the thin blue line
The Methodology and Results of the 2011 Cost of Sub-national Services Study (O&M)

Technical Report | July 2014
Before we continue we would like to extend our thanks to our partner agencies in this project, they include:

- National Department of Health
- National Department of Education
- National Department of Works
- and DFAT (AusAID)
- plus many more...

**A WORD OF GRATITUDE**
WHAT IS THE THIN BLUE LINE?
What is the Thin Blue Line

The *thin blue line* describes the amount of operational and maintenance funding that is required each year to keep the Government’s sub-national service delivery and administrative machine going.

Without this funding provincial, district and facility based public servants are unable to carry out their duties.

- Health clinics and schools will not operate
- Roads and jetties will not be maintained
- Village level law & order, agriculture and fisheries activities cannot be supported
What is the Thin Blue Line

In 2005 and again in 2011 NEFC carried out a country-wide study. It involved consulting 100’s of people and collecting an enormous amount of data to establish a cost for delivering a minimum set of basic services and the cost of supporting an administration. The study covered:

- Service delivery and administrative costs
- In each province
- In each district

The study sought to reflect the realities of each province and district. We know they are not the same.
What the study did not include

The study did not include:

- Salaries
- Capital costs

These areas may be the subject of other NEFC studies.

NB: there are a few exceptions to these rules – refer to the page 25 of the report.
Why we did the study

The main objective for conducting the original study was to establish the cost relativities between Provinces.

This information was needed to design the new intergovernmental financing system that was based on the principles of equity and need. The study still serves this purpose.

Since those early days, NEFC has come to use the Study in many and varied ways. Particularly as a benchmark for budget and expenditure purposes.
Parameters that guided the study

In undertaking a study of this scale it is necessary to establish a clear set of parameters. The report clearly sets these out, they include:

- Existing service delivery programs as they should be delivered
- A standard set of service delivery and administrative activities
- Costing what should be spent (not what is being spent)
- Based on existing facilities, staff and infrastructure
- Only provincial & LLG cost responsibilities
- Only affordable inputs for basic essential services
- Accurate travel costs
- Province specific prices
- Only rural services (not town)
Stage 1. Define Responsibilities

The first stage was to define the service delivery responsibilities of provinces and LLGs.

This work intersects with the Responsibility Specification Exercise that was undertaken by NEFC and published by PLLSMA. The steps included:

- Consultations with all relevant national line agencies
- Consultations with a range of provinces
Stage 2. Determine Standards

The next stage was to determine the service delivery standards that should apply.

Most national agencies have some level of minimum service standards which they expect provincial administrations to meet.

For example:

- Health facilities are expected to conduct mobile outreach clinics to identified sites six times per year.
Stage 3. Create Activity Costs

Once the responsibilities were defined and minimum standards determined these could be translated into activity costs. This involved the collection of a lot of data, which included:

- Provincial price surveys, and district spot price surveys
- Sub-national staffing data
- Demographic data
- District surveys of information on enabling capacity
- Facility, infrastructure, travel route mapping using GIS technology
GIS Mapping

GIS mapping of every district identified service delivery points and travel routes

- Schools
- Health clinics
- Roads
- Travel routes
- etc.

National Economic and Fiscal Commission
Papua New Guinea
Concept – the costing jigsaw

These elements combine to help us derive activity costs that relate to specific locations across PNG.

Facilities include:
- Schools
- Health centres
- Aid posts

Staff include:
- Provincial staff
- District staff
- LLG staff
- Community health workers
- Teachers

Prices:
- Price survey by province
- District fuel spot prices
- Airfare prices

Infrastructure includes:
- Roads and bridges
- Wharves, jetties and landings
- Power source
- Telecommunications

Demographic data:
- Population
- Fisher households
- Agriculture households
- Prison inmates

Basket of goods - prices

Travel routes:
- Routes mapped and GIS technology used to establish distances
- Travel modes: on foot, road transport, boat and air

Travel route data

Demographic data

Infrastructure data

Facility data
The Cost of Sub-national Services Study (O&M)

THE 2011 RESULTS
Three high-cost sectors

• Infrastructure
• Education
• Health

Then...

• Assembly
• Agriculture
The Cost of Sub-national Services Study (O&M)

COSTS IN THE HEALTH SECTOR AS AN EXAMPLE
## Costing health activities

In each sector we identified the specific activities to be costed. In health these activities were as follows:

<table>
<thead>
<tr>
<th>Provincial level activities</th>
<th>District level activities</th>
<th>LLG level activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>K15.8 million</td>
<td>K104.1 million</td>
<td>K3.9 million</td>
</tr>
<tr>
<td>Administration</td>
<td>Administration</td>
<td>Aid Posts</td>
</tr>
<tr>
<td>Staff Training (HRD)</td>
<td>DHMC</td>
<td></td>
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<tr>
<td>Provincial Health Board</td>
<td>Supervision</td>
<td></td>
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<tr>
<td>Health information system</td>
<td>Patient transfer</td>
<td></td>
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<tr>
<td>Supervision</td>
<td>In-Service Training</td>
<td></td>
</tr>
<tr>
<td>Disease Control</td>
<td>Rural Health Facilities</td>
<td></td>
</tr>
<tr>
<td>Distribution of Medical Supplies</td>
<td>operations</td>
<td></td>
</tr>
<tr>
<td>Health Promotion</td>
<td>Rural Health Centre</td>
<td></td>
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<tr>
<td></td>
<td>Transportation</td>
<td></td>
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<tr>
<td></td>
<td>Maintenance of Medical</td>
<td></td>
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<tr>
<td></td>
<td>Equipment</td>
<td></td>
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<tr>
<td></td>
<td>Immunization/MCH</td>
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<tr>
<td></td>
<td>Water Supply</td>
<td></td>
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<tr>
<td></td>
<td>Health Promotion</td>
<td></td>
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<td></td>
<td>HC Radios</td>
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</tbody>
</table>
Costing health activities

Most health activities and health costs are found at the district and facility levels. You will note the costs vary by province.

<table>
<thead>
<tr>
<th>Province</th>
<th>Provincial Costs</th>
<th>District Costs</th>
<th>LLG Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morobe</td>
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<td>SHP</td>
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<td>WHP</td>
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<td>EHP</td>
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<td>Madang</td>
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<td>ESP</td>
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<td>Simbu</td>
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<td>ENB</td>
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<td>MBP</td>
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<td>Sandaun</td>
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<td>WNB</td>
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<tr>
<td>Central</td>
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<tr>
<td>Western</td>
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<td>Oro</td>
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<td>NIP</td>
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<td>Gulf</td>
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<tr>
<td>Manus</td>
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</tr>
</tbody>
</table>

Provincial Costs, District Costs and LLG Costs for each Province. Colour shows details about Provincial Costs, District Costs and LLG Costs. The view is filtered on Sector Division, which keeps Health.
There are Stories within Individual Activities

Costs vary greatly by province and by district. Patient transfer in Western Province is expensive (est. K3.3 million) but a lot less expensive in Western Highlands (est. K0.6 million)
The Cost of Supervisory Visits

The cost to conduct supervisory visits is determined by a variety of factors: mode of travel, distance, time necessary, etc.

We can see the average annual cost of supervisory visits in Telefomin and Karimui is very high relative to other districts.
Sector cost information in the Report

We have sought to make the Study accessible to our wide audience that includes provinces, national agencies, and non-government participants. Information on each sector includes:

- A narrative on the sector at the sub-national level
- A list of costed activities
- Charts depicting costs by province by level (province, district. LLG)
- A detailed table on the sector’s activity costs that covers; descriptions, cost basis used, and an explanation of the assumptions.
- An appendix that details all 2011 costs by sector by province by level...etc.
The Study – reflects PNG’s context

The study identifies costs by sector, by location and by the level of government administration. This makes its use very flexible.

As we know Government is presently discussing the architecture of the decentralised system, with a renewed emphasis on districts as key service delivery centres.

The study captures costs by province, district and LLG – reflecting the realities of service delivery and administration in Papua New Guinea. So it is ready to inform any changes that may evolve.
IN CLOSING

We hope you find this report informative.

The report *The Thin Blue Line* is released to promote transparency and understanding. We believe it can aid better decision-making in planning, budget and expenditure across government.

The study is an expansive and comprehensive exercise and every effort has been made to deliver a result that is both sound and pragmatic. NEFC always welcomes discussion and ideas.