Introduction

In budget negotiations, it is clearly important to demonstrate the value of work undertaken or proposed. We commissioned RAND Europe to conduct a rigorous investigation of this issue in relation to local authority regulatory services. This involved the creation of an evaluation matrix to assess the impacts of activities and the study of five different areas of work: fair trading, fly-tipping, health and safety, reduction of alcohol harm, and smoking cessation.

A subsequent report, published in October 2009, gave regulatory services a process for building a robust evidence base to clarify and quantify the benefits their activities deliver to local businesses and consumers.

The core of this publication was a step by step guide to the development of meaningful indicators to assess the impacts and outcomes of operations, drawing on visual representations called pathways. The use of this toolkit is helping many regulatory services to have more informed discussions about priorities and the allocation of resources, as well as increasing general awareness of their initiatives – enhancing their profile in local strategic partnerships.

Evidence of vital contributions to communities is summarized in dashboards presenting strategic decision-makers with sets of key performance measures.

This concise version of the toolkit covers all the essentials and includes a worked example from East Cambridgeshire District Council. The 13 key tools listed below are closely linked, and should be applied in sequence to gain their full value, as the elements of a comprehensive evaluation framework.

Supporting resources are provided on our website, including the original report Impacts and Outcomes of Local Authority Regulatory Services, sample pathways, a dashboard template and various case studies. For additional information please contact Rebekah Eden at rebekah.eden@lbro.org.uk or on 0121 226 4000.

April 2010
## Process Summary

**Identify the Impacts and Outcomes of Your Service**

**Preparation:**

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<table>
<thead>
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<tbody>
<tr>
<td>1</td>
<td><strong>Define the scope of your pathway</strong> – This can relate to activities or outcomes.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Choose your approach</strong> – Your pathway may be drafted after a workshop with staff and potential external partners or on the basis of existing documentation. The first option is preferable but more resource intensive.</td>
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**Stage One:**

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<tr>
<td>3</td>
<td><strong>Identify your activities</strong> – What does your work entail? It is best to group activities into areas such as intelligence, analysis, support, education and enforcement.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Analyse your inputs</strong> – What do you need to do your work, in terms of staff, information and resources?</td>
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<tr>
<td>5</td>
<td><strong>Identify your partners</strong> – This will help you assess who else influences the impacts and outcomes of your activity and could thus be a potential source of data.</td>
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<tr>
<td>6</td>
<td><strong>Identify your outputs</strong> – These are the products of your activity and are typically tangible and countable. The output indicators in performance management frameworks may point you in the right direction.</td>
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<tr>
<td>7</td>
<td><strong>Identify your outcomes and impacts</strong> – These are the results of your activity, both intended and unintended. In this context, impacts are considered to be long term, with a wide effect on the community or environment.</td>
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<tr>
<td>8</td>
<td><strong>Link the elements</strong> – The sequence to follow is inputs, activities, outputs, outcomes and impacts. List your findings in each case and connect them with lines to indicate the main causal chains. (You may need to add intermediate elements.)</td>
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**Find Indicators to Measure the Elements of the Pathway**

**Stage Two:**

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<tbody>
<tr>
<td>9</td>
<td><strong>Create a comprehensive list of potential indicators</strong> – What measures would assess the key elements in your pathway?</td>
</tr>
<tr>
<td>10</td>
<td><strong>Map these potential indicators against known indicators</strong> – Find out whether the data you would like are already being collected by your service or a third party.</td>
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**Synthesize, Analyse and Communicate the Findings in a Dashboard**

**Stage Three:**

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<tr>
<td>11</td>
<td><strong>Prioritise your indicators</strong> – Decide which of them are necessary to monitor progress given your pathway. The importance, cost and ease of gathering data are all factors here.</td>
</tr>
<tr>
<td>12</td>
<td><strong>Choose the indicators you wish to include in your dashboard</strong> – There should be 12-20, covering the whole sequence and all the main causal chains.</td>
</tr>
<tr>
<td>13</td>
<td><strong>Arrange your indicators in a dashboard</strong> – The aim is to provide a straightforward summary of the vital contribution your activity makes to your community, using a graphical representation of the feedback from your key indicators over the past three years, on a single page divided into four quadrants: input, output, outcomes and impact.</td>
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Preparation

**STEP 1: Define the scope of your pathway**

Prior to developing your pathway, you need to define its scope or boundaries. This can be done using either of the methods below, but the second is more challenging, requiring greater effort to ensure a robust analysis.

**By Activity:**

If you want to assess the outcomes delivered by current work, begin by defining a cluster of activities in a specific policy area. (The Rogers Review 2007 provides a ready-made list of policy areas.)

**By Outcome:**

If you want to assess the contribution of current or proposed work to a particular objective, begin by defining a specific outcome. In this instance, it is useful to produce an initial list of the activities you would expect to contribute. It is also important to avoid overlooking the unintended impacts of work.

**STEP 2: Choose your approach**

Decide how to draft the pathway. There are two ways to proceed.

**Interactive**

Gather evidence through a workshop with your staff and potential external partners.

**Desk-based**

Draw on existing experience and available documentation such as service plans and strategies.

The first approach is recommended, as it has several advantages. It encourages greater participation, a wider perspective, and the identification of options for future collaboration. It is, however, more resource intensive, and needs some desk-based support.
**Stage 1**

**STEP 3: Identify your activities**

Identify the activities you and your team are currently conducting, and group them into clusters such as support, analysis, enforcement or education. These will be the cornerstone of your pathway. From them you need to both work ‘backwards’ to identify inputs and ‘forwards’ to identify the outputs and later the outcomes of your activity.

*Key questions:*
- What are the main activities you are conducting?
- On a day-to-day basis, what are you doing in your job?
- Can these activities be clustered in a group of related activities?

**STEP 4: Analyse your inputs**

Once you have identified the relevant activities, turn your attention to their inputs. If your pathway is focused on one aspect of your service, you may find it difficult to attribute the share of staff or specific resources. At this stage a simple mentioning of the type of inputs is sufficient, but you may later need, for example, to estimate how much time your staff spend on a particular activity.

*Key questions:*
- What inputs do you need to conduct the activities?
- How many staff are required for the activities?
- What resources are needed to conduct the activities?
- What information is needed?

**STEP 5: Identify your partners**

Identify the partners you are working with. This will allow you to assess who else influences the outcomes and impacts of activities. Your partners may also be a source of valuable information and data.

*Key questions:*
- With whom are you working with on a regular basis?
- With whom do you share information?
- On whom do you have to rely to perform your services?
- What is the character of your collaboration?

**STEP 6: Identify your outputs**

Determine the outputs of your activity. These are the direct product of your activities and typically tangible and countable. A lot of (performance) management frameworks use output indicators, so this may be a good starting point. In principle you should have full control over the outputs you produce.

*Example:*

The outputs of food standards work include inspections and particular types of enforcement action. Compliance of food business is already an outcome as it is beyond your immediate control and might (or might not) be the result of your inspection activity.
STEP 7: Identify your outcomes and impacts

Outcomes are the intended and unintended results and consequences of your activities, and tend to be categorised into short-, medium- and longer-term results. In this context, impacts are considered to be long-term outcomes with a wider impact on the community or environment. They include changes in economic and financial conditions, in social conditions (e.g. reduced violence or increased cooperation) or in environmental and political conditions (e.g. participation and equal opportunities).

A list of potential outcomes and impacts is included in the evaluation matrix in the original research report from RAND Europe.

Key questions:

- What is the ultimate objective of your activities?
- What are the final outcomes you want to achieve?
- Which intermediate outcomes are a precondition for achieving the final outcomes?
- How does your service affect the local community?
- Which groups in the community might benefit, or be burdened by, your service?

STEP 8: Link the elements

Make sense of all the elements collected by linking them systematically.

1. Arrange the elements in a basic Input – Activity – Output – Outcome – Impacts sequence.

2. Choose one activity and start linking it with the matching output. Think about which outcomes follow relatively directly from this output. These are often intermediate outcomes that are not the final objective of your activity, but a necessary requirement for meeting them.

3. Test the chains you have identified by talking them through in both directions. Are there logical breaks between elements? Are intermediate steps missing? If so, you will need to add elements.

4. Identify the key causal chains. What are the main mechanisms through which your service attempts to impact on the local community?

An example of a typical pathway is given in the worked example on page 14. (You may find it easier to draft the pathway on a piece of paper before using software packages such as Microsoft Visio®.)

Example:

A food safety inspection (output) might lead, for example, to a better understanding and awareness of the regulation by the business owner (intermediate outcome), which in turn leads to more compliant food businesses (outcome). More compliant food businesses in turn will reduce the number of cases of food poisoning (outcome), which will increase the overall health of the local community (impact).
STEP 9: Create a comprehensive list of potential indicators

With the pathway in front of you, think about how you could measure its key elements. It is very likely that indicators have been mentioned during earlier discussions, and now is the time to focus on them again. The aim of this step is to produce a long list of indicators that cover your whole pathway. To draw up this list:

- think about a way of measuring each element of the pathway;
- consult the evaluation matrix in the original report for further indicators; and
- create a long list of indicators that would be potentially useful in measuring the elements of the pathways.

STEP 10: Map these potential indicators against known indicators

This long list of indicators now needs to be mapped against the information already available by identifying which of the identified indicators are already being measured.

1. Start by looking for indicators already collected by your service. These can be found in service plans, strategy documents and other performance information you and your service currently use. These tend, however, to focus very much on the direct outputs and inputs of the service.

2. If you can’t find the indicator identified, start widening the scope of your search:
   a. Are other services within your local authority likely to hold the information you identified? (e.g. social services, place surveys)
   b. Do other local organisations have this information? (e.g. PCT, NHS, police)
   c. Do national regulators or sector bodies provide this information?

3. If you can’t find a measurement for the initial indicator you identified, make sure you also consider similar indicators that may be suitable to measure what you intend to measure.

Having done this, you now know which indicators and measurements are currently unavailable or not being measured. In the next stage you will need to decide whether it will be worth considering collecting those in the future.
STEP 11: Prioritise your indicators

Your long list of indicators and your knowledge about the availability of indicators are the starting point for thinking about prioritising indicators for the dashboard. The idea is that you want to measure all impacts along the key causal chains you have identified. By having a ‘data point’ at each important step, you will be able to make a more convincing case for how you contribute to local outcomes and impacts.

Decide whether each indicator is central to the assessment:

1. Does it measure a key element of the causal chain?
2. Does it measure a key outcome or impact that is of particular importance to your service? (e.g. as part of a LAA)
3. Is it a necessary indicator to achieve a balanced assessment?

Once you have a list of (potentially) important indicators, consider the ease of measurement:

4. Is the indicator already being measured by your service?
5. Is it being measured by other services or national stakeholders?
6. Will it need to be developed?

If the indicator you identified is not being measured yet, consider the following before setting out to collect data:

7. Could the indicator be replaced by an indicator that is already measured? (proxy)
8. Can it be integrated in existing data gathering? (e.g. residents’ survey)
9. Could it be easily collected during performing the activities? (e.g. another tick box on an inspection protocol)
10. Would it require substantial primary data collection? (e.g. a complete new survey)

The following matrix may be helpful to guide your decision about which additional indicators to collect. If you find yourself with data gaps, make sure you focus on the right-hand side of the diagram. The easy-to-collect indicators on the upper left-hand side are worth considering for a bigger picture, but are not central to your assessment.
STEP 12: Choose the indicators you wish to include in your dashboard

Out of the prioritised indicators you can now choose the final indicators to include in your dashboard. The indicators selected should:

- give a fair representation of inputs, outputs, outcomes and impacts;
- cover all important causal chains; and
- be limited to between 12 and 20 indicators overall.

STEP 13: Arrange your indicators in a dashboard

Use the dashboard to provide a one-page overview of how your service contributes to local outcomes and impacts. Where possible, give time-series data for the key indicators for the last three years in each of the four quadrants (inputs, outputs, outcomes and impacts). For each indicator, define what developments are positive and which need attention or closer monitoring. To indicate this, you can use traffic light symbols and colours. An example of a typical dashboard is given in the worked example on page 17.
Case Study

East Cambridgeshire District Council

1 Define the scope of your pathway

This case study concerns activities to tackle fly-tipping.

2 Choose your approach

An interactive workshop was staged using hexi-mapping. Participants were asked to identify the key elements of the causal chain by writing on individual hexies or Post-it notes. These were then put on a large whiteboard and arranged to reach a shared understanding. Stakeholders present represented:

- LARS staff
- other council services
- PCT
- police
- parish councils
- neighbourhood panels
- industry and business

3 Identify your activities

The workshop participants identified the following:

- environment action days
- enforcement
- prosecution
- investigation
- site visits
- rubbish removal

These varied activities essentially comprise two clusters, one centred on enforcement actions, and the other on education.

4 Analyse your inputs

These were:

- staff
- skills and capacity
- resources for rubbish removal
- investment budget
- intelligence about fly-tips
- powers to enforce and investigate
5 Identify your partners

Key partners were:

- parish council
- neighbourhood policing team
- RECAP (Recycling in Cambridgeshire and Peterborough)
- other council officers
- neighbourhood panels
- fire brigade
- police
- Environment Agency

6 Identify your outputs

Those that could easily be identified were:

- removal of waste
- fixed-penalty notices
- cautions
- court cases
- education activities
- environment action days

7 Identify your outcomes and impacts

The wide range of outcomes extended to:

- recovery of removal costs
- avoided fly-tipping through quick removal of rubbish
- publicity
- deterrence of fly-tipping
- preventing further fly-tipping
- reduced cost of clearance for local authority
- fewer obstructions to rights of way
- cleaner environment
- less pollution
- avoided damage to agricultural land
- reduced cost to taxpayers
- improvement in house prices
- performance in place survey
- community cohesion
- pride in area
- more attractive site for businesses
- more attractive tourist destination
8 Link the elements

The different casual links between the elements of fly-tipping were then identified. The example below focuses on the preventative effect of quick removal of fly-tipped rubbish in the community. If the rubbish is removed quickly (output), this will prevent future fly-tips (intermediate outcome), which in turn results in a cleaner environment (outcome). A visually cleaner environment might lead to an increased identification with and pride in the local area. This chain would look something like this:

![Causal chain diagram]

This chain does not include inputs as part of the causal chain. In developing your pathway you may realise that inputs can be rather generic for all activities in your service, so you would not need to link them systematically to every activity, doing so when they are very specific. The complete pathway for fly-tipping, combining several of these causal chains, is shown below:

![Complete pathway diagram]

Analysing this pathway, three key causal chains were identified:

1. The current main activity of the regulatory service is to initiate the removal of fly-tipped waste, which has indirect and direct consequences for the local community. Directly, there are clear benefits from removing the waste, including a generally cleaner environment, less pollution, fewer obstructions to rights of way and less damage to agricultural land. Indirectly, the timely removal of waste contributes to preventing future illegal deposit of waste as existing dumps tend to reduce the threshold for illegally dumping waste.
2. Education activities are the second set of activities conducted by the regulatory services, although those are more ad hoc in nature, including, for example, environment action days. The thrust of the education activities is to prevent fly-tipping by informing the public about the illegal nature and the potential hazards for residents and the environment. This should in turn reduce the number of fly-tipping incidents.

3. The third causal chain evolves from the prosecution of fly-tippers. If there is sufficient evidence on site, the regulatory service can initiate a prosecution which could result in a number of outcomes, such as cautions, fixed penalties or stronger sentences. Central are, however, two outcomes. The prosecution will allow the local authority to recover the removal costs from the offenders. If pursued actively, cases in which offenders have been punished or had to pay back substantial amounts might be communicated to the wider public to create publicity and act as a deterrent. Prosecuting offenders would thus result in reduced costs for local authorities by recovering some of the clean-up costs. In addition the deterrence should lead to an overall reduction in fly-tipping over time.

9  Create a comprehensive list of potential indicators

To illustrate how you could think about indicators, this extract from the fly-tipping pathway focuses on the effects of prosecuting for fly-tipping. The yellow star shapes contain the (unreviewed) indicators:
10 Map these potential indicators against known indicators

Staying with the previous example, this long list of indicators could be mapped against what is being measured already. Green indicates that an indicator is measured already, orange that it is not collected yet. In addition, the current source and the potential source are indicated on the right-hand side of the chain:

11 Prioritise your indicators

These were identified as:

- outputs from educational activities
- assessment of the preventative effect
- assessment of the deterrent effect

Some indicators that are not currently measured were dropped, such as the publicity indicator, as the deterrence indicator would suffice to demonstrate the effect.
Choose the indicators you wish to include in your dashboard

The final selection of indicators followed the considerations to cover the three most important causal links as well as the four elements of the logic model. The table below shows the indicators included in the toolkit:

<table>
<thead>
<tr>
<th>Causal chain</th>
<th>Input</th>
<th>Output</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal</td>
<td>No. of incidents</td>
<td>No. of staff</td>
<td>Average time between report and removal of waste</td>
<td>Total incident clearance costs</td>
</tr>
<tr>
<td>Education</td>
<td>Staff in FTE, or £</td>
<td>No. people reached by education programmes</td>
<td>% of people considering the illegal disposal of rubbish as not a big deal</td>
<td>% of residents who think their council is making the local area a better place to live in</td>
</tr>
<tr>
<td>Prosecution</td>
<td>No. of successful prosecutions</td>
<td></td>
<td>% of citizens considering the risk of getting caught for fly-tipping as high</td>
<td>% of businesses considering the local environment a positive location factor</td>
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</table>

Arrange your indicators in a dashboard

The final dashboard developed for the fly-tipping case study is shown in the figure below. The traffic lights indicate which elements of the causal chains require attention. If, as in this case, no prosecution has been happening, potential offenders are unlikely to be deterred:

- Specific budget for fly-tipping service
- Investment into fly-tipping service
- Perceived risk of getting caught for fly-tipping
- Perceived acceptance of fly-tipping
- % residents who think that rubbish and litter lying around is a very or fairly big problem in their local area
- 30% East Cambridgeshire - 42% England
- % of residents who think their council is making the local area a better place to live: 69% East Cambs - 70% England average
- % of businesses considering the local environment a positive location factor
Local authority regulatory services check whether our air is clean, food is fit to eat, workplaces are safe and companies trade fairly. All this vital work supports businesses in delivering economic prosperity and protecting consumers from harm and fraud – a complex task in a complex environment. Yet historically there was very little research into the wider impacts and outcomes of local regulatory activity. As a result, regulatory services were unable to prove their value to their local authorities, leading to difficulties around budgets and priority setting. This formed the backdrop to the investigation by RAND Europe.

RAND Europe is an independent not-for-profit research organisation that aims to serve the public interest by improving policy-making and informing public debate. Our clients are European governments, institutions and firms with a need for rigorous, impartial, multidisciplinary analysis.

We wish to thank all those who provided valuable support in understanding the landscape of and challenges for regulatory services, in particular the organisers and participants of the logic modelling workshops conducted with Cambridgeshire County Council, East Cambridgeshire District Council, London Borough of Islington, Leicester City Council and Northamptonshire County Council.

We would also like to thank all colleagues at RAND Europe who made important contributions to our research, in particular Philipp-Bastian Brutscher and Kai Wegrich for their useful and insightful comments during the quality assurance process.

For more information about RAND Europe please contact: Jan Tiessen, RAND Europe, Westbrook Centre, Milton Road, Cambridge CB4 1YG. United Kingdom. Tel: +44 (1223) 353 329 / Email: tiessen@rand.org