY Analysis Guide

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This document provides a brief guide to undertaking a MEATY Analysis. This methodology helps teams evaluate the efficiency, cost-effectiveness, and accuracy of their processes, making it easier to target areas where change can have the greatest impact. The guide walks you through how to undertake an analysis in your work area or team. The COE intranet page has a blank template to get you started with doing your own analysis.

If you get stuck email: [coe@mapleridge.ca](mailto:coe@mapleridge.ca) for help.

The MEATY Analysis framework—stands for **M**oney, **E**rror, **A**mount, **T**ime, and **Y**early Cost—is used to assess key aspects of operational performance and identify opportunities for improvement.

How MEATY works:

- **Money:** How much is spent on staff (staff hourly rate) and resources.
- **Error:** The percentage of mistakes made during the process.
- **Amount:** How many times the work is done.
- **Time:** How much time does it take to complete a particular task.
- **Yearly Cost:** The total cost of operations, calculated by multiplying Money, Amount, and Time, to identify potential savings and areas for improvement.

It is applicable across various city services, including public works (e.g., street maintenance scheduling), administrative services (e.g., processing permit applications), and community programs (e.g., event coordination and facility booking).

The most important thing to remember when using this tool is that you can start with a guestimate of the elements. It doesn't have to be 100% exact because you might not have solid data on which to calculate exact costs or time to complete a regular process. Make a start by doing a "back of the envelope type" estimate. If you have data, use it to determine how many times in a given period (day, month, quarter) the task or process is completed. The more precise you can be the better but don't let the lack of data stop you from getting started with an estimate.

**The point is to see where waste might be found, not to get the numbers 100% right first time.**

MEATY can be applied to both physical and digital processes. For example, it can help quantify the time staff spend searching for documents in a poorly organized filing system, the frequency of duplicate work orders, or the financial cost of delays in responding to public service requests. By analyzing these factors, MEATY ensures that city resources are better aligned with departmental goals, reducing waste and improving responsiveness to community needs.

**Example:** *Streetlight Repair Requests*

- **Money:** *Technician hourly rate is \$40/hour.*
- **Error:** *10% of repair tickets are duplicate due to uncoordinated reporting systems.*
- **Amount:** *2,000 repair requests annually.*
- **Time:** *Each repair takes 1.25 hours on average.*

- **Yearly Cost:**

$$\$40 \times 1.25 \times 2,000 = \mathbf{\$100,000/year}$$

**Insight:**





*Duplicate tickets waste time and inflate costs. By integrating reporting systems and using GPS tagging, the city could reduce duplicate repairs, saving up to \$10,000 annually and improving response times (10% of 2,000 repair requests = 200 duplicate requests that each take 1.25 hrs. on average to identify at \$40/hr. – therefore if we reduce error rate to 0% then we'd save \$10,000).*


**Getting Started**

1. Money – How much does it cost?
  - Estimate how much money is spent on the task.
  - Include staff (hourly wages), materials, and any equipment used.
  - *Example: How much does it cost in wages and supplies to complete one sidewalk repair?*
2. Error – How often do mistakes happen?
  - Identify common errors or problems in the process.
  - Count how often they happen and what the impact is.






- *Example: Are inspection forms completed incorrectly? How often on average do they need to be redone?*
3. Amount – How often is this process or task done?
    - Count how many times the task or process happens in a month or year.
    - This helps show the overall impact.
    - *Example: How many permit applications are processed each month?*
  4. Time – How long does it take?
    - Measure how much time it takes to complete one task from start to finish.
    - Include waiting time, delays, or handoffs.
    - *Example: How long does it take to process a resident's complaint from submission to resolution?*
  5. Yearly Cost – What's the total cost for the year?
    - Multiply the cost, frequency, and time to get an estimate of the total yearly impact.
    - Use this to see where savings or improvements can be made.
    - *Example: If each task costs \$25 and happens 2,000 times a year, the yearly cost is \$50,000.*

Summarize this analysis in a MEATY Table so you can see all the aspects together in the current state column.

|  | Current State  | Future State |
|--|--|--------------|
| <b>Money</b>    | \$45 per hour (avg)                                      |              |
| <b>Errors</b>   | 15% error rate (task not completed, duplicate work done) |              |
| <b>Amounts</b>  | Approx. 35 per quarter                                   |              |
| <b>Time</b>     | 1.10 hrs per process (start to finish)                   |              |

|  |  |  |
|--|--|--|
| <b>Yearly Cost</b>  | $(\$45/\text{hr} \times 1.1\text{hrs}) \times 35/\text{quarter}$<br>$= \$1,732.50$ |  |
| <b>Potential Yearly Savings</b>  |  |  |

Think about what a future state might look like. In the above example you might not be able to change the hourly rate so that it stays the same, but the error rate could be reduced from 15% to 5%, or the time required could be reduced from 1.5 hours per process to 1 hour per process so write these estimates in the Future State column.

|  | <b>Current State</b>   | <b>Future State</b>   |
|--|--|---|
| <b>Money</b>          | $\$45 \text{ per hour (avg)}$  | $\$45$  |
| <b>Errors</b>       | $15\% \text{ error rate (task not completed, duplicate work done)}$                | $5\%$   |
| <b>Amounts</b>      | $\text{Approx. } 35 \text{ per quarter}$   | $35$  |
| <b>Time</b>         | $1.5 \text{ hrs per process (start to finish)}$                                    | $1 \text{ hr per process}$  |
| <b>Yearly Cost</b>  | $(35/\text{quarter} \times 1.5\text{hrs}) \times \$45/\text{hr}$<br>$= \$2,362.50$ | $(35/\text{quarter} \times 1 \text{ hr}) \times \$45 =$<br>$\$1,575.00$ |
| <b>Potential Yearly Savings</b>  | $\text{Current } (\$2,362.50) - \text{Future } (\$1,575.00) = \$787.50$            |   |

Now you can calculate the potential yearly savings if you make the improvements.

Now that you have calculated the MEATY for your process or work area you can determine which actions you could take to make improvements to one or more areas of your MEATY.

An "IF-THEN" table can help you identify the most impactful improvements to make. Complete a table to propose possible things you could do, then estimate the likely outcome from making that change and indicate what benefit it might provide in terms of one or more of the MEATY elements.

| <b>If we change....</b>                    | <b>Then it will likely....</b>                                    | <b>Likely impact (e.g., minutes saved, reduced cost, more processed per period)</b> |
|--|---|---|
| <i>Example: use a do-confirm checklist</i> | <i>Let us know when tasks aren't done completely or correctly</i> | <i>Reduce error rate by 5%</i>  |

## Using the Template

The template is broken down into the following sections:

1. Purpose – write down process or work area are you focused on for this MEATY Analysis, and what is your hoped-for outcome?
2. Scope – what parts of the work process will the template document (e.g., The yearly cost of a fleet manager to prepare data reports)
3. MEATY analysis shows five elements
  - a. Money – Staff wages, and material costs
  - b. Error – Type, frequency, and impact of errors
  - c. Amount – Frequency of task execution
  - d. Time – Duration of each task
  - e. Yearly Cost – Calculated as:  $\text{Time} \times \text{Money} \times \text{Amount}$
4. If-Then Analysis - what is the potential saving is we reduced one or more aspects of the MEATY? For example: reduce errors from 10% to 1%, and/or reduce the average time it takes from 1 hour to 45 minutes.