

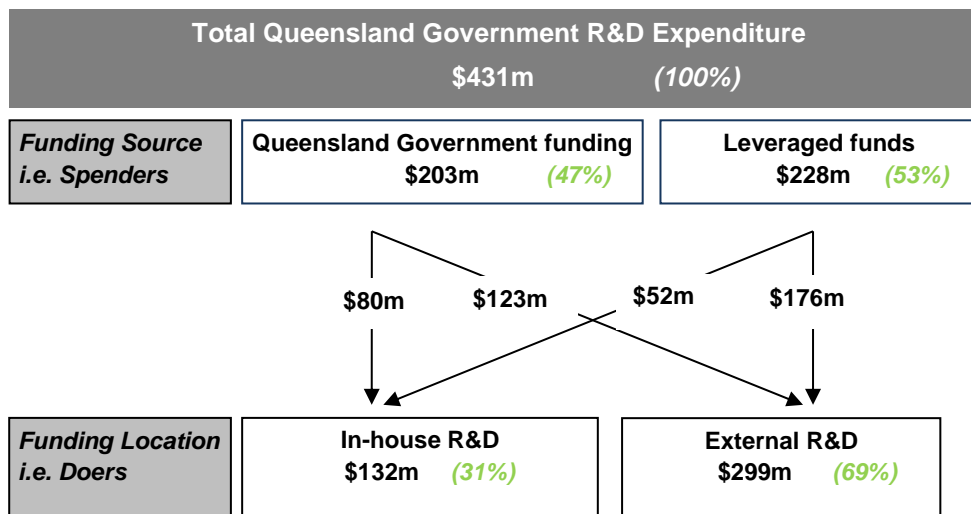
Queensland Government Research and Development Expenditure Report 2012-13 Fact Sheet

Why spend on research and development?

Expenditure on research and development (R&D) is one of the most widely used measures to demonstrate support for innovation. R&D is defined as '*creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications*'.

The Queensland Government uses its investments into R&D to meet specific economic, social and environmental outcomes consistent with the government's priorities. Partnerships between the Australian Government, state governments, the higher education sector and industry have been important to deliver skills and critical infrastructure in the past and will be increasingly important in the future. By investigating and assessing these relationships we can adapt our spending to deliver real outcomes that will benefit Queensland and Queenslanders.

How much does the Queensland Government spend on R&D?



In 2012-13 \$203 million was spent on R&D in Queensland on in-house research activities (activities performed by the Queensland Government) and external research projects and grants.

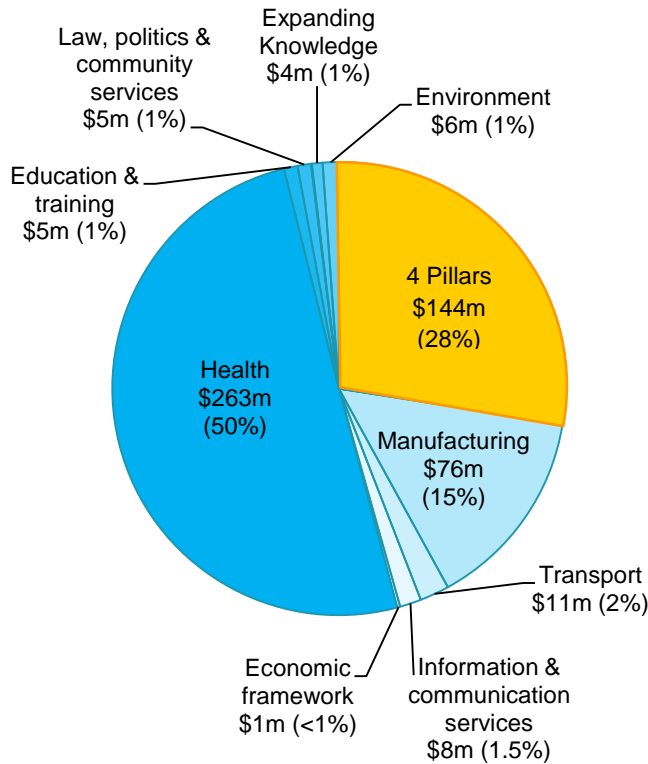
This investment money was used to secure \$228 million in additional money and resources (called 'leveraging'), bringing the total investment to \$431 million. The total spend of \$431 million is down 32 per cent on the \$634 million spent and leveraged in 2011-12 and this is largely due to the completion of major research infrastructure projects, outlined on page 3.

How much did Queensland Government departments spend on R&D?

Department	Funding amount (\$m)	% of overall funding
Department of Science, Information Technology, Innovation and the Arts (DSITIA)	\$72	36%
Department of Agriculture, Fisheries and Forestry (DAFF)	\$57	28%
Department of Health	\$28	14%
Department of Natural Resources and Mines (DNRM)	\$10	5%
Hospital and Health Services (9 board-run hospitals that provide public health services in Queensland and report to the Department of Health)	\$10	5%
Government Bodies and Statutory Authorities	\$9	5%
Department of Environment and Heritage Protection	\$4	2%
Department of Education, Training and Employment	\$3	2%
Department of Transport and Main Roads	\$3	2%
Department of Energy and Water Supply	\$2	1%
Department of Community Safety	\$2	1%
Department of Communities, Child Safety and Disability Services	\$1	1%

What was the money spent on?

Top areas of research



1. **Health*** (\$263m, 50 per cent)
Health research was performed across a number of departments and government bodies including QIMR. Of this \$263m:
 - \$155m was expended by Queensland Health, the Health and Hospital Services and QIMR
 - \$97m went to DSITIA competitive grant funding and funding towards other projects, for example the Centre of Advanced Imaging, Institute of Molecular Bioscience and the Queensland Tropical Health Alliance
 - \$12m was expended by various departments and government bodies
2. **Queensland's four pillars of the economy** - agriculture, construction, resources, tourism (\$144m, 28 per cent)
3. **Manufacturing*** (\$76m, 15 per cent)
4. **Transport*** (\$11m, 2 per cent)
5. **Information & communication services*** (\$8m, 1.5 per cent)
6. **Environment*** (\$6m, 1 per cent)
7. **Education & training*** (\$5m, 1 per cent)
8. **Law, politics & community services*** (\$5m, 1 per cent)
9. **Expanding knowledge*** (\$4m, 1 per cent)
10. **Economic framework*** (\$1m, <1 per cent)

**(Research projects are aligned with the Australian Bureau of Statistics classifications for Socio-Economic Objectives which allow R&D data to be classified according to the researcher's intended purpose)*

How does the government leverage its expenditure?

It is important for the government to leverage as much additional money and resources from its expenditure as possible to bolster its investment. Leverage on expenditure in R&D can include: funds attracted from private investors; grants or funding from the Australian Government; and contributions from universities.

In 2012-13 the Queensland Government leveraged \$228 million from the Australian Government, universities, businesses and other external sources (down \$175m, or 43%, on the \$403m leveraged in 2011-12).

Brisbane's QIMR Berghofer Medical Research Institute (QIMR) - dedicated to translating medical discoveries into treatments, diagnostics and prevention strategies - leveraged an additional \$91.5 million from the government's investment. If we add this to the \$431 million of Queensland Government money and its leveraged component we get a total expenditure on R&D by the Queensland Government of \$523 million.

Capital (infrastructure) investment is money used to buy fixed assets, such as land, machinery or buildings. The Queensland Government's capital investment (excluding leverage) decreased considerably in 2012-13 to \$23 million, from \$58m in 2011-12 and \$109m in 2010-11. This was due to the completion of infrastructure projects (for example, research facilities like the

Ecosciences Precinct, the Health and Food Sciences Precinct, the Translational Research Institute Health, and the QIMR Berghofer Medical Research Centre building).

In 2012-13 Queensland Government funds leveraged only \$1.12 for every \$1.00 spent on in-house and external R&D in comparison with the \$1.74 leveraged from every dollar spent in 2011-12. This drop is largely due to the significant reduction in capital investment because infrastructure projects often attract high levels of investment (leverage) from the private sector.

Summary

The Queensland Government's investment in science and research has been strengthened over the past 15 years. Since 1998, the Queensland Government has spent more than \$5 billion on scientific infrastructure, projects and skills. This investment has leveraged an additional \$4 billion to provide an overall investment of more than \$9 billion.

Most R&D funded by the Queensland Government is performed either in-house (42 per cent) or by the university sector (45 per cent). The business sector receives only 4 per cent of the government's R&D funding. It is important for government to grow our business sector commitments, encourage greater collaboration with industry and strengthen our R&D portfolio.

In 2013-14 the Queensland Government defined ten key Queensland Science and Research Priorities. Alignment of expenditure to these should result in an increasingly strong science and research investment portfolio for Queensland in years to come. The use by government of a set of new *Science and Research Investment Decision Rules* will enable better assessment and targeted investment in science and research. When these tools are used in conjunction with the Queensland Government's *Science and Innovation Investment Framework* we can deliver a viable and resilient research and innovation community and associated investment portfolio.