

## **Executive Summary**

This review of LSAY commenced in June 2013 with the Terms of Reference at [Appendix A](#). The intention was that the review should make no assumptions about value for money, continuation or structure. A review of this kind has not been undertaken since the commencement of LSAY in 1995, although evaluations of its effectiveness and efficiency were completed in 2000 and 2010.

### **Aim**

The aim of this report is to provide systematic evidence to underpin decision making on the future of LSAY by:

1. Making an objective assessment of the value for money and limitations of LSAY as presently constituted to policy makers, researchers and the wider community;
2. Identifying the feasibility, implications and cost of enhancements or changes, including improvements to make LSAY a better and more agile policy tool; and
3. Identifying options, timelines and, where possible, costs for continuance or discontinuance.

### **Methodology**

The information on which this report is based is drawn from:

- a review of existing LSAY documentation;
- a survey of over 200 LSAY users, supplemented by 25 interviews with key stakeholders;
- a literature review of more than 60 research papers published since 2008 based on LSAY;
- analysis of data on LSAY usage based on web downloads, citations and related statistics;
- eight case studies of LSAY's contribution to policy and research;
- a review of longitudinal surveys in Australia and overseas with relevance to youth; and
- technical and cost analysis of options for LSAY enhancement.

The report uses principally descriptive analytical techniques. It makes qualitative assessment of costs and benefits. Some indicative modelling of costs of options is included.

### **Context**

LSAY and its antecedents arose from the shocks to the Australian economy and the economic restructuring of the 1970s and 1980s with rising unemployment and particularly high youth unemployment, leading to concerns about permanent alienation of youth with consequent social security dependence and loss of productivity. In this context the protective value of education and training was recognised. School retention rose through the period and continuation to university started to rise, accelerating in the 1990s and rising further since.

LSAY originated as an ACER research activity in 1995 funded by the Commonwealth and the States and Territories. It has been fully publicly tendered since 2007, with interviews conducted by Wallis Consulting (Wallis) and the data preparation, research and analysis and dissemination component conducted by the National Centre for Vocational Education and Research (NCVER). Since its commencement a wider variety of sources of data on youth has become available, including Australian longitudinal studies of households and children.

Except for the shift in 2003 to following the PISA age 15 cohort rather than a Year 9 cohort, LSAY design, scope and data collection has not changed much since its inception. This has been both a strength – because it has provided a long period of highly comparable data – and also a weakness – because it has meant limited evolution to meet changing needs. A range of development options have been identified over time, particularly in the 2010 evaluation, but technical and cost implications have constrained implementation.

## The value of LSAY

### *LSAY is used by many and of critical importance to some*

A survey of 207 LSAY users pointed to a high level of awareness and use across a relatively small group of policy makers, researchers and general users:

- Of all respondents:
  - 86% were very familiar or somewhat familiar with LSAY or had at least a general knowledge of what it is about.
  - 70% reported having used LSAY research or data in their work.
- Of those who had used LSAY:
  - 74% used LSAY at least several times a year.
  - 66% had been using LSAY for two years or more.
  - On the occasion in the last two years when LSAY information was of the most help to their work, almost two thirds regarded it as critical or very important.
    - LSAY was especially strongly rated as critical or very important among users very familiar with the survey with 73% of policy users and 85% of research users in this group regarding LSAY as critical or very important.
  - On those occasions when LSAY was used, 49% agreed that other sources could rarely or never have been used as effectively.

Analysis of NCVER website statistics showed that an average of around 1,700 users have accessed each LSAY report released since 2010 from the NCVER website. Media references to LSAY reports when they are released have been growing over time. Academic citations are highest among the oldest reports, reflecting the time taken for citations to build up over 3-4 years after publication.

Eight policy case studies (four policy reviews, one Parliamentary inquiry, an evaluation of a policy initiative and a project to identify good practice) illustrate the use of key information or

data for which LSAY was either the only or the best and most robust source. This was especially the case for transition or pathway information, where LSAY was the pre-eminent source of information. LSAY was the key information source across a large part of the report in four of the case studies and was critical for parts of the report or supportive in others. For example:

- In the Review of Higher Education (2008) and follow-up inquiries including the Review of Student Income Support Reforms research from LSAY provided key information key evidence that low SES rather than locational factors was the major reason for lower participation in higher education in regional areas. LSAY data was also used to analyse the relationship between increased rates of taking gap years and eligibility for Youth Allowance.
- In COAG Reform Council reporting on youth transitions (ongoing since 2009) LSAY was the first and pre-eminent source of quantitative information on patterns of youth transitions, in particular: how youth transitions are influenced by individual, family, school and other factors; pathways from school; and the impact of work experience and vocational education while at school.

### ***The value derived from LSAY at present falls short of its potential***

The overall view expressed in stakeholder interviews was that LSAY was of national significance and should be preserved and continued in the future, but that its potential impact was not realised in the actual value derived from its use at present.

Stakeholders saw LSAY as existing in an increasingly contested landscape of data, especially in schooling. Although the value of a longitudinal survey was widely acknowledged, for some LSAY was less useful than other data sources. Support for continuation of LSAY was strongest among Australian Government agencies, researchers and non-government bodies and weakest among state government agencies, especially where they conduct their own school leaver survey or are able to meet their more specific data needs from their own data. Many shared the view that LSAY had experienced a decline in status and value with the growth of other data sources including other longitudinal surveys that were seen as delivering better value. In contrast, LSAY was thought of by many as reflecting past policy concerns and as having difficulty moving quickly enough to respond to new or emerging issues. An interviewee from the OECD noted that LSAY provides a significant additional data source on youth that is not available in many other countries and that it is particularly valuable in filling in the gaps from broader cross-sectional surveys and in following the paths of cohorts of young people.

Several areas in particular were seen to need improvement by key stakeholders:

- LSAY was seen as conservative and averse to exploring novel topics. As a result, its findings are less relevant to a broad spectrum of policy-makers and less appealing to young researchers interested in exploring new areas of policy.
- This narrowness, together with the cumulative effects of attrition, limits the questions able to be investigated to broad “cause and effect” studies, when finer grained analysis of outcomes for sub-groups of interest is needed.
- Advanced users generally considered that the LSAY dataset is difficult to work with and poorly documented and that the investment of time needed to become proficient is much greater than in some other longitudinal surveys.

- Commissioned research topics and reports were seen as too accommodating of Australian Government interests. Greater independence in commissioned research from other surveys was felt to give more credibility to their findings.
- The close involvement of the Department of Education in managing the commissioned research program was also perceived to reduce timeliness and contribute to delays in release of research and to act as a disincentive to explore wider and more relevant topics.
- Governance arrangements were felt to not effectively engage other stakeholders and LSAY was seen mostly as a survey designed primarily to meet Australian Government information needs.

The fundamental value of LSAY has been recognised by the Australian Bureau of Statistics, which has included LSAY in its listing of Essential Statistical Assets (ESA) for Australia. The ESA aims to support effective prioritisation of investment, focus and effort within the National Statistical Service by identifying those essential statistical assets which are critical to decision making in Australia (ABS 2013). Apart from LSAY, the ESA includes a number of key datasets in the fields of education and youth such as NAPLAN (ACARA), PISA (ACER), the National Schools Statistics Collection Education (ABS) and the Survey of Education and Work (ABS). LSAY's inclusion reflects its importance in showing the relationship between the attainment of educational outcomes and participation in the labour market.

#### ***Recent LSAY findings have broadened somewhat the analysis of youth transitions***

LSAY research shows much continuity and evolution in the experiences of and influences on young people. A literature review of 66 research papers published over the last five years using LSAY data shows that it has contributed to a better understanding of contemporary Australian youth transitions in a number of ways.

- LSAY has enabled changes in the experiences of different cohorts of young people to be captured. Mapping and understanding changing experiences has involved projects exploring the gap between Indigenous and non-Indigenous Year 12 completion rates, the increased incidence of taking a gap year between school and post-school study, the effects of increased participation in VET in school programs, the impacts of the increased frequency of combining full-time school and post-school study with employment and the long term effects of recession on youth employment.
- More sophisticated analysis of existing data has occurred by examining the relationship between adolescent occupational plans and later attainments, the impact of personality traits on dropping out of school and patterns of post-school education and employment, the impact of social capital networks on youth transitions, incentives for New Apprenticeships and the self-reported well-being and happiness of young people.
- New perspectives have also arisen from joining up LSAY with other data sets and creating synthetic data sets within LSAY, for example linking with PISA and Youth in Focus (YIF). Some examples include:
  - Linking YIF data on disadvantage with LSAY schooling data has helped to provide fresh insights about the factors influencing school completion.

- Linkage of PISA with LSAY data has enabled exploration of school characteristics and their effects on progress to university.
- Statistical techniques have been used to identify comparison groups within the LSAY data which share the same background characteristics as a group affected by a policy change of interest, thus allowing its impact to be considered using LSAY data.
- LSAY has also contributed to a more nuanced understanding of transitions and pathways. For example, the impact of disadvantage due to being Indigenous or low SES on educational outcomes and the identification of direct and indirect influences on outcomes (such as school achievement, intentions, career aspirations and peer attitudes) and their relationships. The influence of choice of maths and science subjects at school on career paths, the meaning of 'at risk' youth and the dynamics of young people's labour market status over time have also been explored.

### ***LSAY remains relevant but needs to adopt a wider focus in future***

The core purpose of LSAY was and continues to be to describe and explain the educational, training and employment dimensions of youth transitions and the pathways young people take.

In the 2010s the same concerns remain but the profiles of youth education, training and work have changed considerably. The duration of post school education and training has lengthened. Young people are staying in the family home – or returning to it – to a far greater degree and forming families later. In parallel with these changes the service industries have become the dominant employers and manufacturing continues to decline. Unskilled work is less common and highly casualised. Full time employment is becoming more difficult to secure at younger ages and increasingly requires post-school qualifications. Long term careers with one employer are no longer the norm. Communication technologies are rapidly changing modes of social engagement. Disposable income has increased markedly for many but not all. Social attitudes on many matters, including diversity and multiculturalism, are evolving rapidly.

Among some stakeholders there was interest in broadening LSAY's research focus beyond the narrowly economic and educational to include civic participation and youth wellbeing. For some, the model of transitions centred on education and employment outcomes on which LSAY has been based was seen as outdated and restrictive with social dimensions and impacts now just as important. This sense of LSAY being narrow in scope contrasted with the breadth of topics covered in other longitudinal surveys such as HILDA and LSAC. For others, LSAY was seen as having too great a focus on youth making poor transitions and not enough on those who are successful, especially where this occurs in spite of their circumstances or background. However, this was balanced with concerns that broadening the research focus and the scope of data would lead to greater respondent burden, which could affect participation and attrition or require trade-offs in other regards given limited resources, e.g. fewer new cohorts. Some believed that other enhancements might be of greater value, for example, extending the age to which cohorts are followed to thirty years.

The future research focus for LSAY needs to be shaped by shifts in the interests of policy makers, the changing nature of youth transitions and emerging opportunities to capitalise on the development of data collections. While this does not require different research methods

per se, it will require more extensive and richer information about respondents including, for example, greater differentiation of their skills, aptitudes and non-cognitive skills.

### ***The value for money offered by LSAY needs to be increased***

At present, LSAY is of high value to some stakeholders and of some value to many but not all. It has potentially higher value if certain practical limitations, particularly on policy relevance, accessibility and ease of use and design restrictions such as the range of data items collected, can be overcome. LSAY is used in a number of policy and research contexts and is irreplaceable in a few. Results have a reasonably wide dissemination. Nevertheless the use of LSAY has been restricted to a relatively small group of policy makers and researchers and there are a range of views about its usefulness.

The cost of LSAY averages about \$1.7m a year excluding the research and analysis component (\$0.4m) for comparability with other longitudinal surveys. For its design and implementation LSAY costs would appear to be on or a little lower than market rates. By comparison, the annual costs of HILDA and LSAC would appear to be around \$7-8m a year each. The difference in cost is attributable to several factors:

- interview methods – HILDA and LSAC primarily use face to face methods whereas LSAY is telephone and online;
- range and depth of data items – HILDA and LSAC are both very extensive in range and depth of information collected, whereas LSAY is very focused on its core purpose; and
- extent of data preparation – HILDA and LSAC put a good deal more effort into making datasets easy for researchers to use.

The balance of high value to a restricted stakeholder group and relatively low cost indicates that LSAY has been adequate value for money on the whole. However, the increasing availability of data on youth from other sources, including HILDA and LSAC, together with interest in a wider set of policy issues and the limitations of LSAY in its current form suggest that value for money has been static or begun to decline and is at risk of continuing to do so unless the survey is revamped.

## **Operational issues**

### ***Some broadening of the scope of data collected is needed***

One part of rejuvenating LSAY is to broaden the scope of data it collects. A number of extensions to LSAY (also canvassed in the 2010 evaluation) would directly enhance its capacity to support its core purpose without placing an onerous burden on respondents.

- Matching to NAPLAN and My School records for a new Y15 cohort (and potentially in future to the Australian Early Development Index (AEDI) for later cohorts) would provide a record of attainment and school factors from childhood. In time this would strengthen LSAY's capacity to separate the longer term effects of school achievement relative to other factors, e.g. family and community environments and individual capabilities.

- Surveying parents directly would yield more accurate and wider data on family and parental background and engagement in education. The principal benefits would be a better understanding of the effects of parental engagement and family background on student and youth outcomes and more accurate data about parental education, occupation, expectations and involvement with their children's education. It would also provide an opportunity to promote LSAY to parents who could then encourage their children to participate.
- Collecting data on social capital, physical and mental health and risk behaviours and attitudes would help to capture broader youth outcomes. There are differences between each of these dimensions in the extent to which LSAY has already collected data and could do so in future as well as the challenges and sensitivities in collecting it, but these should be considered in future.
- LSAY with a parent questionnaire added could in principle be used to collect information on childhood and adolescent learning and development beyond formal school achievement. However, timing considerations mean that it would be impractical to collect such data in 2015 from young people and their parents for a new LSAY cohort. LSAC will collect relevant data in this area and whether LSAY should also do so could be reconsidered for new cohorts in 2018 or beyond depending on need at that point.
- The LSAY questionnaire, designed for computer aided telephone interview, has proved highly effective for its purpose but has largely been reviewed only incrementally since its first use in 1995. The last full review of its scope occurred in 2002. The wider range of contact options now available, along with the interest in collecting a wider scope of data, indicate that it would be timely to consider fundamental redesign while maintaining its core purpose and good comparability over time.

#### ***A broader scope of data also has implications for how data is collected***

LSAY is comparatively a very lean and efficient survey because it interviews by telephone and online and because interviews generally take between 15 and 20 minutes. This is possible because of the concentrated focus on employment and education outcomes, but resource constraints and the limits of a telephone interview format constrain what can be collected.

- Linking LSAY to earlier NAPLAN results could be a relatively inexpensive way of broadening the value of LSAY within tight resource constraints without adding to respondent burden. The principal challenges to overcome would be obtaining agreement from state/territory governments and school authorities as well as consent from respondents and protecting privacy and confidentiality. The recent implementation of data linkage between LSAC and NAPLAN with the agreement of education authorities and the consent of 95% of interviewed families shows that these challenges can be overcome.
- A parental survey could involve Australia participating in the PISA parental survey (estimated to cost around \$30,000 in 2015) or instituting a separate parental survey as part of LSAY in an early wave of the 2015 cohort, e.g. 2016 or 2017. The latter could use ACARA's online platform for parent surveys or involve a telephone survey by the LSAY data contractor. The PISA parental questionnaire or one using the ACARA platform would be lower cost than a separate telephone survey within LSAY. There may be concerns about adding to the burden of PISA on schools and students and possible low response rates. For PISA 2015 a decision not to take up the parental questionnaire option has already been



made, so consideration should be given to a separate parental survey within LSAY in a subsequent early wave of a new 2015 cohort, e.g. 2016 or 2017.

- Broadening the scope of LSAY to gather data about a wider range of youth outcomes requires a more sophisticated capacity to collect sensitive data. The experience of other longitudinal surveys that also use telephone interviewing suggests that, with care, it is feasible to collect at least some more sensitive data, but further developmental work and extensive testing would be required to define the most useful and achievable items.

The use of supplementary data gathering on specific topics or themes would also be possible and would need to be assessed on a cost-benefit basis.

### ***A new LSAY cohort should be added in 2015 linked to PISA***

Cohort frequency should be determined by the policy and research needs that LSAY data and analysis helps to meet balanced against available resources. There are three considerations.

- It is desirable to at least follow two cohorts some years apart in age to ensure that the survey always includes young people at different key stages of transition to adulthood between the ages of 15 and 25 so that the impact on them from significant and unforeseen events can be captured, as this is important for policy.
- It is prudent to time new cohorts so that information is captured about cohorts at different points in the economic/business cycle. In accordance with the core purpose of LSAY this allows analysis of the impact of changing economic circumstances and youth responses to them.
- Cohorts do not always need to be three years apart (though it is not useful for them to be less) and they do not have to be equally spaced in time.

If it were financially sustainable, commencing a new cohort from PISA every three years would be desirable, because this would provide maximum responsiveness to both policy and research needs and make the most of the opportunity with each PISA cycle to investigate in depth the impact of its major domain on transitions. From a strictly research perspective commencing new cohorts every six years would be adequate, but such a gap could be seen as a long time to wait for results by policy makers concerned about the short to medium term impact of policies and events. Commencing a new cohort every six years could, however, free up resources for other improvements to LSAY.

The link to PISA has provided an economical and effective starting point for LSAY cohorts, providing robust measures of school achievement and minimising administrative overheads for schools. It is highly desirable that a new LSAY cohort commence based on the 2015 PISA sample, especially since no LSAY cohort commenced from the 2012 PISA cohort. If a new LSAY cohort does not commence in 2015 there will be at least a nine year gap between the 2009 cohort and any new one. As a result the LSAY program may be at risk of falling to an unsustainable level of activity given that the user survey conducted for this review suggests that government users in particular regard the ability to compare the experiences of different cohorts as an important aspect of LSAY. A decision on whether to commence a new cohort in the next PISA cycle in 2015 will need to be made early in 2014 to enable the necessary design negotiations to occur.



PISA faces pressures to accommodate both international and national requirements. Additional questions necessary for LSAY must compete with these and there are some options for dealing with this. If it proves impractical to continue with the PISA link then a new cohort could be selected from the Year 9 NAPLAN cohort and separate arrangements would need to be made to collect similar background and school data as PISA does. This would be a second best outcome given the robust nature of PISA achievement measures, extensive additional costs and the added burden reverting to a separate survey would place on schools.

Consideration could also be given to not commencing an LSAY cohort in 2015, relying instead on Longitudinal Survey of Australian children (LSAC) cohorts, which are now starting to enter the same age range as LSAY. While LSAC has the potential to provide richer data that covers the whole education journey from infancy onwards, relying on LSAC would be at the cost of a significant loss of analytical power due to its much smaller sample size and the selection of the sample not being school based.

### ***There is a good case for following LSAY cohorts to age 30 rather than 25***

This would more effectively capture lengthening youth transitions and allow for better explication of the pathways taken as well as to more accurately measure outcomes in adulthood. These longer transitions result from a number of social and economic trends as well as government policies.

If a decision were made immediately to allow the necessary contact with participants, the 2003 cohort, which would not otherwise be followed after reaching 25 in 2013, could be followed for some further years. However, this may not be a realistic option as a decision would need to be made very quickly or there could be a 2 year gap before they are contacted again. The 2006 cohort turns 25 in 2016 and an extension to age 30 could occur from then. Alternatively, an extension could be limited to any new cohort beginning in 2015. Attrition rates have been higher in more recent cohorts and any judgement about the value of extending the age of follow-up will need to take this into account.

Because it would increase the number of cohorts active at any one time, cost constraints may mean that consideration would need to be given to conducting surveys every second year after the critical years of transition, for example after 21 or 25 years. Biennial surveying could however have a negative effect on sample retention and timeliness of findings.

The approximate cost of following the Y03 cohort beyond age 25 is \$0.5m over four years if the interview occurs every second year. If the extension were limited to a new LSAY cohort in 2015 because of concerns about attrition, then costs could be deferred to the period beyond 2025. However, this would also delay LSAY's capacity to better identify transition pathways.

### ***The initial LSAY sample size based on PISA is generally adequate***

The use of cluster-based school sampling is the most appropriate methodology for a survey with LSAY's objectives. This allows multi-level models to be used to investigate the impacts of school-level and peer characteristics.

The current PISA and hence LSAY sample sizes are adequate at the commencement of a cohort for making robust population-based estimates at the state, sector and national levels. With attrition over time the margin of error increases to unacceptable levels for smaller jurisdictions and sub-populations. The sample of Indigenous students in PISA is adequate to make robust predictions at the national level at commencement, but this sub-sample is rapidly reduced by attrition, limiting LSAY's capacity to analyse outcomes in this area.

If the starting point for LSAY is not PISA, then there would be greater flexibility in sampling strategy and size to reflect the requirements of a longitudinal survey. This could allow for a re-prioritising the different elements of LSAY.

### ***Reducing attrition needs to be a priority, especially from PISA to LSAY***

The highest annual rate of attrition is from PISA to the first year of the LSAY survey (for the 2009 cohort 38% of the original PISA sample was lost at this point). This attrition is greater for lower performing students, lower socio-economic groups and Indigenous students. By most standards, retention in LSAY in later waves is good at around 90% per annum, but the cumulative effective in combination with significant attrition immediately after PISA is to reduce the sample size significantly by age 25. At the current rate of attrition, as little as 20% to 22% of the original 2006 and 2009 samples could be left by age 25. A recent review of LSAY attrition concluded that a final sample size less than 25% of the original should be used with extreme caution. The evidence indicates that attrition is becoming worse in more recent cohorts.

If LSAY remains linked to PISA, first priority should be given to remedying the initial attrition from PISA. Several options could be considered while being mindful of privacy requirements, minimising the 'ask' on schools to undertake additional work and cost implications for PISA:

- Securing better contact details for students, e.g. by schools:
  - pre-populating PISA student questionnaires with student contact details or
  - checking details filled in by students to ensure they are accurate and complete or
  - supplying student contact details direct to the Australian PISA contractor once students consent to participate in LSAY.
- Following up PISA with a contact survey later in the same year in which PISA testing occurred. Doing so appeared to result in a markedly lower attrition rate for the Y03 cohort, although for that cohort contact details were missing for only around 300 students compared to around 3,000 in the Y09 cohort. This could cost up to an additional \$0.5m per cohort.
- If a parent survey is introduced, making contact with parents before the first wave of LSAY to check contact details and promote the value of their children participating in LSAY.

These options would require the co-operation of the Australian PISA team and the OECD PISA managers and relevant state governments and non-government school authorities. Any strategies and cost implications would mean changes to the existing implementation of PISA in Australia for 2015 and would need to be negotiated and agreed as soon as possible. As a first

step, the Department would need to discuss the options with stakeholders immediately to see if any of these options are possible.

In the medium term consideration should also be given as part of the ongoing work of the data contractor to a number of other strategies to reduce the effects of attrition beyond Wave 2, e.g. further investigation of targeted data collection methods (telephone, online, smartphone) supported by probability analysis of individual response patterns.

Associated with this, an expert panel could be formed to advise on the most suitable future sample design, modes of interview and questionnaire, limited not only to the main questionnaire but also to supplementary modules, including perhaps some for separate interview. This could also consider measures to improve response rates and attrition and occur in association with a detailed review of the scope of the questionnaire.

### ***The independence, timeliness and accessibility of LSAY research need to be strengthened***

While the Department has undertaken some one-off initiatives in recent years to promote LSAY and derive greater value from its investment, what is required to reinvigorate LSAY is a consistent and sustained effort over a period of years. Four specific areas need attention:

- the length of time required to draft, complete and publish reports and other products;
- the involvement and engagement of a wider group of stakeholders in research topic selection and overall survey design, subject to funders having a final say on research priorities and topics;
- the limitations in the structure and organisation of LSAY datasets which present a barrier to third party analysis of the data; and
- the variable quality and usefulness of commissioned research. A smaller, more tightly focussed program might be better suited to the needs of the Department and others.

While the reasons for specific problems with timeliness are varied, these are areas for which the Department has ultimate responsibility under present arrangements. To address this and perceptions of lack of independence, consideration should be given to reducing the Department's role and relocating the prime responsibility for research and analysis and dissemination with the contractor. The NCVET administered National Vocational Education and Training Research Program (NVETR) could provide a model for this type of arrangement. The one-off Research Innovation and Expansion Fund (RIEF) for LSAY when active (2010-11) operated in a somewhat similar way although on a limited scale.

Encouraging more researchers to analyse LSAY data requires a number of initiatives:

- improving the ease of use of the LSAY datasets through better database structures, variable naming and documentation – a target could be to help researchers reach 'first extracted results within a day'. An expert external review of the LSAY data files setup and documentation could be considered to help to ensure that as far as possible it reflects contemporary best practice and ease of use for longitudinal social surveys. A review of dataset rules and conventions would incur a one-off cost as well as implementation costs for existing datasets;

- providing joined up data sets, such as PISA/LSAY/NAPLAN and parent surveys (if pursued) to provide greater material for background and contextual analysis; and
- conducting seminars, policy forums and data workshops more regularly.

While the mix of research reports and briefing papers has been broadly effective in meeting some stakeholder needs, a smaller number of topics over three years (perhaps two rather than three research reports per annum) may allow greater focus. The possible addition of key fact summaries would meet a growing need among policy makers for short and sharp analyses and results that can be understood and used immediately. These measures would complement the recently completed website table generating facility as well as work already underway on an updated research compendium and the development of prototypes for an annual/statistical report.

### ***LSAY's governance arrangements do not engage stakeholders effectively***

LSAY is a Commonwealth, State and Territory program managed by the Commonwealth Department of Education and funded approximately 95% by the Commonwealth and 5% by the States and Territories. Ideally, both levels of government would be fully engaged in the governance and funding of LSAY as part of a broad research agenda covering youth outcomes in education and employment.

The LSAY Strategic Advisory Committee (SAC) advises the Department on all aspects of the LSAY program to ensure its relevance to current and emerging policy needs. Membership includes nominees from key intergovernmental committees of senior officials for the school and vocational education and training (VET) sectors, the independent schools sector, and Australian Government departments with relevant policy interests. Experts with relevant academic and technical expertise are also involved, including nominees from the NCVET, the Australian Council for Educational Research and the Melbourne Institute.

While LSAY's governance structures are similar to those of other longitudinal surveys, stakeholder interviews suggested that generally stakeholders other than the Department had a low level of engagement with LSAY. This was reflected in comments about the limited relevance of research findings together with a level of disinterest in shaping how LSAY could be redirected. This lack of engagement presents a considerable hurdle to overcome in rejuvenating LSAY.

In the current constrained fiscal environment, it is important to be able to demonstrate that LSAY delivers value for money. The total existing funding for LSAY (including the Commonwealth and state/territory contributions) was \$2.1m in 2013-14 (including GST). The Commonwealth component has been sourced from departments responsible for education and employment. The state/territory component is sourced from the Australian Education, Early Childhood Development and Youth Affairs Senior Officials Committee (AEEYSOC) funds and goes towards LSAY research and analysis.

A longitudinal youth survey is an important part of the national data infrastructure to support evidence based policy development. As such, all governments have an interest in ensuring that high quality, policy relevant data such as that which has been collected through LSAY continues

to be available in future and is accessible and useful to a wide range of users. In particular, the value of a longitudinal survey cumulates over time and requires a long-term funding commitment that reflects the importance of the data and the willingness of all levels of government to invest both money and time in it.

## **Options and recommendations**

A number of possible options including enhancements have been identified and considered against the background of the fiscal constraints that all governments are currently facing:

1. Discontinue LSAY.
2. Business as usual – Continue LSAY within existing funding adding a new cohort in 2015.
3. Make some additional investment in LSAY to implement highest priority enhancements.

Key considerations on the identification of options include:

- The range of options should assist decision makers by illustrating in a manageable way some of the possible choices to be made between ceasing, maintaining or enhancing LSAY depending on available funding.
- If LSAY does not continue, then there is a small but real risk that some evidence needs for policy will not be able to be met, necessitating ad hoc data collection or a new longitudinal survey. The estimated annualised cost of such collection should be treated as the contingency cost of discontinuance.
- For those options where LSAY continues then:
  - The core purpose of LSAY and its low cost approach to data collection should be maintained.
  - It would be preferable to make some additional investment in youth longitudinal data with the aim of improving the value LSAY delivers for stakeholders through enhancements to address concerns on useability, relevance and timeliness and the changing characteristics of the youth population.
  - Enhancements should be considered that extend the value of LSAY to a wider range of policy makers and researchers:
    - enhancements should meet cost-value and relevance criteria; and
    - preference should be given to enhancements that do not require extensive additional data gathering.
- Value for money for LSAY is very sensitive to the funding envelope – there is potential for large value increases from small funding increases.
- The operational management of LSAY, including for research and analysis, should lie as much as possible with the contractors.

Potential enhancements are listed in Table 1.

**Table 1: Summary of potential enhancements to LSAY**

<b>Broadening the scope of LSAY data</b>	<b>Approximate cost over next 4 years \$'000</b>	<b>Priority</b>	<b>Option in which included</b>
Data linkage with NAPLAN	(a)	High	3
Add parental survey for new cohort	30 (b)	High	3
Develop, test and introduce broader measures of youth outcomes	300 (c)	Low	-
<b>Reducing attrition</b>	<b>Approximate cost over next 4 years \$'000</b>	<b>Priority</b>	<b>Option in which included</b>
Better contact details for students in PISA 2015	n.av.	High	2
<b>Extend age range</b>	<b>Approximate cost over next 4 years \$'000</b>	<b>Priority</b>	<b>Option in which included</b>
Extend age to which cohorts are followed to 30 years	500 (d)	Low	-
<b>Making LSAY more accessible, timely and relevant</b>	<b>Approximate cost over next 4 years \$'000</b>	<b>Priority</b>	<b>Option in which included</b>
Accelerate reporting of early results	Nil	High	2
Increase delivery of seminars, presentations and workshops	Nil (e)	High	2
Greater engagement on the development of LSAY research priorities	n.av.	High	2
External review and simplification of the LSAY data file setup	120	High	3
Expert panel to advise on directions for the future technical design of LSAY	50	High	3
Part fund 3 extra research projects a year	600	Low	-
Widen dissemination and engagement with researchers and the public	(f)	Low	-

n.av. not available

Notes:

(a) Will depend on results of pilot project underway.

(b) Cost shown is for PISA parental survey. Other options may have higher costs.

(c) Assumes additional questionnaire items are developed and then collected every second year adding 5 minutes to average interview length.

(d) Based on following Y03 cohort every second year after age 25.

(e) No cost if fully recovered through fees.

(f) Cost likely to be low but would depend on specifics to be developed.

### **Option 1 Discontinue LSAY**

The principal arguments that might be made for discontinuing LSAY – whether as soon as possible or gradually – include:

- Over almost twenty years the experience of cohorts going through LSAY has been sufficiently similar and the analysis of that experience sufficiently robust that it provides strong evidence for the behaviour of future cohorts, at least for the foreseeable future.

Many of the fundamental drivers of youth in their transitions from school are not changing rapidly.

- Policy makers are increasingly interested in a wider range of issues than are covered by LSAY and in being able to track specific sub-groups of young people of interest, such as those in a particular state or from designated smaller areas or who are Indigenous. In particular, there is a need to be able to analyse the pathways they follow and target effective interventions to them. However, as a national survey, LSAY cannot reliably address this need.
- There are better means now of keeping track of what young people are doing and what drives their choices. The aggregation of cross-sectional data available from many sources together with what is available longitudinally in administrative systems would provide a more detailed picture of youth transitions. Also, LSAC will provide a more in depth view of the experiences of the age group LSAY covers for a period of time.
- If LSAY data were not available, the evidential needs of reviews and reports could largely be met from other existing sources such as ABS cross-sectional data and longitudinal surveys such as HILDA and LSAC.

Arguments in favour of retaining LSAY include:

- While data to track and analyse youth and related transitions has grown over time, LSAY still occupies a unique place in Australian data sources because of its capacity to link detailed and consistent data about the background and experiences of individual young people across their schooling, post-school education and training and employment outcomes. While other data sources can provide greater detail on aspects of this transition, there is no other readily available, nationally representative data source that provides access to this breadth of data over such a long period of time and that is able to link experiences, achievement and school and peer characteristics to outcomes. For example, LSAY is able to address issues when other sources could rarely or never have been used as effectively such as, for example, to analyse:
  - the effects of school experience and literacy and numeracy achievement at school on subsequent education and employment outcomes;
  - the persistence over time of disadvantage and adverse outcomes in the transition from school into further education or employment; and
  - the comparative experience of different cohorts of young people over time.
- The knowledge and data LSAY provides about causes and effects in youth transitions cannot be gained easily by other means. In the very long term, data linkage for administrative systems may provide sufficiently comprehensive coverage of the youth population, including those who connect minimally with government services, but that is not the case now and there are significant privacy and consent issues to overcome in collating this data and making it accessible to researchers. As well, administrative datasets lack the breadth of data that is not directly related to program administration, but which can be collected through a survey (e.g. attitudes, motivations and personal history). While LSAY is limited in what it can tell us about the experience of some group by its sample size and scope of topics, there is still a strong policy interest from a national perspective in understanding transition outcomes at the aggregate level.



- The transition experience of young people is in fact changing significantly as a higher proportion stay to Year 12 or go on to university, the expected length of post-school study time rises and the age at completion increases. Associated patterns such as gap years and part time work while studying are changing accordingly. Moving out of the parental home and family formation are also occurring later on average. These changes are occurring against a backdrop of the enduring consequences of the global downturn and uncertainties about Australia's economic prospects, all of which will impact on the work prospects for young people. In the medium term the gradual exit from the labour market of baby boomers could have significant impacts on the labour market for young people. Comparatively the late 1990s and most of the 2000s were a period of relatively strong labour markets and stability for young people. As a result, past lessons from LSAY may not hold good in the future.
- LSAY continues to be actively used and drawn upon in policy debates over youth transitions:
  - Eight policy case studies over the period 2006 to 2013 show that LSAY has provided critical evidence for specific elements of several major reviews and reports.
  - In a survey of users, 70% reported having used LSAY research or data in their work, with almost two thirds of these regarding it as critical or very important to their work.
  - Over the last five years, research based on LSAY has generated new findings that have contributed to evidence base for good policy making.
- Without LSAY it is likely that at some point in the next decade similar data on young people would be required for policy purposes. Costing discontinuance should include the cost of meeting such a requirement, which would be likely to be a nationally representative survey with a considerably larger questionnaire than LSAY to capture multiple years of activity, which in any case could not be as accurate and high quality as if it had been collected longitudinally. Major one-off ABS surveys of this kind can cost in the region of \$4-6m, depending on sample size and interview method. The ongoing cost associated with discontinuing LSAY and meeting the demand for similar information in other ways could run at around \$0.5m to \$1m pa.

Weighing these arguments turns to an extent on an assessment of risk. The level of risk depends on the extent to which policy might be misdirected without the evidence on changes in young people's circumstances, decisions and that can only be captured by LSAY. This risk is real. It relates principally to the continuing and potentially lifelong effects of compounding economic and educational disadvantage. The level of risk is higher when the youth population is under economic stress.

There is however no ready means to quantify the level of risk and it is ultimately a matter for judgment. On balance, given that there is no ready alternative data source, patterns of youth transition are continuing to change and that LSAY is actively used by many policy makers and researchers, there is a strong case for continuing the program, noting that discontinuance involves a real though small risk and likely future costs. Ceasing LSAY would remove an important part of the information infrastructure supporting youth policy development and implementation in Australia at a time of growing interest in building the evidence base for youth policy. The need to understand the impacts on young people, their responses and the

influences on them is likely to remain a driver of policy relevant research for the foreseeable future.

**Recommendation 1:** LSAY should continue since it provides a unique Australian source of data about youth pathways that cannot be gained from other collections. Discontinuing it would lead to a significant loss of information at a time when demand for policy oriented research to understand youth transitions is set to grow.

**Option 2 Business as usual – Continue LSAY within existing funding adding a new cohort in 2015**

Within the existing funding envelope of around \$2m pa, the highest priority should be to commence a new LSAY cohort based on the 2015 PISA sample. Longitudinal surveys such as LSAY that follow age cohorts need to periodically add a new cohort or they become unviable. In the recent past new cohorts have been added to LSAY with a spacing of between three and five years. Unless a new cohort is added based on the PISA sample in 2015, LSAY will be reduced to a single cohort after 2016 and the next opportunity to add a cohort based on PISA would be in 2018. While the link to PISA has become riskier as PISA grows in scope and complexity, this remains the most efficient and effective way to select new LSAY cohorts. A new cohort would cost approximately \$0.75m in 2016-17 with the first wave of LSAY occurring in the year following PISA. This cost can be managed within provided there is some flexibility to move funds between years to meet peak costs.

Apart from this there should be scope to fund a limited number of enhancements by reprioritising, for example, by reducing from three to two the number of research reports produced each year. Other possible offsets that would allow more extensive reallocation could involve judicious trimming of LSAY data items, reducing the frequency of interviews once cohorts turn 21 or trimming overall sample size. In the longer term but not in the shorter term, reducing the frequency of commencements of new cohorts to every six years could also free up resources.

Depending on the extent of this reprioritisation, a small number of low cost but high value enhancements might be considered. For example:

- The next most urgent priority is to reduce the significant loss of sample from PISA to LSAY, which is primarily due to missing and poor quality student contact details collected in PISA. Addressing this requires the active co-operation of school authorities and the PISA contractor, for example, by schools assisting in supplying or checking student contact details.
- Making LSAY more accessible, timely and relevant is another priority. Low cost steps here could include:
  - Increased delivery of seminars, presentations and workshops for which a fee is charged. The Melbourne Institute has used these successfully to promote its research and data collection such as in HILDA.
  - Reporting of early results from LSAY could be accelerated through greater use of briefing notes and an annual statistical and operational report (building on current work). Transfer of the responsibility for management of publication approval and quality

assurance processes from the Department to the research and analysis contractor would also address concerns about the timeliness of LSAY reports.

- Greater engagement on the development of LSAY research priorities with policy makers using the Commonwealth/State machinery of ministerial and officials committees as well as with researchers and other stakeholders.

Beyond these the scope within existing budgets to enhance LSAY by reallocating substantial funding is likely to be very limited. A risk here is that the usefulness to stakeholders and value for money of the survey might not improve very much or only very slowly. While this outcome may in time lead to further questioning of the value and purpose of LSAY, it would at least enable the survey to remain viable over the next few years by the addition of a new cohort and some other enhancements, after which scope to invest in longitudinal data may be greater. By their nature, longitudinal surveys require a willingness to stay the course and invest resources for the long term before their full value can be realised. Continuing LSAY in the short term within its existing budget would at least keep open the possibility of enhancing it in future, while discontinuing it would close off this option completely.

**Recommendation 2:** If it is not possible to increase the existing funding envelope for LSAY at the present time, then LSAY should continue with the addition of a new cohort based on PISA in 2015 and some low cost but high value enhancements to:

- reduce the significant loss of sample members between PISA and LSAY and
- improve the timeliness, accessibility and relevance of research.

### ***Option 3 Make some additional investment in LSAY to implement highest priority enhancements***

If some additional funding were available it would be possible to consider a wider range of enhancements that would improve the value and relevance of LSAY. This would build on those elements identified in Option 2, i.e. a new cohort commencing from the 2015 PISA sample as well as reducing attrition from PISA to LSAY.

The highest priority enhancements are:

- Matching with NAPLAN results to obtain Years 3, 5, 7 and 9 literacy and numeracy achievement results for LSAY participants. This would improve LSAY's explanatory power by enabling it to take into account the trajectory of achievement growth for each student prior to LSAY commencing. In the longer term, matching with other data sets could be a practical and low cost way to broaden the scope of data available to analyse youth pathways and outcomes. Such matching is increasingly a feature of other longitudinal studies. The existing pilot project will help to resolve technical and consent issues.
- Introducing a parent survey for the 2015 cohort. A parental questionnaire would go a long way to filling a significant gap in LSAY data collection and would greatly extend the usefulness of LSAY for analytical and explanatory purposes in addressing issues such as parental engagement. One survey of parents per cohort would be needed.
- Further steps to make LSAY more accessible, timely and relevant could include:

- review and simplification of the data sets, such as naming conventions, to ease researcher use; and
- appointing an expert panel to advise on future directions for the technical design of LSAY including the most suitable sample design, modes of interview, questionnaire scope issues as well as to suggest ways to improve response rates and attrition.

Some other enhancements could also be considered depending on available funding, but these are considered to be a lower priority for the time being. These include:

- Collecting a wider range of data on broader youth outcomes such as social capital, physical and mental health and risk behaviours and attitudes and, possibly, childhood and adolescent learning and development beyond formal school achievement. The exact data to be collected and how this would occur requires extensive consideration and testing before it can be implemented. Respondent fatigue could be a significant issue and would need to be monitored carefully given the concerns about attrition. There may be other ways of collecting such data than through a telephone interview that would achieve better results, such as online.
- Extending the age to which cohorts are followed to 30 years is a high priority in that transitions seem to be happening more slowly. However, the viability of extension depends on attrition rates, which have been acceptable in the Y03 cohort but higher in more recent cohorts. It may be necessary to return attrition to manageable levels in a new cohort before extending the age of follow-up is worthwhile. There are also trade-offs here between the frequency of commencing new cohorts and the frequency of interviewing. A reduced frequency in both could allow cohorts to be followed for longer, but would have implications for the currency and relevance of LSAY more broadly and may also increase attrition.
- Strengthening LSAY research and analysis by part funding a number of projects specifically for their analysis of the data against agreed research topics. The scale of such a program would be discretionary. An additional \$150,000 a year could fund around three projects, doubling LSAY commissioned research output. If the program proved successful over some years, consideration could be given to moving all LSAY funded research to this model, although the research and analysis component is a large incentive for likely contractors.
- Widen dissemination and engagement with researchers and the public by:
  - annual get togethers of a small number of selected LSAY participants to function in part as focus groups and in part as showcase for youth experiences; and
  - active engagement by LSAY with social media, online survey tools and similar.

The key challenge for the Department in its stewardship of LSAY is to significantly improve the value for money achieved. There is clear potential for large increases in value from relatively small investments in better longitudinal data on youth provided that this effort is well directed and sustained over time. This review has concluded that, in recent years, LSAY has been adequate value for money on the whole because it delivers high value to a restricted stakeholder group at a lower cost than some other longitudinal surveys. However, it appears that this value has been static or begun to decline as stakeholders turn to other data sources that better meet their specific needs and LSAY has not adapted or been rejuvenated to meet

changing expectations. In this context there is a real risk that the perceived relevance and usefulness of LSAY will continue to diminish over time.

**Recommendation 3:** LSAY should be rejuvenated through a number of high priority enhancements that would enable it to better meet future needs for policy research about youth pathways. This could include:

- broadening the scope of LSAY data through data linkage with NAPLAN for a new LSAY cohort starting from PISA 2015;
- including a survey of the parents of LSAY participants for the new 2015 cohort; and
- making LSAY more accessible, timely and relevant through reviewing and simplifying data sets so that they are easier for researchers to analyse and undertaking an expert review of future directions for the technical design of LSAY.