
New South Wales Auditor-General's Report

Performance Audit

Physical Activity in Government Primary Schools

Department of Education and Communities



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The roles and responsibilities of the Auditor-General, and hence the Audit Office, are set out in the *Public Finance and Audit Act 1983*.

Our major responsibility is to conduct financial or 'attest' audits of State public sector agencies' financial statements. We also audit the Total State Sector Accounts, a consolidation of all agencies' accounts.

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In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled **Physical Activity in Government Primary Schools: Department of Education and Communities**.

A handwritten signature in black ink that reads 'Peter Achterstraat'.

Peter Achterstraat
Auditor-General
13 June 2012

Foreword

We as a society are less physically active than we were.

Today, few children walk or ride their bikes to school. Children are exposed to a growing range of sedentary alternatives to physical activity such as television, computer games and the internet.

Physical inactivity contributes to the deaths of over 13,000 Australians and results in more than \$1.5 billion in direct healthcare costs each year. The indirect costs in lost time and productivity are also substantial. For the first time in living memory, life expectancy in developed countries such as Australia may start to fall due to childhood obesity.

As a society, we have an important decision to make. We can continue as we are, and subsidise our inactivity by more than \$1.5 billion each year. Or we can make a concerted effort to encourage the population to become more active.

In my view, we must do the latter. A more active population would be happier, healthier and more productive. As put by the UK's Chief Medical Officer:

The potential benefits of physical activity to health are huge. If a medication existed which had a similar effect, it would be regarded as a 'wonder drug' or 'miracle cure'.

About half of the NSW population does the recommended level of physical activity required to obtain health benefits. We need to address the behaviour of the other half.

A good place to start is our children. If we can increase activity amongst them, there will be immediate health benefits. If we can instil in them a love of physical activity these benefits will be ongoing. Increased physical activity is likely to enhance academic performance too, so it is consistent with the current strong focus on literacy and numeracy.

While parents and carers should take primary responsibility, society needs to provide a safety net. After all, society as a whole – inactive children, the health system, employers, and government – bears the costs of inactivity.

Academic achievement

Schools have many important priorities and we cannot expect them to be solely responsible for fixing the problem of physical inactivity. But schools have to be part of the solution. More effective physical activity need not be at the expense of academic achievement. Schools can make better use of the two hours per week of class time physical activity, it can be better integrated into other parts of the curriculum, and sport-a-thons can replace traditional chocolate and cake drives for fundraising.

Role Models

In addition schools can encourage local community leaders and business people who adopt and advocate an active lifestyle to act as role models and visit schools to champion the lifelong benefits of physical activity.

We need to help schools help our children, as part of a larger commitment by the people of this State to turn things around.

Peter Achterstraat
Auditor-General

Contents

Foreword	
Executive summary	2
Background	2
Conclusion	2
Supporting findings	3
Recommendations	4
Response from the Department of Education and Communities	5
Introduction	7
1. Introduction	7
1.1 The benefits of physical activity for children	7
1.2 Physical activity and childhood obesity	8
1.3 Physical activity levels of primary age children	9
1.4 Children and fundamental movement skills	9
1.5 Importance of physical activity in primary school	10
Key findings	11
2. Physical activity in primary schools	11
2.1 Physical activity levels of children in primary school	11
2.2 Programs provided by DEC to help schools	12
2.3 Practices in NSW schools	14
3. Improving physical activity in primary schools	16
3.1 Increase accountability, incentives and motivation	16
3.2 Increase skills and capacity	19
3.3 Promote better practice in schools	20
3.4 Improve access to facilities and space	21
Appendices	22
Appendix 1: About the audit	22
Appendix 2: Good practices in schools	24
Appendix 3: Feedback from schools	26
Performance auditing	27
Performance audit reports	28

Executive summary

Background

The Australian Department of Health and Ageing recommends that young people participate in at least 60 minutes of moderate to vigorous physical activity every day. The NSW Department of Health estimates that less than half of NSW primary school age children do this on a regular basis, and that around one third are not adequately fit.

Excess weight in children is attributable to a number of factors including a trend towards decreased physical activity levels. Since 1985 the proportion of Australian children who are overweight has doubled and who are obese has increased fourfold. Excess weight increases the likelihood of chronic diseases including diabetes, heart disease, and fatty liver disease. Cardiovascular risk factors and lifestyle behaviours often track from childhood to adulthood.

The financial cost of obesity in Australia was estimated at \$8 billion in 2008. In New South Wales, the proportion of overweight or obese young people (5–16 years) appears to have stabilised at around 23 per cent. A State Plan target is to reduce overweight and obesity rates of young people to 21 per cent by 2015.

Physical activity is associated with a wide range of benefits from infancy to old age. Health benefits at a young age include favourable skeletal development, improved physical and psychological wellbeing, and an increased likelihood of physical activity later in adulthood. Research in a number of countries, including Australia, has also found that higher levels of physical fitness are linked to improved academic performance.

In recent times, there has been increasing pressure on schools to demonstrate academic success, including the publication of comparisons of school performance in literacy and numeracy. There has been less pressure to demonstrate a school's success in promoting physical activity. Nevertheless schools have a responsibility to encourage the physical development of all students, helping them master fundamental movement skills and develop a positive attitude to physical activity including sport.

In fulfilling this responsibility, the Department of Education and Communities (DEC) requires its primary schools to provide two hours per week of planned physical activity. This audit examined how well DEC manages physical activity in NSW Government primary schools, in particular how it achieves compliance with this requirement and implementation of better practices.

Conclusion

Whilst DEC has established a framework to support physical activity in schools, it does not ensure schools provide the required two hours per week and implement practices which make best use of this time.

DEC has directed its schools to provide at least two hours of planned physical activity per week. It provides guidance for teachers on how to improve fundamental movement skills and encourage participation in physical activities. It also funds and promotes valuable programs like the Premier's Sporting Challenge and School Swimming Scheme and assists with the provision of facilities and sporting equipment.

DEC, however, does not monitor physical activity in schools and therefore does not know how well each school is performing. We found that some schools are not meeting DEC's minimum requirement of two hours per week of planned physical activity. Good practice has been implemented in some primary schools but is less evident in others. DEC also does not know whether schools volunteering for the programs it offers are those in greatest need.

Improvement opportunities lie in:

- ensuring every school delivers the required two hours of planned physical activity
- helping schools make better use of the time available for physical activity
- monitoring the quantity and quality of physical activity delivered by each school
- targeting assistance to schools in need.

Enhancing physical activity in government primary schools will not be easy given the many competing pressures on DEC and the need to retain a strong focus on literacy and numeracy.

Nevertheless, it presents an important opportunity for DEC to contribute to the Government's goal to reduce childhood obesity.

Supporting findings

Are schools providing two hours of planned physical activity each week as required by DEC?

DEC's 'Curriculum Planning, Assessment and Reporting Policy' requires schools to provide two hours of 'planned' physical activity each week. Planned physical activity is usually part of the physical education and sport programs. DEC does not monitor physical activity in schools, leaving this to school principals. Based on available evidence we found that:

- around 30 per cent of government primary schools do not provide two hours of planned physical activity each week
- even those schools that provide two hours of planned physical activity are not likely to provide two hours of moderate to vigorous physical activity each week, as planned time usually includes travel to venues, setting up equipment, waiting for a turn etc. DEC's minimum requirement for planned physical activity does not stipulate a minimum amount that should be 'moderate to vigorous', unlike some other States
- the quality of physical activity instruction varies between schools and teachers, with many primary students not able to master the fundamental movement skills required to participate in a full range of physical activities.

Are DEC and schools implementing better practices?

DEC makes several good physical activity programs available to schools, including the Premier's Primary Schools Sporting Challenge and the School Swimming Scheme. These opportunities are taken up by schools who volunteer to participate in these programs. These schools, however, may not be those that need help most.

DEC does not monitor the extent to which government primary schools are implementing better practice. The audit identified a number of practices in schools which increase the time spent on moderate to vigorous activity, impart game-play and fundamental movement skills, and encourage participation. A few schools we visited adopted many such good practices while most adopted a few.

What are the major barriers to improving physical activity in schools?

We found the major barriers to improving the quantity and quality of physical activity in NSW Government primary schools include:

- insufficient time for physical activity in a crowded curriculum
- limited teacher skills and knowledge about how to teach physical activity well
- little accountability for delivering sufficient, good quality physical activity
- insufficient incentives, recognition and reward for taking on extra responsibilities for physical activity
- limited space and facilities in some schools.

Principals we spoke to also rated 'lack of guidance from the Department' as one of the major impediments to improving physical activity in schools. This is despite there being a significant amount of information available on DEC's website and elsewhere on the internet. Schools seem to be looking to DEC to make it easier and quicker for them to identify and implement a mix of good practices suitable for the particular circumstances of their school.

Several major reviews dating back to the early 1990's have found a decline in the priority given by Australian schools to physical activity, concurrent with the increased focus of school systems on literacy and numeracy. These have consistently called for a reinvigoration of physical activity in schools, citing physical health, mental health and academic benefits.

Features that assist the delivery of sufficient good quality physical activity include:

- supportive school leaders
- skilled and motivated teachers, with regular training to keep skills up-to-date
- specialist support e.g. physical education teacher, external/private physical education providers
- easily accessible good quality sports equipment and appropriate spaces and facilities
- easily accessible advice and support on implementing good practice.

Recommendations

It is recommended that the Department, commencing from the start of 2013, should:

1. Enhance existing arrangements to effectively monitor and report:
 - publicly on physical activity programs and outcomes in each Government primary school, including whether planned physical activity requirements are met
 - on each child's aptitude, attitude, skills and level of activity to his/her parents or guardians (page 17).
2. Once reliable information is available, use the results of monitoring to identify schools in most need and facilitate assistance to them (page 17).
3. Provide greater recognition for staff involved in student physical activity, especially sport. This could include greater acknowledgment of the value of physical education teaching and sports organising skills in appointments and promotions (page 18).
4. Ensure schools make best use of the existing time available for physical activity by:
 - maximising time spent on moderate to vigorous physical activity
 - keeping students active by minimising time spent waiting their turn, for equipment to be set up or travelling to venues, etc
 - scheduling some activity each day of the week
 - maximising opportunities to incorporate physical activity into other key learning areas, including literacy, numeracy and science, and vice versa (page 18).
5. Consider additional options to further motivate teachers and students including:
 - encouraging local community leaders and business people (who adopt and advocate an active lifestyle) to visit schools and champion the lifelong benefits of physical activity
 - helping schools engage with local sporting organisations to encourage greater sharing of expertise (page 19).
6. Increase the skill levels of the primary school teacher workforce in teaching physical activity and sport education. This may include:
 - providing training to those teachers who need it
 - recruiting physical education specialists to teach and/or provide on-the-job training and support for classroom teachers.
 - recruiting more teachers with substantial training or experience in physical education
 - liaising with universities on initiatives to enhance the physical education and sport coaching skills and experience of teacher graduates (page 20).
7. Do more to identify best practice in schools and promote its wider adoption. This may include:
 - developing exemplar programs
 - conducting seminars
 - arranging site visits between schools whereby best practice schools can demonstrate attributes of their physical activity programs
 - assisting schools to tailor solutions which meet their needs (page 21).
8. Further assist schools and groups of schools to develop agreements with local councils to facilitate access to ovals and other facilities at little or no cost (page 21).

Response from the Department of Education and Communities

5

NSW Auditor-General's Report
Physical activity in government
primary schools
EXECUTIVE SUMMARY



Education &
Communities

Mr Peter Achterstraat
Auditor-General
Audit Office of New South Wales
GPO Box 12
SYDNEY NSW 2001

DGL 12/658

Peter

Dear Mr ~~Achterstraat~~

I write in response to your letter of 1 May 2012 regarding the *Physical Activity in New South Wales Government Primary Schools* performance audit report.

The Department of Education and Communities welcomes the opportunity provided through the performance audit to reflect on the strategies and practices that are in place and to address the challenges in extending the involvement in physical activity, sport and physical education of young people in New South Wales public schools.

I am pleased that the report recognises the Department's many exemplary physical activity programs operating in our schools, including the Premier's Sporting Challenge, School Swimming Scheme and Live Life Well @ School program. These initiatives add significant value and support good practice.

I also note that the report acknowledges that sport and Personal Development, Health and Physical Education are mandatory components of the curriculum in New South Wales schools. The Department recognises the importance of regular physical activity in supporting the health and learning of young people. Participation in, and learning about physical activity and active lifestyles is part of a complex, demanding and broad curriculum within our public schools to ensure that the physical activity and educational needs of students and school communities are met.

The report highlights opportunities to reinvigorate our current programs and practices to better meet outcomes in physical activity. The report's recommendations focus on a number of key areas:

- greater monitoring of school physical activity programs and reporting of individual student participation
- increased identification, support and accountability for schools in need
- increased teacher training opportunities across physical activity outcomes
- increased opportunities for schools, teachers and the community to partner in providing physical activity for students
- maximising opportunities to incorporate physical activity into other key learning areas and model best practice to meet student need.

NSW Department of Education & Communities - Office of the Director-General

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The Department accepts the report's recommendations and I thank the staff at the Audit Office of New South Wales for their professional and collaborative approach to the conduct of this audit. The Department's consideration of the recommendations will be made in the context of curriculum requirements, the industrial and employment conditions for New South Wales teachers and current research on best practice in health promotion and physical activity in schools.

In closing I would like to recognise the outstanding contribution made by teachers in our public schools, and those working to support them in providing for the health, wellbeing and future directions of our young people in New South Wales.

Yours sincerely



Dr Michele Bruniges AM
DIRECTOR-GENERAL OF EDUCATION AND COMMUNITIES
MANAGING DIRECTOR OF TAFE NSW
25 May 2012

1. Introduction

1.1 The benefits of physical activity for children

Children participating in a variety of physical activities gain valuable experience and can learn skills such as running, throwing, jumping, catching and kicking. Active play and informal games, as well as organised sport, provide opportunities to develop these skills, help to build their confidence and give them more options to take part in a wide range of activities as they get older.

The Australian Department of Health and Ageing recommends that young people should participate in at least 60 minutes of moderate to vigorous physical activity every day. Moderate activities include a brisk walk, a bike ride or any sort of active play. More vigorous activities will make children 'huff and puff' and include football, netball, ballet, running and swimming.

Physical activity is associated with a wide range of benefits from infancy to old age. Health benefits at a young age include favourable skeletal development, improved physical and psychological wellbeing, and an increased likelihood of physical activity later in adulthood.

Students who are well-nourished and physically active are better able to reach their academic potential and exhibit positive behaviours in the classroom.

As put by Active Living Research (a research program administered by University of California, San Diego) in its Active Education Fall 2007 Research Brief:

The available evidence shows that children who are physically active and fit tend to perform better in the classroom, and that daily physical education does not adversely affect academic performance. Schools can provide outstanding learning environments while improving children's health through physical education.

Exhibit 1: Case study – benefits of physical activity

We had a child arrive in Year One at school and he was continually in trouble. His parents were called to the school several times because he was aggressive in the playground and causing problems in class. He then became very interested in sport.

This interest led to his eager participation in our school sport program and he also began playing sport outside school. By the time he had reached Year Five (2010) he had changed completely from the child he was in Year One. He was representing the school in every sport we played, achieving well academically and, due to his outstanding attitude and behaviour in class and the playground, was elected as one of our school captains for 2011.

Perhaps the biggest indicator of the maturity and sportsmanship that being involved in sport has taught was an event at the school a few weeks ago. Year Six were playing a game of continuous cricket. We have a boy with special needs in Year Six who came to bat. He hit the ball straight to our star sportsman and captain who held the ball and allowed our special needs student to achieve in the game and make a run. Once the child had made the run he threw the ball back.

Source: Audit Office from school visits 2011.

According to the NSW Board of Studies' Personal Development, Health and Physical Education (PDHPE) syllabus: 'School programs at all levels have a responsibility to encourage the physical growth and development of all students, support the acquisition of movement skills and nurture positive attitudes towards physical activity'. Further, the Board says schools should provide 'regular and frequent opportunities for students to acquire and apply movement skills, enhance their creativity and aesthetic awareness and develop positive attitudes towards regular physical activity.'

Young people
should
participate in at
least 60
minutes of
moderate to
vigorous
physical
activity every
day

Since 1985 the proportion of Australian children who are overweight and who are obese has increased fourfold

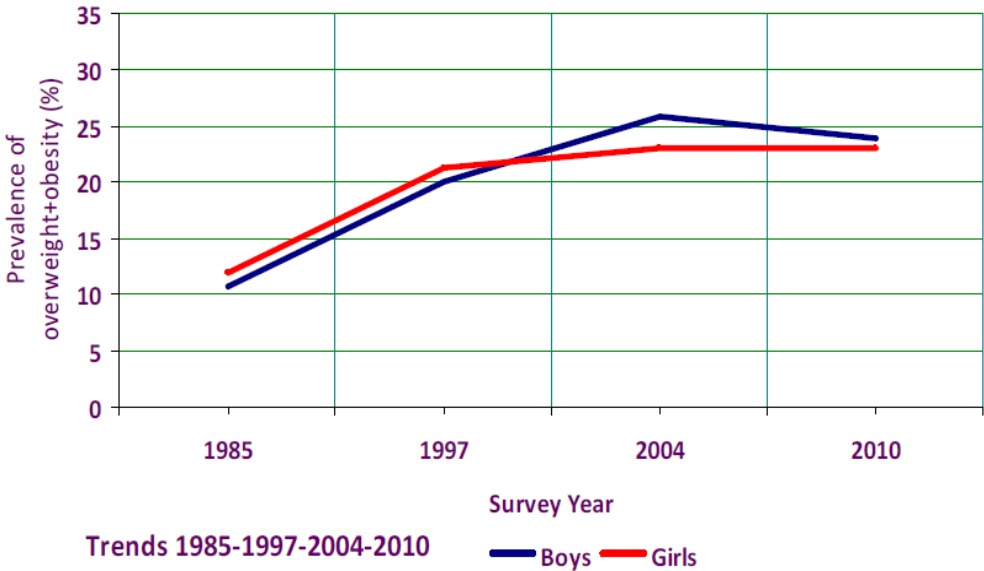
1.2 Physical activity and childhood obesity

One of the key mechanisms for managing a child's body weight is physical activity. Lower physical activity levels are associated with a higher prevalence of obesity in children. A review of international studies conducted in this area identified a significant association between higher levels of physical activity and reduced adolescent body weight.

Since 1985 the proportion of Australian children who are overweight has doubled and who are obese has increased fourfold. The concern with childhood obesity arises from its association with adverse psychological and social outcomes, as well as health problems in the short and long term. Excess weight gain increases the likelihood of developing chronic diseases including type-2 diabetes, cardiovascular disease, and fatty liver disease. More importantly, childhood overweight and obesity tracks into adulthood.

In New South Wales, the proportion of young people (5–16 years) who are overweight or obese is currently around 23 per cent. As the graph below illustrates, rates have increased rapidly between 1985 and 2004 although they now appear to have stabilised.

Exhibit 2: Prevalence of combined overweight and obesity among boys and girls for the 1985, 1997, 2004 and 2010 NSW data sets (%) (unweighted data)



Source: NSW Department of Health's 2010 Schools Physical Activity and Nutrition Survey (page 3).

There is likely to be a significant growth in costs to Government and society more generally if we do not reduce childhood obesity. The Productivity Commission staff working paper 'Childhood Obesity: An Economic Perspective' 2010 refers to estimates from Access Economics on the cost of obesity in Australia. The financial costs of obesity were estimated to be around \$8 billion in 2008, and included:

- health system costs (such as hospital and nursing home costs, GP and special services, and pharmaceuticals) (\$2.0b)
- productivity losses (\$3.6b)
- carer costs (\$1.9b)
- other indirect costs (such as aids, modifications and travel) (\$776m).

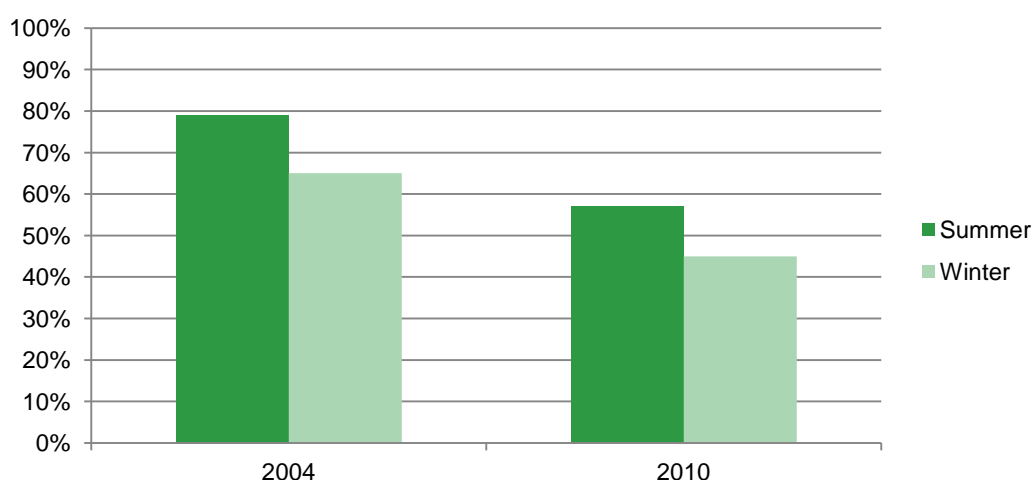
The NSW Government recognises the risks of increased obesity. A State Plan target is to reduce overweight and obesity rates of young people (5–16 years) to 21 per cent by 2015.

1.3 Physical activity levels of primary age children

The 2010 Schools Physical Activity and Nutrition Survey (SPANS) prepared by the NSW Department of Health estimated that less than half of Kindergarten and Year Two and Four students in New South Wales schools (government, Catholic and independent) met the Australian Physical Activity Guideline for young people of at least 60 minutes of moderate to vigorous physical activity every day.

Between 2004 and 2010 there was a significant decline in students' physical activity, during both summer and winter school terms.

Exhibit 3: Prevalence of achieving at least 60 minutes of moderate to vigorous physical activity every day during summer and winter school terms among Year Six students in 2004 and 2010 (%).



Source: NSW Department of Health's 2010 Schools Physical Activity and Nutrition Survey (SPANS) (page 4).

SPANS 2010 also found that only around 63 per cent of Year Four students and 73 per cent of Year Six students had satisfactory aerobic fitness based on a 20mSRT or 'beep' test. This requires students to run a 20 metre distance at progressively faster speeds. Low aerobic fitness increases the risk of cardiovascular disease and other chronic diseases. Between 2004 and 2010 there was a moderate increase in the cardio respiratory fitness of boys but there were signs of a decline in the fitness of girls.

1.4 Children and fundamental movement skills

Fundamental movement skills (FMS) such as running, throwing and jumping are necessary for a variety of activities and exercises. FMS proficiency is associated with increased physical activity in young people, and has a positive association with aerobic fitness and lower body weight. This suggests that developing proficiency in movement skills may have important health implications for young people.

A large proportion of young people, however, do not attain proficiency in fundamental movement skills during their primary school years. This may make it difficult for them to participate in the full range of physical activities both in childhood and throughout their lives.

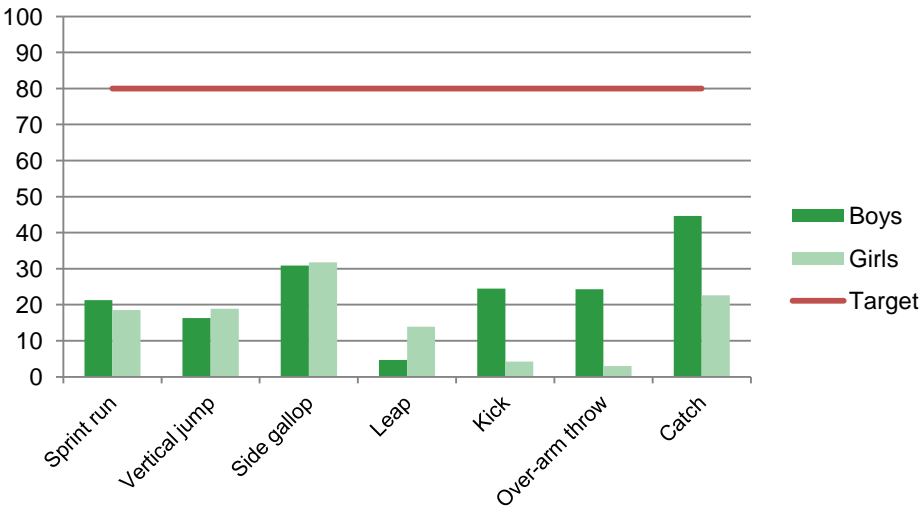
According to the NSW Department of Health's 2010 Schools Physical Activity and Nutrition Survey, it takes around ten hours instruction for most children to master one fundamental movement skill (FMS). By Year Four at least 80 per cent of children should have mastery of key fundamental movement skills. In New South Wales, the proportion of Year Four students with a mastery of fundamental movement skills is less than 40 per cent as the graph on the following page illustrates.

Between 2004 and 2010 there was a significant decline in students' physical activity

Mastery of
fundamental
movement
skills is low
amongst Year
Four students

SPANS 2010 assessed Year 4 students for seven fundamental movement skills using checklists developed by DEC.

Exhibit 4: Percentage of Year Four students who had mastered a FMS in 2010



Source: NSW Department of Health's 2010 Schools Physical Activity Survey (page 170).

1.5 Importance of physical activity in primary school

Whilst parents have the major role in ensuring their children get enough physical activity, schools are an important venue for physical activity, including organised sport. DEC has 1,630 primary schools and 67 central schools delivering education services to more than 430,000 primary students. Approximately 125,000 of these students are from non-English speaking backgrounds and 26,000 are Aboriginal. The DEC employs approximately 27,000 primary teachers.

Research indicates that schools can make a difference to children's physical activity participation and fitness. Primary school students are at an optimal age for motor skill learning and developing physical activity habits. A review of 26 research studies exploring interventions to increase physical activity in the school setting identified school programs that have significantly increased physical activity duration, increased oxygen uptake (as a measure of fitness) and reduced blood cholesterol.

For the purposes of this report, physical activities include rhythmic, outdoor, fitness and recreational activities, and games and sports that are performed individually and in groups.

Physical Development, Health and Physical Education (PDHPE) is a mandatory area of the primary school curriculum which provides opportunities for physical activity, as well as opportunities to learn about physical activity and active lifestyles.

DEC advises it is a key stakeholder in the 'NSW Government Plan for Preventing Overweight and Obesity in Children, Young people and their Families' and, to this end, leads school-based initiatives that take a whole-school approach to physical activity.

Key findings

2. Physical activity in primary schools

2.1 Physical activity levels of children in primary school

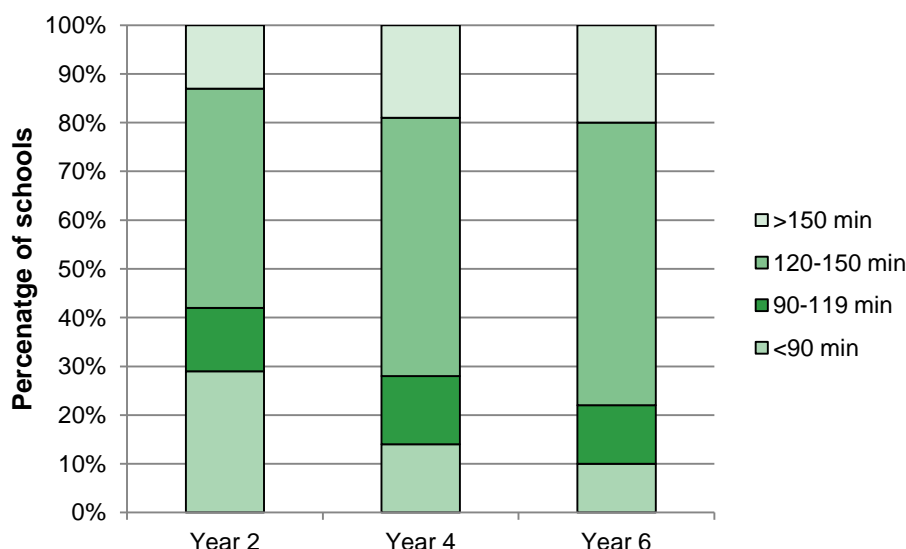
The Department has acknowledged the importance of physical activity in primary schools by requiring schools to deliver, for Years K-6, two hours per week of planned physical activity, including in Years 3-6, a minimum of one hour for sport.

DEC does not, however, monitor achievement of this target, instead leaving this to school principals. It does not know which schools are delivering the required two hours per week, how much time they spend on moderate to vigorous physical activity, or how well they teach fundamental movement skills and game playing skills.

It is clear, however, that while some schools meet this target, others do not. The NSW Department of Health survey for SPANS 2010 estimated that approximately 30 per cent of primary schools do not deliver two hours of planned physical education and sport each week.

The following exhibit also indicates a variation in the amount of physical activity across Year 2, 4 and 6 students. It illustrates that younger children (i.e. K-2) generally receive less organised physical activity.

Exhibit 5: Amount of sport and PE allocated in primary schools in minutes per week by student year



Source: NSW Department of Health's 2010 Schools Physical Activity Survey.

Note: The SPANS figures are based on a sample of government, Catholic and independent schools.

Our discussions with key stakeholders and with principals in the government primary schools we visited confirmed that some schools do not meet the Department's requirement of two hours planned physical activity per week.

Most principals we spoke to advised us that:

- the time allocated for physical activity included setting up equipment, instructions and transporting students to and from sporting venues
- if the minimum requirement specified two hours of 'moderate to vigorous activity' their schools would not meet it.

Approximately
30 per cent of
primary
schools in
NSW do not
deliver two
hours of
planned
physical
education and
sport each
week

Exhibit 6: Minimum physical activity requirements in Qld and ACT

In Queensland, all government primary schools are required to allocate 30 minutes per day to physical activity of at least moderate intensity as part of the school curriculum. In the ACT, all schools are required to provide students with a minimum of 25 to 30 minutes per day of moderate to vigorous physical activity as part of planned physical education and sport programs.

Source: Queensland Government 'Planning for Smart Moves – Guidelines' 2007 and Australian Capital Territory Education and Training 'Get a Move On'.

Research, expert advice and the results of our primary school visits indicate that the quality of physical activity provided varies between schools.

Exhibit 7: Features of higher and lower performing schools

Higher	Lower
150 minutes per week or more devoted to sport and PE	90 minutes or less per week devoted to sport and PE
Equipment already set-up so activity can start with minimal delay	Most children sedentary while waiting for equipment to be set up
High proportion of session time spent on moderate to vigorous physical activity	High proportion of time spent on sedentary activity
Fundamental movement skills taught well	Little or no focus on movement skill development
Appropriately trained teachers to supervise all classes	Classes taught by teachers with little or no training
Playing fields of high quality on-site	Students have to be transported to appropriate playing fields, wasting time and incurring costs
Skills and fitness of students tested and monitored	Skills and fitness of students not tested
A physical activity plan with clear outcomes	No physical activity plan
PE programs developed from an overall PE policy	No policy and PE programs developed ad-hoc
School level scope and sequence overview to guide teacher planning	No school level scope and sequence overview

Source: Audit Office research, Audit Office school visits 2011, SPANS 2010.

We concluded that some primary schools do better than others in the quantity and quality of planned physical activity delivered to students. Key factors behind this variation in student experiences are discussed in chapter 3.

2.2 Programs provided by DEC to help schools

The Department has implemented a range of structured programs to motivate children to be more active, provide professional development opportunities to teachers and fund new sports equipment and facilities in schools.

We found that teachers and principals strongly support the Premier's Primary School Sport Challenge. The Challenge aims to engage young people in sport and physical activity. It involves primary school classes participating in a 10 week sport and physical activity challenge which specifies moderate to vigorous physical activity. Schools receive assistance through funding for training and sports equipment, visits by State Sporting Organisations and access to online resources. The Challenge also allows participating high school students to work alongside primary school teachers, coaching and mentoring small groups of primary school students.

To achieve an award the class and individual students must accrue a minimum amount of time being active over the ten week period. Around half of NSW Government primary schools participated in the challenge in 2011.

The Department runs major programs to encourage student participation and skill development

Exhibit 8: Increased participation in the Premier's Primary School Sport Challenge

	2008	2009	2010	2011
Schools	333	696	737	830
Students	67,020	142,714	156,714	172,973

Source: DEC 2012.

The Department also runs other major programs to encourage participation and skill development.

For example, the School Swimming Scheme provides students with swimming and water safety instruction. Students who are unable to swim 25 metres in deep water, unaided, with confidence and style are eligible to attend. The Scheme operates daily lessons of 45 minutes over 10 consecutive school days. DEC advised that around 70,000 children from over 1,100 schools participated in the School Swimming Scheme in 2010-11. We consider the Scheme a worthwhile program however, one school we spoke to indicated that they could not offer lessons to students due to a lack of qualified instructors and no suitably qualified teachers at the school. Another school indicated that enrolments in the program were low because parents could not afford the pool entry and transport costs.

Live Life Well @ School is a joint initiative between the NSW Department of Education and Communities and NSW Ministry of Health that aims to get more students, more active, more often, as well as improving students' eating habits. The core of the program, which has been operating since 2008, is a two day professional learning workshop for NSW primary teachers.

Teachers are provided with resources and a training session in the teaching of fundamental movement skills, and a range of innovative strategies to promote and support physical activity as part of the school day. Local Health District staff are also made available to school communities to support physical activity and healthy eating initiatives. DEC advised that, to date, Live Life Well @ School has provided professional learning to over 1600 teachers at 800 schools.

Various interschool sport competitions are coordinated by state, regional and district Primary School Sport Associations for students in Years 3-6. The range of sports offered includes Australian football, basketball, cricket, soccer, hockey, netball, rugby league, rugby union, softball, tennis and touch football. The schedule also covers athletics, cross country and swimming zone meetings and championships.

The Department, through the School Sport Unit, also offers a range of professional development courses and workshops for teachers. Courses are offered throughout New South Wales and cover coaching qualifications for a comprehensive range of sports as well as a workshop on teaching physical activity to students with disabilities.

Under the School Sport Foundation, schools are invited to apply for funding of up to \$2,500 per annum for sport and healthy lifestyle programs. Preference is given to programs that promote health across the school and are not normally covered by global funding.

Programs such as the Premier's Primary School Sport Challenge aim to improve the amount and quality of physical activity in primary schools.

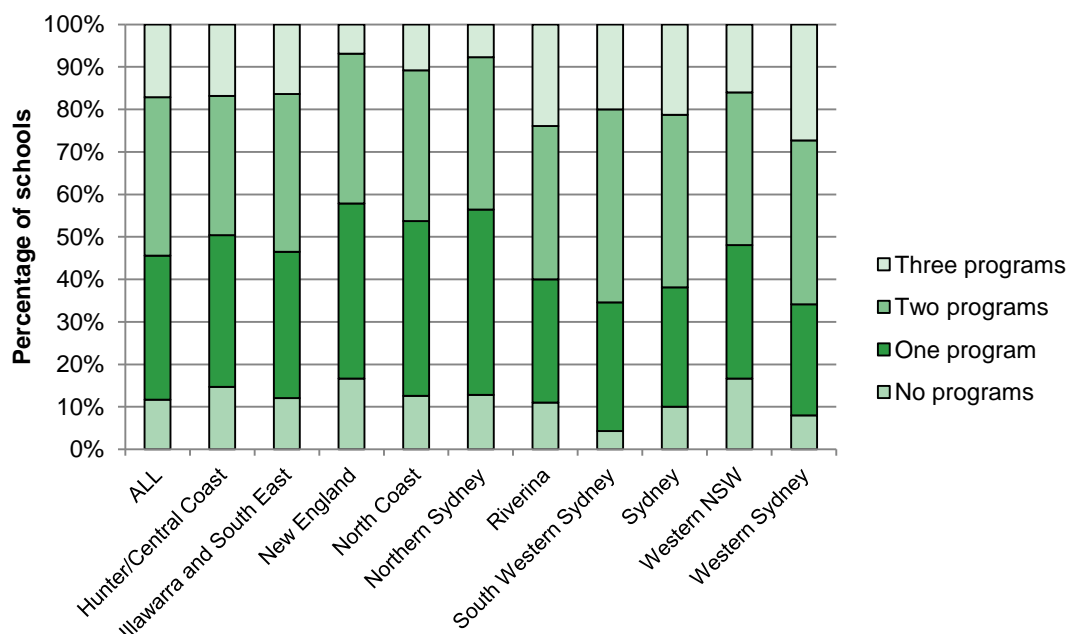
Data provided by DEC on participation of schools in the Premier's Primary School Sport Challenge 2011, School Swimming Scheme 2011 and Live Life Well@School since its inception shows that:

- 17 per cent participated in all three programs
- 37 per cent participated in two programs
- 34 per cent participated in one program
- 12 per cent participated in none of these programs.

There is a risk that some of the schools most in need of help may have low rates of participation in physical activity programs

Schools in some DEC regions also tend to participate more than others. For example, around 17 per cent of schools in the New England and Western NSW regions do not participate in any of these programs as shown in the following chart.

Exhibit 9: Proportion of schools participating in one or more DEC physical activity programs by region



Source: Prepared by Audit Office from DEC data 2012.

Notes: School Swimming Scheme and Premier's Primary School Sport Challenge data is for 2010-11, data for Live Life Well@School is 2008 to present.

The data table showing the percentage of schools participating in one or more DEC programs by region is contained in Appendix 2.

Participation in these programs is voluntary, and not based on need. The Department cannot say whether or not those schools in most need of help are participating in these programs. As discussed earlier, the Department does not systematically monitor physical activity in schools. It is possible that some of the schools most in need of help will have low rates of participation in these programs.

2.3 Practices in NSW schools

A few of the schools we visited have adopted many good practices while most have adopted a few. For example, one school had a morning fitness program focusing on one activity per day for 10-15 minutes prior to the start of class, which in turn settled the class for the first lesson.

Some schools organised vigorous activities such as dance to be fit and grid running in rugby to maximise the fitness benefits.

Some schools integrated physical activity into other parts of the curriculum through strategies such as:

- combining learning outcomes e.g. ten pin bowls in class for counting, or moving to the directions of up, down, left, right, forward and back for literacy
- holding special days to celebrate our diverse backgrounds including bushwalks with Aboriginal community leaders, National Tree Day, NAIDOC District Celebration including Aboriginal dance groups.

A number of schools have adopted the 'game sense' approach to teaching and coaching. DEC advised that instruction in game sense is provided as part of its School Sport Unit's teacher professional learning workshops.

Exhibit 10: Game Sense

The Game Sense approach allows students to develop their own skills and understandings while being actively involved in the game. By focusing on the game, rather than on the skills and technique, players are encouraged to become more tactically aware and make better decisions during the game. Skill development occurs at the same time as understanding, with the modified games reducing the technical demands on the students so that they can concentrate on the games as a whole.

Source: Curry, C., University of Western Sydney, 'Using the Game Sense approach to deliver Quality Teaching in Physical Education', 2011.

Some schools we visited advised they were using the 'Get Skilled: Get Active' resource to assist teachers with teaching fundamental movement skills.

Exhibit 11: Fundamental Movement Skills

Students need to master certain fundamental movement skills if they are to enjoy the wide range of physical activities, sports and recreational pursuits offered in our communities. The Get Skilled: Get Active resource focuses on twelve fundamental movement skills considered to be building blocks for movement. They are:

- | | | |
|------------------|---------|-------------------|
| • static balance | • catch | • leap |
| • sprint run | • kick | • overarm throw |
| • vertical jump | • hop | • two-hand strike |
| • side gallop | • skip | • dodge |

Source: DEC 2011, <http://www.curriculumsupport.education.nsw.gov.au/primary/pdhpe/gamesport/fms001.htm>.

A more comprehensive list of good practices we found in schools is contained in Appendix 2.

There is a range of barriers to overcome if the quality and quantity of physical activity is to improve in primary schools. We asked principals in the schools we visited to rate the main barriers in terms of importance. We also asked them to rate the importance of potential solutions. The results are contained Appendix 3.

A discussion of barriers to improving physical activity and potential solutions is contained in the following chapter.

The major
 barrier to
 improving
 physical
 activity in
 schools is the
 competing
 demands on
 curriculum time

3. Improving physical activity in primary schools

3.1 Increase accountability, incentives and motivation

Teachers and schools have many demands placed on them. Teachers and principals we spoke to consider the major barrier to improving the amount and quality of physical activity in schools is the competing demands on curriculum time. In an independent survey of classroom teachers in NSW in 2008, insufficient time was identified as the most common impediment to the delivery of physical education programs.

This is not a problem confined to New South Wales. For example, to quote the WA Department of Sport and Recreation publication *'Brain boost: Sport and physical activity enhance children's learning'*:

Unfortunately, with increasing pressure on schools to ensure children achieve academic success, and the new practise of publicised average grade comparison between schools, physical activity classes (such as physical education and sport) are increasingly being pushed down the curriculum priority list.

The introduction of NAPLAN (National Assessment Program – Literacy and Numeracy) in 2008 has focused community and practitioner attention on Maths and English, and rightly so as these are important areas of the curriculum. However, other key learning areas are also important as the school curriculum is concerned with supporting the development of the student as a whole person.

Concern about the state of physical activity in Australian schools has existed for at least 20 years; a Senate Inquiry into Physical and Sport Education detailed major problems in the delivery of PE in schools in 1992. These included the dramatic reduction of physical education in schools, and a lack of commitment to address problems associated with the provision of quality physical education.

More recent reviews have found a decline in the priority given by Australian schools to physical activity, concurrent with the increased focus of school systems on literacy and numeracy. These have consistently called for a reinvigoration of physical activity in schools, citing physical health, mental health and academic benefits.

Principals we spoke to indicated it was very rare for physical activity or sport to be raised by line management during discussions about school performance. The focus of these was almost entirely on NAPLAN. One practitioner commented that he had been attending regional conferences for over ten years and in that time there had been only one presentation on sport or physical activity. This is representative of the views of practitioners about the priority given by the Department to physical activity.

As previously stated, DEC does not monitor the quantity and quality of planned physical activity in primary schools. Nor does it monitor the progress of students in terms of physical fitness and skill levels. But the Department's website states that a range of fitness tests can be used by schools to test each component of health related fitness. These include body composition (e.g. BMI), aerobic capacity, muscular endurance, muscular strength, flexibility.

Monitoring and reporting helps to focus attention on physical activity. Monitoring and reporting increases accountability and over time should lead to more schools and teachers delivering sufficient, good quality physical activity. Queensland Government primary schools are required to report annually on their allocation of school sport and physical activity through the school improvement and accountability framework.

Some other jurisdictions undertake fitness and weight testing, and report the results to parents.

Exhibit 12: Fitness and weight testing

The New York City (NYC) 'FITNESSGRAM', started in 2005, is a 'report card' measuring a child's fitness, including Body Mass Index (BMI), muscular strength and endurance, flexibility and aerobic capacity. Teachers send this home to parents with recommendations on how whole families can get active, eat right and maintain a healthy weight. Results show a relationship between fitness and academic achievement: overall, students in the top five percent in NYC FITNESSGRAM score 36 percentile points higher on standardised academic tests than students in the bottom five percent in NYC FITNESSGRAM.

Under the UK's National Child Measurement Programme children are weighed and measured at school. The information is used by the National Health Service (NHS) to plan and provide better health services for children. Some local NHS providers send the results to the parents of the children measured.

Source: Office of Mayor of NYC (PR- 440-11) December 15, 2011.

UK National Health Service, Livewell, National Child Measurement Programme.

Aside from the accountability benefits, effective monitoring would give the Department the information it needs to be able to direct assistance to schools where children are falling behind. It would also send a clear message to principals, teachers and the community that physical activity in schools is important.

Recommendation 1: Enhance existing arrangements to effectively monitor and report:

- publicly on physical activity programs and outcomes in each government primary school, including whether planned physical activity requirements are met
- on each child's aptitude, attitude, skills and level of activity to his/her parents or guardians.

Recommendation 2: Once reliable information is available, use the results of monitoring to identify schools in most need and facilitate assistance to them.

Principals and teachers indicated that there was little or no reward for any involvement in promoting, leading or taking on roles in physical activity. Some teaching staff even perceived that focusing on physical activity limits their opportunities for future promotion.

Exhibit 13: Case study – lack of incentives for participation

One school we visited cited the example of a teacher who had recently competed at the Open State Championships for a particular sport. This person has made a conscious decision to not nominate as a convenor/coach/ manager at the regional level because it would be one more job to do without the recognition and an appropriate reduction in workload in other areas.

Source: Audit Office school visits 2011.

The sport organiser's role in a school is challenging. The role of an effective organiser may include:

- organising school and district championships, swimming and sports carnivals and school swimming lessons
- coordinating sport within the school and assisting staff in coaching
- liaising with local government authorities and sporting groups
- nominating for a range of funding grants for training and sports equipment
- overseeing the organising, storage and setting up of sports equipment
- corresponding with commercial operators for the provision of services.

DEC needs to
address
perceptions
that sport and
PE are a low
priority

Despite the demands of this role, the Department has no specific policy (or funding) allowing teachers relief from face-to-face class time to undertake this task. This further limits the incentive for teachers to play an active role in increasing the quantity and quality of physical activity for students. Principals reported that it was getting harder and harder to get teachers to take on – and remain in – roles such as sports organiser, coach etc.

The Department needs to address perceptions that student physical activity is a low priority and that pursuing roles in sport and physical education will not assist promotional prospects.

Recommendation 3: Provide greater recognition for staff to be involved in student physical activity, especially sport. This could include greater acknowledgment of the value of physical education teaching and sports organising skills in appointments and promotions.

As previously stated, some other Australian jurisdictions specify at least moderate daily physical activity in their minimum requirements.

Exhibit 14: Case study – programs featuring vigorous physical activity improve student fitness

Daily moderate to vigorous activity can have a significant impact on children's physical fitness. In one overseas study, 188 school children with a mean age of 11 from seven classes in three different schools were given either an active exercise program, or a conventional program of just two sports lessons a week. The exercise program comprised of daily supervised exercise which included at least 15 minutes of endurance training. In just one year the proportion of overweight and obese children decreased from 13 per cent to nine per cent, but increased in the control group from 11 per cent to 13 per cent. These were statistically significant changes. Aerobic fitness, cholesterol levels and of blood pressure all improved in the exercise group.

Source: Science Daily, 'Cardiovascular Benefits Of Daily Exercise In School Children Are Evident Even After One Year'.

Establishing a minimum requirement for physical activity, as the Department has done, is a good practice. The current requirements do not, however, stipulate a minimum amount of 'moderate to vigorous' physical activity, unlike some other Australian jurisdictions.

As previously stated, schools can count activities such as travelling on a bus, collecting equipment from the store-room and setting it up, and standing around awaiting directions, toward the current minimum requirements. The Department needs to be more specific about what activity satisfies the requirement and will make a difference.

The US President's Council on Physical Fitness and Sports states in its E-Newsletter (Fall 2008) that:

"Research evidence suggests that participation in daily physical activity in schools may improve academic performance. Thus, the benefits of physical activity extend beyond the known health-related outcomes to include academic performance and cognitive function in children and should be viewed as a valuable part of each school day. "

Recommendation 4: Ensure schools make best use of the existing time available for physical activity by:

- maximising time spent on moderate to vigorous physical activity
- keeping students active by minimising time spent waiting their turn, for equipment to be set up or travelling to venues, etc
- scheduling some activity each day of the week
- maximising opportunities to incorporate physical activity into other key learning areas, including literacy, numeracy, science and technology, and vice versa.

Principals and teachers we spoke to consider the promotion of the physical, psychological and academic benefits of physical activity to be a key mechanism for motivating staff and students to actively participate and improve physical activity in schools.

Some of the schools we visited had invited representatives from local sports clubs to run workshops designed to educate and motivate teachers and students. We consider this a worthwhile initiative that could be extended to all schools. Further motivation could also be provided by engaging with local community leaders and business people who adopt and advocate an active lifestyle.

Recommendation 5: Consider additional options to further motivate teachers and students including:

- encouraging local community leaders and business people (who adopt and advocate an active lifestyle) to visit schools and champion the lifelong benefits of physical activity
- helping schools engage with local sporting organisations to encourage greater sharing of expertise.

3.2 Increase skills and capacity

Many NSW Government primary teachers are highly motivated and have attended additional pre-service and in-service training opportunities regarding physical activity, involve themselves in organising school sport and deliver quality physical education classes.

However, research indicates that many teachers experience problems implementing physical activity programs and many feel they do not have the skills to be able to keep students active and impart fundamental movement skills. In a number of recent surveys in New South Wales, teachers indicated that a lack of skills was a major barrier to teaching quality physical activity. Our school visits reiterated this.

There is clear evidence that quality training for teachers increases students' levels of physical activity at school. Research indicates that new primary teachers have, on average, completed about ten hours of physical education training in their initial teacher training. Many teachers are relying on their own school experiences with physical education and sport, hence their own teaching of physical education is a reflection of their memories, both good and bad, rather than the knowledge gained in professional pre-service training.

A recent Australian Government report into the future of sport in Australia suggested greater emphasis should be placed on the delivery of sport and physical education as part of teacher training programs. This was seen as critical to skills development in a non-competitive environment.

There was a prevailing view amongst teachers and principals we spoke to that providing additional pre-service and in-service training would increase the competence and confidence of many primary school teachers to enable them to provide quality physical activity to students. This is supported by other research which recommends that specialist assistance and staff development programs may improve physical activity instruction of classroom teachers.

As discussed in section 2.2, the Department provides a range of programs and courses to improve the skills of teachers in physical activity. But in order to provide additional training a school must fund course costs out of its own limited budget together with the daily cost of a relief teacher to cover the class.

To put this into perspective, school principals indicated that:

- they allocate between \$1,000 and \$2,000 per teacher to spend on all learning and development each year
- the cost to attend a physical activity course and relieve the teacher is around \$600 to \$700 a day
- the current focus on NAPLAN scores and reporting provides a strong incentive to give priority to literacy and numeracy courses.

Providing in-service training to improve teacher organisational skills, including ways to minimise time spent on classroom management, transitions, and administrative tasks, could be an effective and comparatively inexpensive means of increasing physical activity.

Teachers indicated that a lack of skills was a major barrier to teaching quality physical activity

Principals and teachers strongly support the utilisation of specialist PE teachers in primary schools

The strategy ranked highest by principals and teachers we spoke to for improving physical activity was the introduction of specialist physical education (PE) teachers. Experts and research studies suggest that the best way to improve the quality and quantity of physical activity in schools is to recruit and develop more specialist PE expertise.

A recent survey of teachers found almost all strongly support the utilisation of specialist PE teachers in primary schools. It was also found that the majority of generalist teachers teach PE only once a week or less and their programs offer little variety in activities for students.

PE specialists may produce greater physical activity levels in children. In a US study conducted in seven schools with more than 100 teachers, children in classes taught by PE specialists received on average, more than 22 additional minutes of health-promoting activity per week, compared with students taught by untrained classroom teachers. PE specialists are also more successful in achieving higher levels of key outcomes including motor performance and fitness.

Whilst PE in NSW Government primary schools is usually taught by a generalist teacher, some schools do utilise specialist PE teachers, although no data is maintained by DEC on their number and location. Similarly, specialist PE teachers are employed in the private and Catholic primary systems. Queensland, South Australia, Western Australia and Victoria also employ some specialist primary PE teachers. Discussions with DEC suggest that some NSW schools engage specialist PE teachers to provide relief from face-to-face classes.

External specialists are used in a few of the schools we visited to assist generalist teachers with their PE classes for activities such as gymnastics, dance and Zumba. The cost of using external providers can present a barrier to this approach for some schools.

Some teachers and experts also believe it is now unrealistic to expect primary teachers to be experts in every subject across every key learning area, and that it is time to revisit the 'generalist' model of primary teaching.

We have been advised that currently there is an oversupply of trained secondary PE teachers. With appropriate bridging training this could provide a pool of potential primary school PE specialists.

Recommendation 6: DEC should increase the skill levels of the primary school teacher workforce in teaching physical activity physical activity and sport education. This may include:

- providing training to those teachers who need it
- recruiting physical education specialists to teach and /or provide on-the-job training and support for classroom teachers
- recruiting more teachers with substantial training or experience in physical education
- liaising with universities on initiatives to enhance the physical education and sport coaching skills and experience of teacher graduates.

3.3 Promote better practice in schools

There is a significant quantity of information on physical education available on the Department's and the Board of Studies' websites including guidance and resource material for principals, teachers, parents and the community. The material includes information on current programs and instruction on teaching fundamental movement skills, aerobics, dance and gymnastics. There is also much information available on the internet about practices adopted the world over to improve the delivery of physical activity in schools.

Despite the significant amount of information available, principals we spoke to rated 'lack of guidance from the Department' as one of the major impediments to improving physical activity in schools. They seem to be looking to the Department to make it easier and quicker for them to identify and implement contemporary good practices suitable to their school which have worked elsewhere. This would include lesson plans and exemplar programs detailing how to:

- maximise movement during class time
- improve levels of participation
- progressively improve the skills of students and teachers
- integrate physical activity into other parts of the curriculum.

Principals rated 'lack of guidance from the Department' as one of the major impediments to improving physical activity

Recommendation 7: DEC should do more to identify best practice occurring in schools and promote its wider adoption. This may include:

- developing exemplar programs
- conducting seminars
- arranging site visits between schools whereby best practice schools can demonstrate attributes of their physical activity programs
- assisting schools to tailor solutions which meet their needs.

3.4 Improve access to facilities and space

Some schools have limited space, particularly those in the inner city. This restricts the amount and range of physical activity that children can undertake during class time. Some growing schools have also seen reductions in the amount of space available to students due to the installation of demountable classrooms on green areas. A number of schools compensate for the lack of space by utilising the grounds of nearby schools or local sporting grounds and parks. However, some principals reported a trend for Councils to charge for the use of sporting grounds and facilities.

Rain and hot and cold weather conditions can also limit physical activity at a school. The Australian Government's Building the Education Revolution Program (BER) has provided many schools with multipurpose halls which may be used as gyms or indoor sporting centres. Some of the schools we visited had also installed storerooms for sporting equipment. Many schools have also installed covered outdoor learning areas which can also be used for physical activities during wet weather.

A number of schools indicated that they had received funding through the Premier's Primary School Sport Challenge which has resulted in them having adequate sports equipment in good condition. Lack of suitable equipment has been identified as a key barrier to physical activity in some other jurisdictions. We did not find this to be so among the schools we visited, perhaps because many had received equipment through the Challenge.

Some schools, however, commented on the lack of funding for ongoing maintenance of sporting facilities and equipment, which can be expensive. For example, one school indicated it had recently received a quote for \$25,000 to renew rubbery material (soft-fall) under its playground equipment.

Recommendation 8: Further assist schools and groups of schools to develop agreements with local councils to facilitate access to ovals and other facilities at little or no cost.

Exhibit 15: Playground equipment with soft-fall material covering the base



Source: Audit Office of New South Wales 2011.

Some principals reported a trend for councils to charge for the use of sporting grounds and facilities

Appendices

Appendix 1: About the audit

Audit objective

Determine how well the Department of Education and Communities manages physical activity in NSW primary schools, in particular compliance with mandatory requirements and implementation of better practices.

Audit criteria

In answering the audit objective, we used the following audit criteria:

1. Are primary schools meeting the Department's mandatory requirements for physical activity?
2. Are primary schools and the Department adopting better practices for physical activity?

Audit scope

The scope was limited to primary schools, because this is the time children are developing motor skills and attitudes to activity are being formulated.

We are focused on government schools, because the Department has direct control over what occurs in these.

Audit approach

The main sources of evidence for this audit were:

- documents provided by the Department or available on the Department's website
- testimony from:
 - DEC staff responsible for relevant policies and programs
 - relevant stakeholders, including representatives of the NSW Teachers' Federation, the Primary Principals' Association of NSW, the Parents and Citizens Association of NSW, and the NSW Department of Health
 - experts and academics in the fields of physical activity
- literature and academic research on:
 - the benefits of physical activity
 - the costs and implications of physical inactivity
 - physical activity in NSW primary schools
 - good practices in the delivery of physical activity in schools
 - barriers to providing sufficient, high quality physical activity
- the NSW Department of Health's Schools Physical Activity and Nutrition Survey 2010
- visits to thirteen NSW Government primary schools selected to provide a range of sizes, locations (city, regional, rural) and socio-economic status (six schools were nominated by DEC and seven by us) to:
 - receive testimony from principals and teachers on the extent and quality of student physical activity, better practices, the barriers to improving physical activity and potential improvements
 - observe facilities and equipment
- official publications describing requirements and practices in other jurisdictions.

We adopted a consultative approach to the audit, including:

- discussing and agreeing the audit plan with representatives of the DEC
- discussing emerging issues with relevant DEC staff throughout the audit
- providing the DEC with the opportunity to comment on a preliminary findings paper and a draft report before we issued this final report.

Audit selection

We use a strategic approach to selecting performance audits which balances our performance audit program to reflect issues of interest to Parliament and the community. Details of our approach to selecting topics and our forward program are available on our website.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standards ASAE 3500 on performance auditing, and to reflect current thinking on performance auditing practices. We produce our audits under a quality management system certified to International Standard ISO 9001. Our processes have also been designed to comply with the auditing requirements specified in the Public Finance and Audit Act 1983.

Acknowledgements

We gratefully acknowledge the co-operation and assistance provided by Cheryl Best and Ross Morrison of DEC, key stakeholders including the NSW Department of Health, NSW Teachers Federation and the NSW Federation of Parents and Citizens Associations, and the principals and teachers we spoke to at the schools we visited. We would also like to thank the various academics who assisted us with advice and guidance on research relevant to this topic.

Audit team

This audit was carried out by Rod Longford and Neil Avery. Sean Crumlin provided direction and quality assurance. Dr Karen Martin from the University of Western Australia provided expert advice and assistance throughout the audit.

Audit cost

Including staff costs, printing costs and overheads, the estimated cost of the audit is \$223,208.

Appendix 2: Good practices in schools

Some of the schools we visited are implementing practices which seem to work well. For example, practices to maximise activity during class time included:

- vigorous activities such as dance to be fit and grid running in rugby
- morning fitness programs focusing on one activity per day for 10 – 15 minutes prior to the start of class, which in turn settled the class for the first lesson
- a structured program to develop the fitness, knowledge and skill set of students across physical activity, PDHPE, sport and fundamental movement skills throughout all stages
- funding raising using physical activity e.g. fun runs instead of chocolate drives
- daily physical education classes including short relay work
- school camps involving outdoor education experiences
- equipment ordered through a booking system and delivered to the classroom prior to the physical activity session
- high school students going to primary schools to work alongside classroom teachers coaching and mentoring small groups of students. We note the progress of the Premier's Sporting Challenge program – Leadership and Get Active in the Middle Years – in advancing this approach
- adoption of the 'gamesense' approach to teaching and coaching as used in the 'Active After School Program' and provided throughout the School Sport Unit teacher professional learning workshops.

Strategies to improve inclusiveness included:

- games which combine elements of two different sports such as netball and Australian football, and are played by mixed gender teams
- eight person cricket with no trophy, so that everyone gets a go and fun and learning is emphasised
- children can only get into one summer and one winter State Knock-out team, to increase participation
- dance, including teaching traditional dances of different cultures
- a 'house sport' competition for those students not involved in competitive inter-school sport.

Strategies to Integrate physical activity into other parts of the curriculum included:

- combining learning outcomes e.g. ten pin bowls in class for counting, or moving to the directions of up, down, left, right, forward and back for literacy
- special days to celebrate our diverse backgrounds including bushwalks with Aboriginal community leaders, National Tree Day, NAIDOC District Celebration including Aboriginal dance groups.

Strategies to progressively enhance the skills of students and teachers included:

- an entire school K – 6 'scope and sequence' for all physical activities across the PDHPE, school sport and school break programs based on the needs of students
- skill lesson booklets permanently available and prominently displayed
- School Sport Unit teacher professional learning programs
- after-school training for teachers provided by a Local Health Service
- appointment of sport organiser at a senior level eg Assistant Principal, who is assigned time within their role to coordinate sport
- 'Get Skilled: Get Active' resource to assist teachers with teaching fundamental movement skills.

Strategies to engage specialists included:

- trained secondary PE teacher on a return to work program used as an additional resource coordinating PE and sport, including assisting with lesson planning, setting up equipment for classes, and providing training and information to teachers
- teaching assistant with a background in physical activity and sport organised for some sporting mentors to visit the school and provide coaching
- external providers for a range of physical activities in schools including gymnastics, martial arts, Zumba and yoga
- utilise secondary students from Physical Activity and Sport Science classes trained under the Premier's Sporting Challenge Leadership programs to facilitate physical activity classes in primary schools
- sports liaison officers from major sports attending schools, working with teachers to develop their skills, providing lesson plans and participating in classes
- use of a trained high school PE teacher to provide relief from face-to-face teaching
- teachers with expertise in physical education exchanging classes with teachers with expertise in other aspects of the curriculum.

Programs encouraging activity out of class time included:

- participation in the 'Active after School' program
- organised sport/physical activity programs before/after school, at recess/lunchtimes
- creation of playground spaces for sports eg handball, netball, basketball, volleyball, rugby field, T-ball diamond, cricket nets, obstacle course and fitness track, and fixed equipment.
- sport shed borrowing during lunch times run by students in senior school
- a program providing bicycles (that police had collected as lost/stolen property but were never claimed) to disadvantaged children.

Percentage of primary schools by region participating in one or more DEC physical activity programs i.e. Premier's Sporting Challenge, Live Life Well@School and the School Swimming Scheme.

Number of programs	0	1	2	3
Hunter/ Central Coast	14.7	35.8	32.8	16.8
Illawarra and South East	12.0	34.4	37.2	16.4
New England	16.7	41.2	35.3	6.9
North Coast	12.6	41.1	35.5	10.8
North Sydney	12.8	43.6	35.9	7.7
Riverina	11.0	29.0	36.1	23.9
South West Sydney	4.3	30.3	45.4	20.0
Sydney	10.0	28.1	40.6	21.3
Western NSW	16.7	31.4	35.9	16.0
Western Sydney	8.0	26.1	38.6	27.3
All schools	11.7	33.9	37.3	17.2

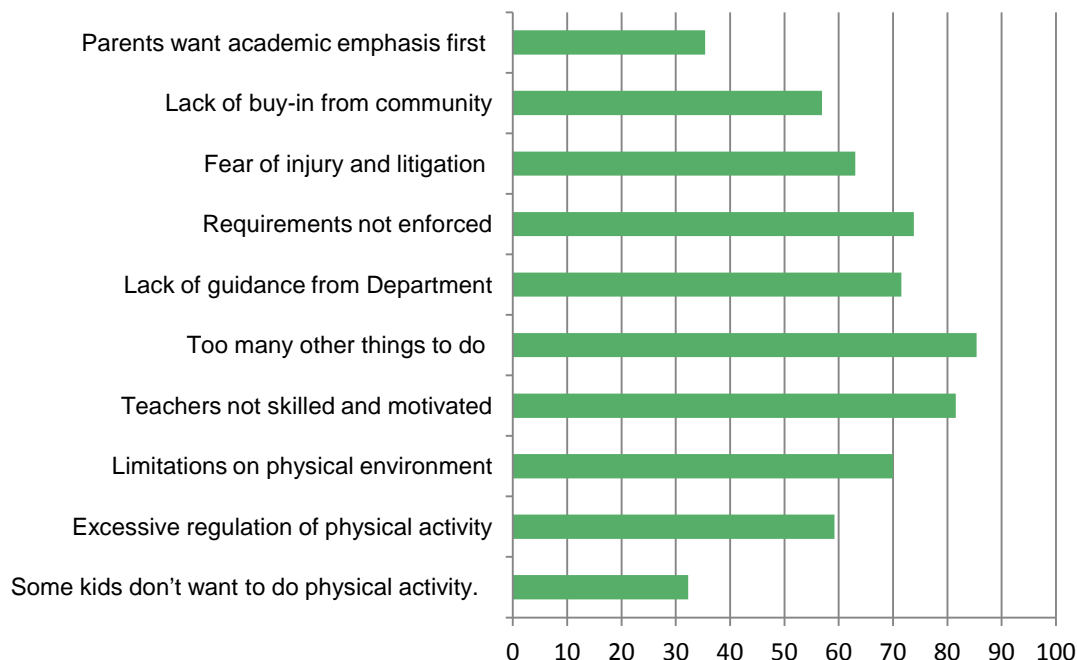
Source: Audit Office from DEC data 2012.

Appendix 3: Feedback from schools

There is a range of barriers to overcome if the quality and quantity of physical activity is to improve in underperforming schools.

Using a structured interview technique, we asked principals in the schools we visited to rate the main barriers in terms of importance.

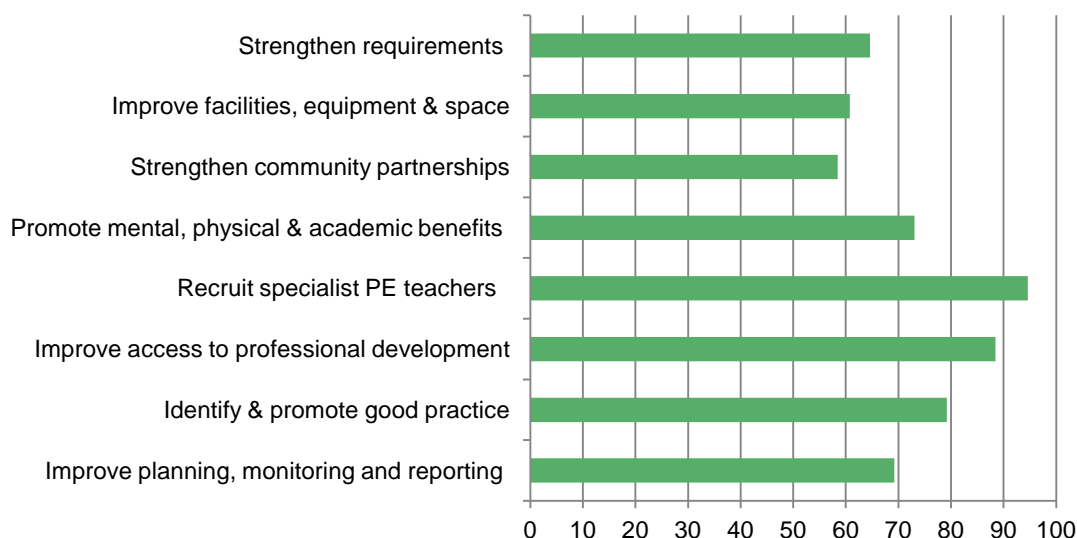
Barriers to improving physical activity (scored out of 100 by practitioners)



Source: Audit Office of New South Wales 2012.

We also asked principals in these schools to rate the potential solutions in terms of importance.

Potential solutions for improving physical activity (ranked out of 100 by practitioners)



Source: Audit Office of NSW 2012.

A discussion of barriers to improving physical activity and the potential solutions is contained in Chapter 3.

What are performance audits?

Performance audits determine whether an agency is carrying out its activities effectively, and doing so economically and efficiently and in compliance with all relevant laws.

The activities examined by a performance audit may include a government program, all or part of a government agency or consider particular issues which affect the whole public sector. They cannot question the merits of government policy objectives.

The Auditor-General's mandate to undertake performance audits is set out in the *Public Finance and Audit Act 1983*.

Why do we conduct performance audits?

Performance audits provide independent assurance to parliament and the public.

Through their recommendations, performance audits seek to improve the efficiency and effectiveness of government agencies so that the community receives value for money from government services.

Performance audits also focus on assisting accountability processes by holding managers to account for agency performance.

Performance audits are selected at the discretion of the Auditor-General who seeks input from parliamentarians, the public, agencies and Audit Office research.

What happens during the phases of a performance audit?

Performance audits have three key phases: planning, fieldwork and report writing. They can take up to nine months to complete, depending on the audit's scope.

During the planning phase the audit team develops an understanding of agency activities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the agency or program activities are assessed. Criteria may be based on best practice, government targets, benchmarks or published guidelines.

At the completion of fieldwork the audit team meets with agency management to discuss all significant matters arising out of the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with agency management to check that facts presented in the draft report are accurate and that recommendations are practical and appropriate.

A final report is then provided to the CEO for comment. The relevant minister and the Treasurer are also provided with a copy of the final report. The report tabled in Parliament includes a response from the CEO on the report's conclusion and recommendations. In multiple agency performance audits there may be responses from more than one agency or from a nominated coordinating agency.

Do we check to see if recommendations have been implemented?

Following the tabling of the report in parliament, agencies are requested to advise the Audit Office on action taken, or proposed, against each of the report's recommendations. It is usual for agency audit committees to monitor progress with the implementation of recommendations.

In addition, it is the practice of Parliament's Public Accounts Committee (PAC) to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report is tabled. These reports are available on the parliamentary website.

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards.

Internal quality control review of each audit ensures compliance with Australian assurance standards. Periodic review by other Audit Offices tests our activities against best practice. We are also subject to independent audits of our quality management system to maintain certification under ISO 9001.

The PAC is also responsible for overseeing the performance of the Audit Office and conducts a review of our operations every three years. The review's report is tabled in parliament and available on its website.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament.

Further information and copies of reports

For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website www.audit.nsw.gov.au or contact us on 9275 7100.

Performance audit reports

No	Agency or Issues Examined	Title of performance Audit Report or Publication	Date Tabled in Parliament or Published
222	Department of Education and Communities	<i>Physical activity in government primary schools</i>	13 June 2012
221	Community Relations Commission For a multicultural NSW Department of Premier and Cabinet	<i>Settling humanitarian entrants in NSW services to permanent residents who come to NSW through the humanitarian migration stream</i>	23 May 2012
220	Department of Finance and Services NSW Ministry of Health NSW Police Force	<i>Managing IT Services Contracts</i>	1 February 2012
219	NSW Health	<i>Visiting Medical Officers and Staff Specialists</i>	14 December 2011
218	Department of Family and Community Services Department of Attorney General and Justice Ministry of Health NSW Police Force	<i>Responding to Domestic and Family Violence</i>	8 November 2011
217	Roads and Traffic Authority	<i>Improving Road Safety: Young Drivers</i>	19 October 2011
216	Department of Premier and Cabinet Department of Finance and Services	<i>Prequalification Scheme: Performance and Management Services</i>	25 September 2011
215	Roads and Traffic Authority	<i>Improving Road Safety: Speed Cameras</i>	27 July 2011
214	Barangaroo Delivery Authority Department of Transport NSW Treasury	<i>Government Expenditure and Transport Planning in relation to implementing Barangaroo</i>	15 June 2011
213	Aboriginal Affairs NSW Department of Premier and Cabinet	<i>Two Ways Together - NSW Aboriginal Affairs Plan</i>	18 May 2011
212	Office of Environment and Heritage WorkCover NSW	<i>Transport of Dangerous Goods</i>	10 May 2011
211	NSW Police Force NSW Health	<i>The Effectiveness of Cautioning for Minor Cannabis Offences</i>	7 April 2011
210	NSW Health	<i>Mental Health Workforce</i>	16 December 2010
209	Department of Premier and Cabinet	<i>Sick leave</i>	8 December 2010
208	Department of Industry and Investment	<i>Coal Mining Royalties</i>	30 November 2010
207	Whole of Government electronic information security	<i>Electronic Information Security</i>	20 October 2010
206	NSW Health NSW Ambulance Service	<i>Helicopter Emergency Medical Service Contract</i>	22 September 2010
205	Department of Environment, Climate Change and Water	<i>Protecting the Environment: Pollution Incidents</i>	15 September 2010
204	Corrective Services NSW	<i>Home Detention</i>	8 September 2010
203	Australian Museum	<i>Knowing the Collections</i>	1 September 2010
202	Industry & Investment NSW Homebush Motor Racing Authority Events NSW	<i>Government Investment in V8 Supercar Races at Sydney Olympic Park</i>	23 June 2010
201	Department of Premier and Cabinet	<i>Severance Payments to Special Temporary Employees</i>	16 June 2010

No	Agency or Issues Examined	Title of performance Audit Report or Publication	Date Tabled in Parliament or Published
200	Department of Human Services - Ageing, Disability and Home Care	<i>Access to Overnight Centre-Based Disability Respite</i>	5 May 2010
199	Department of Premier and Cabinet NSW Treasury WorkCover NSW	<i>Injury Management in the NSW Public Sector</i>	31 March 2010
198	NSW Transport and Infrastructure	<i>Improving the performance of Metropolitan Bus Services</i>	10 March 2010
197	Roads and Traffic Authority of NSW	<i>Improving Road Safety: School Zones</i>	25 February 2010
196	NSW Commission for Children and Young People	<i>Working with Children Check</i>	24 February 2010
195	NSW Police Force NSW Department of Health	<i>Managing Forensic Analysis – Fingerprints and DNA</i>	10 February 2010
194	Department of Premier and Cabinet Department of Services, Technology and Administration NSW Treasury	<i>Government Advertising</i>	10 December 2009
193	Roads and Traffic Authority of NSW	<i>Handback of the M4 Tollway</i>	27 October 2009
192	Department of Services, Technology and Administration	<i>Government Licensing Project</i>	7 October 2009
191	Land and Property Management Authority Maritime Authority of NSW	<i>Administering Domestic Waterfront Tenancies</i>	23 September 2009
190	Department of Environment, Climate Change and Water NSW Environmental Trust	<i>Environmental Grants Administration</i>	26 August 2009
189	NSW Attorney General's Department NSW Department of Health NSW Police Force	<i>Helping Aboriginal Defendants through MERIT</i>	5 August 2009
187	Roads and Traffic Authority of NSW	<i>Improving Road Safety – Heavy Vehicles</i>	13 May 2009
186	Grants	<i>Grants Administration</i>	6 May 2009
185	Forests NSW	<i>Sustaining Native Forest Operations</i>	29 April 2009
184	NSW Police Force	<i>Managing Injured Police</i>	10 December 2008
183	Department of Education and Training	<i>Improving Literacy and Numeracy in NSW Public Schools</i>	22 October 2008
182	Department of Health	<i>Delivering Health Care out of Hospitals</i>	24 September 2008

Performance audits on our website

A list of performance audits tabled or published since March 1997, as well as those currently in progress, can be found on our website www.audit.nsw.gov.au.

Our vision

To make the people of New South Wales proud of the work we do.

Our mission

To perform high quality independent audits of government in New South Wales.

Our values

Purpose – we have an impact, are accountable, and work as a team.

People – we trust and respect others and have a balanced approach to work.

Professionalism – we are recognised for our independence and integrity and the value we deliver.

Professional people with purpose

Making the people of New South Wales
proud of the work we do.

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