

Chapter 2

Living well

Urban life and the rise of the megacity: trends and forecasts of continuing growth in urbanisation and the resulting rise of megacities.

Well-being in an urban landscape: presents data on changing household structures and improved air quality in large residential areas.

Towards safer communities: examines incarceration rates and road accidents in OECD countries.

War and peace: illustrates the military's activity through the lenses of expenditure and proportion of the workers in the armed forces.

Body and society: The weight of nations: tackles health and nutrition as obesity becomes an epidemic in the developed world.

Investing in health: considers health expenditure data in conjunction with premature death through the indicator called Potential Years of Life Lost.

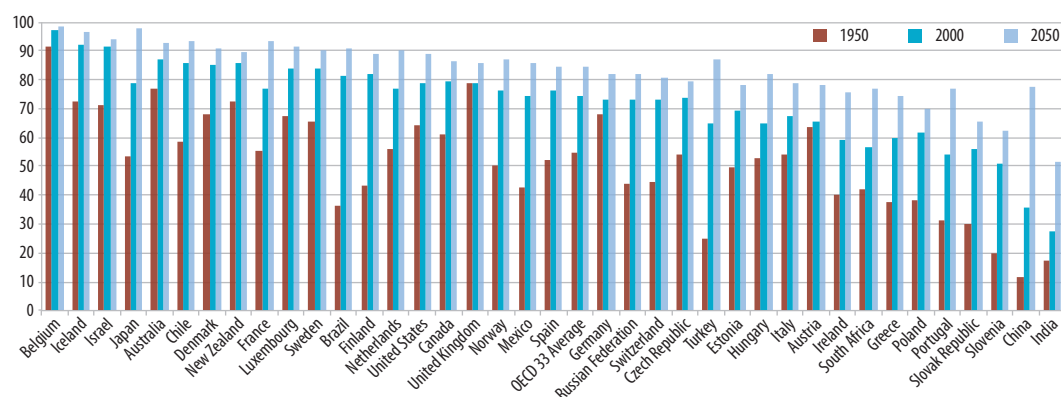
The ballot box: looks at civic engagement as measured through voter turnout and voter registration, basic pillars of a healthy democracy.

URBAN LIFE AND THE RISE OF THE MEGACITY

Our world is becoming more and more urban, with an ever-increasing proportion of the world's population living in cities. The 20th century saw the rise of megacities, or cities with populations that number in the tens of millions. The shift from rural to urban living has consequences for how we live, work, and build communities and families. Increasing urbanisation provides more career and educational opportunities and a host of other positive prospects. However, it can also give rise to a loss neighbourhood connection and an increase in perceived alienation. This can have consequences for families and children, and, by extension, education. Schools and vocational and tertiary education increasingly provide a sense of belonging and play the role of the immediate community and neighbourhood in urban areas.

Figure 2.1. More people living in cities

Percentage of people living in areas classified as “urban” by national authorities, 1950-2100



StatLink <http://dx.doi.org/10.1787/888932757846>

Source: United Nations Population Division (2012), *World Urbanization Prospects: The 2011 Revision*.

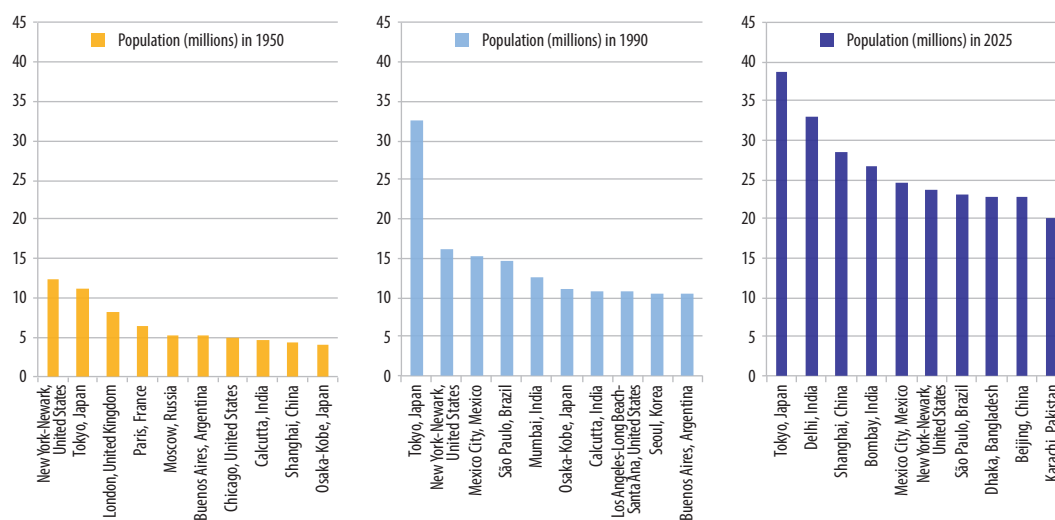
Between 1950 and 2000, the percentage of the population living in urban environments increased on average from 52% to 75% across all OECD countries. Even countries with the lowest percentage of urban dwellers in 1950 (Slovenia and Turkey) experienced substantial increases in the proportion of their population living in urban areas by 2000. This pattern is expected to continue across the OECD and BRIC countries, with a forecasted OECD average of 85% in 2050. In fact, Belgium, Iceland, and Japan are all expected to have as many as over 95% of their population living in urban areas by this time. Urbanisation poses a social challenge to educators, in terms of possible alienation and loss of a sense of community. Notwithstanding, this phenomenon also has the potential to provide a richer cultural environment and better, more diverse job prospects that can motivate students in their studies.

In 1950, only two cities in the world had over 10 million inhabitants: New York-Newark and Tokyo. By 2000, each of the world's ten largest cities had over ten million inhabitants, with Tokyo well ahead with almost 33 million people. The growth of megacities is expected to continue, although the geographical distribution of the top ten is changing. In 1950, six of the ten largest world cities were located in current OECD countries. By

2025, only three of the top ten will come from current OECD countries. In particular, the marked increase in the size of cities in Brazil, China, and South Asia (Bangladesh, India, and Pakistan) is projected to continue. For education, these data raise a number of questions about the role of the school in building community and social capital in large urban societies. The evidence from student performance suggests that urbanisation can influence achievement at school. For example, PISA 2009 data indicate that for some countries, living in large urban areas is linked to improved student performance.¹

Figure 2.2. Redefining the megacity

Population (in millions) of the top 10 largest cities world wide in 1950, 1990 and a projection to 2025



StatLink <http://dx.doi.org/10.1787/888932757865>

Source: United Nations Population Division (2012), *World Urbanization Prospects: The 2011 Revision – Cities and Urban Agglomerations*.

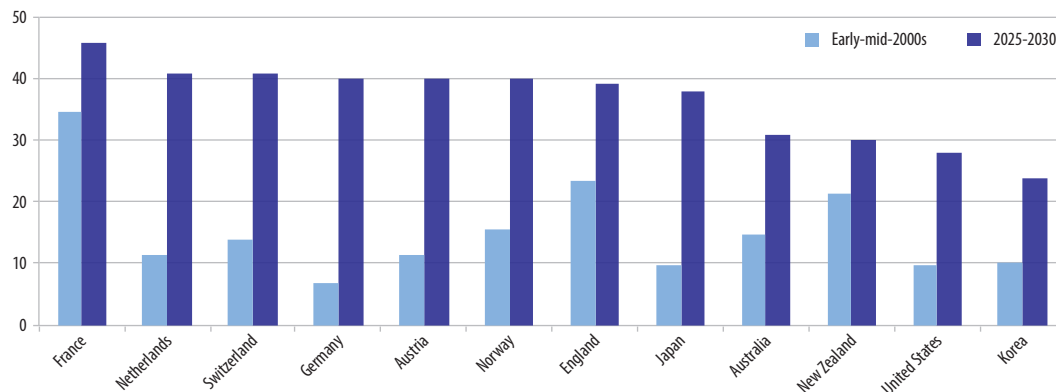
And education?

- Very rapid rates of urbanisation place services, including education, under strain. How can school, vocational and tertiary education cope with problems of overcrowding and overstretched infrastructure in quickly growing urban areas?
- In what ways might densely populated and diverse local communities be creatively used as a learning environment (for example, creativity through street art, or local elderly reading to primary age youth)?
- Greater urbanisation means that fewer children have experienced rural or farm life. Does education have a role to play in raising awareness of different types of communities? Is there a place for educational exchange between urban and rural schools?

WELL-BEING IN AN URBAN LANDSCAPE

Does living in a city have an impact on well-being? Large urban environments provide more educational and career opportunities, better access to high quality health and emergency services, and a number of other positives. However, a lack of green space and intensity of both traffic and industry are linked to higher pollution, which in turn creates risks for respiratory health. This section examines well-being in cities through two quite disparate trends: the number of people living alone, and the rates of air pollution in urban environments. These are important issues for education, with schools taking a more active role in promoting mental and physical health as well as reinforcing social ties and encouraging community engagement. Teachers are increasingly relied upon to detect students showing signs of withdrawal and alienation, and to effectively model positive social behaviours.

Figure 2.3. Home alone: The rise in single-person households
Number of one-person households, in the early to mid-2000s and projected to 2025-2030



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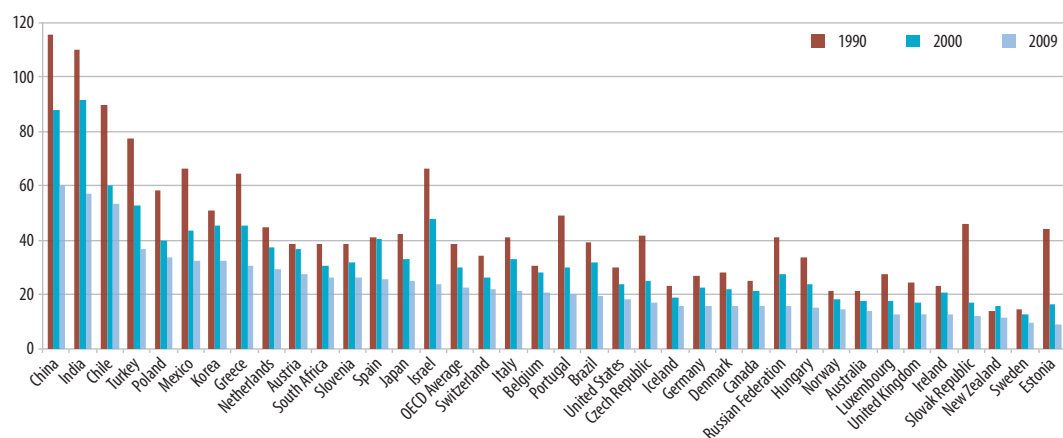
Note: A one-person household refers to a household in which a person makes provision for his or her own food or other essentials for living without combining with any other person to form part of a multi-person household.

Source: OECD (2011), *The Future of Families to 2030*.

Traditional household structures are changing, with one of the most significant shifts being an increase in single-person households, particularly in urban areas. In the early to mid-2000s, England, France and New Zealand had the largest number of people living alone. By 2025-30, those countries are forecast to be joined by a number of other OECD countries, including Austria, Germany, The Netherlands, Norway, and Switzerland. A number of social and demographic trends are pushing this increase: a rise in divorce rates, elderly women living longer, and the increasing mobility of young professionals. Although the financial crisis has slowed this trend in the short term, with young people delaying moving out from their childhood home until they are on a stronger economic footing, the overall rise in single-person households is expected to continue. In the medium to long term, this trend raises questions about increasing alienation, which has been linked to higher levels of depression and ensuing health challenges, especially for the middle-aged and elderly.

On a more positive note, the level of air pollution in large residential areas consistently decreased from 1990-2009 across all OECD and BRIC countries. Poor air quality and pollution is related to a number of health risks, including respiratory ailments and premature death. In 1990 Chile, Greece, Israel, Mexico, Poland, and Turkey had the highest levels of air pollution among OECD countries, but all had significantly improved by 2009. The economic and social costs of poor air quality are significant. In response to this, all OECD and BRIC countries have set targets for reducing air pollution in residential areas, taking measures such as reducing vehicle and industrial emissions and increasing green spaces in order to reach these goals. The data indicate that these strategies have been at least partially successful. Education can play a role not only in reinforcing positive attitudes to well-being and environmental health; it can also model healthy behaviours and prepare students with the skills they need to attain urban and social well-being.

Figure 2.4. Air quality improving in residential areas
Levels of particulate matter in the air of large residential areas by country, 1990-2009



StatLink  <http://dx.doi.org/10.1787/888932757903>

Note: The particulate matter measured here is known as PM10 and is measured in micrograms per cubic metre in the air of urban residential areas of greater than 100 000 people. Also note that data from 1994 are used in place of 1990 figures for Slovenia.

Source: World Bank (2012), *World Databank: PM10 Country Levels*.

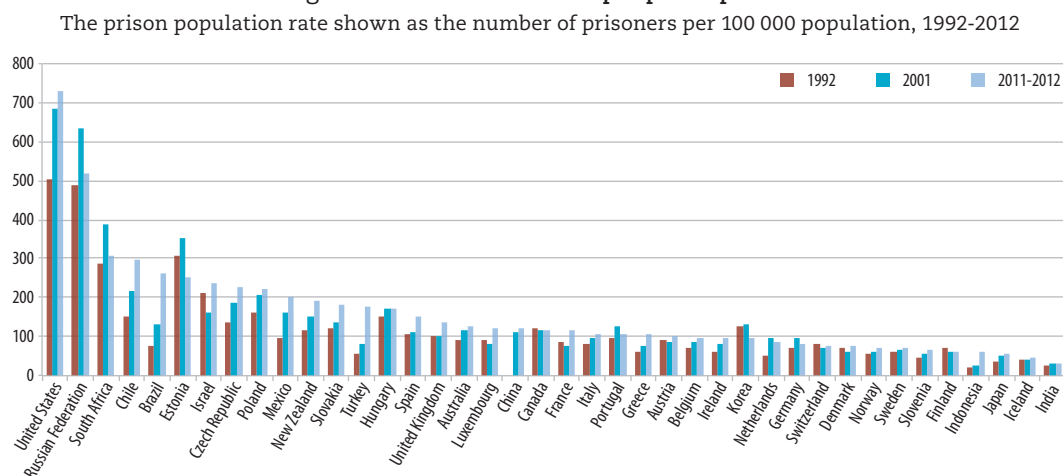
And education?


- Increased urbanisation creates both challenges and opportunities for local communities. Which skills are needed to deal with these challenges (for example, civic responsibility, non-cognitive skills), and how can schools develop them?
- The most effective learning can occur by following the example of others. How might educational institutions model the behaviours for positive social and environmental health?
- A potential drawback of urbanisation is the perception of a loss of community and connection to the local neighbourhood. How might schools continue to foster a greater sense of community for their students and families in urban environments?

TOWARDS SAFER COMMUNITIES

Do we feel safe going about our daily lives in our communities? In many OECD countries, improving neighbourhood safety and decreasing the incidence of violent accidents and crimes is high on the political agenda. The push to be tough on crime has led to a rise in the numbers of people in prison, but has it also led to an increase in the perception of safety? Safety and security can also be measured in other ways. As our societies become more urbanised, more and more drivers, cyclists, and pedestrians are sharing the roads. This issue is of such importance that the United Nations has declared 2011-20 the Decade of Action for Road Safety. And, for good reason: nearly 1.3 million people die each year on the world's roads, with up to 50 million injured.² Accident prevention and raising road safety awareness are essential components of many school curricula. Violence, crime, and bullying in schools are also at the top of policy agendas.

Figure 2.5. More and more people in prison



StatLink  <http://dx.doi.org/10.1787/888932757922>

Note: Data for Belgium, Canada, India, Israel, Korea, Portugal and the United States are from 2010, rather than 2011 or 2012.

Source: International Centre for Prison Studies (2012), *World Prison Brief*.

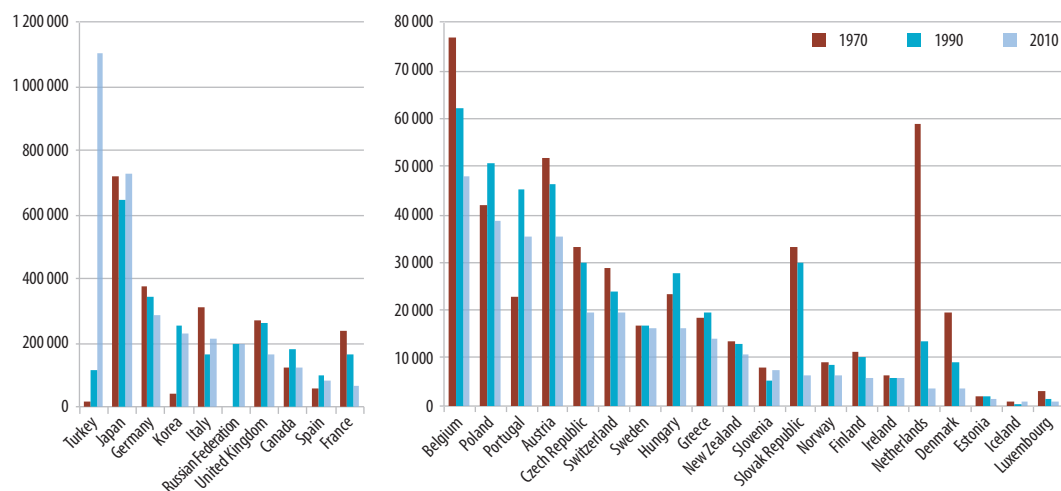
On average across the OECD there are more people being incarcerated in prisons. The United States saw a dramatic rise in the numbers of prisoners in the period between 1992 and 2010, from 501 per 100 000 people in 1992 to 730 per 100 000 people in 2010. The United States also has the highest proportion of the population in prison, well above the next highest rates in the Russian Federation and South Africa, and more than double that of the next OECD country, Chile. The lowest prison population rate among OECD countries is in Iceland, where only 47 people in 100 000 were incarcerated during 2011. While on average the trend is for increasing numbers of prisoners in most countries, there are a number of exceptions. Canada, Estonia, Finland, Germany, Korea, The Netherlands, and Portugal have all seen decreases in the number of people in prison since 2001.

The prevalence of road accidents is another way to measure individual safety in communities. Across the OECD, injury accidents (an accident resulting in at least one person

being injured or killed) steadily declined in most countries between 1970 and 2010. The two biggest exceptions to this are Japan and Turkey. An explosion of injury accidents was seen in Turkey during this time, particularly since 1990. This is likely due to both an increase in the number and coverage of roads, and the dramatic jump in the numbers of vehicles on them. It is important to note that while the number of injury accidents are in decline in some of the countries in the left figure – namely, Canada, France, Germany, Italy, Korea, Spain and the United Kingdom – the relatively large frequency of injury accidents is a continuing cause for concern. Even the lowest number of injury accidents in these countries on the left is very high. For instance, by 2010, there were still more than 67 000 injury accidents recorded in France, well above the almost 48 000 in Belgium, the country with the highest number of injury accidents in 2010 among countries in the graph on the right-hand side.

Figure 2.6. Safer roads, but are they safe enough?

Number of injury accidents, in 1970, 1990 and 2010



StatLink  <http://dx.doi.org/10.1787/888932757941>

Note: An injury accident refers to any accident involving at least one road vehicle in motion, resulting in at least one injured or killed person, excluding suicides and terrorist acts. In this figure, data for the Czech Republic and Slovak Republic from 1970 and 1992 are figures of the former Czechoslovakia. Data for Belgium and Canada are from 2009 rather than 2010.

Source: OECD (2012), *OECD Stat Road Injury Accidents*.

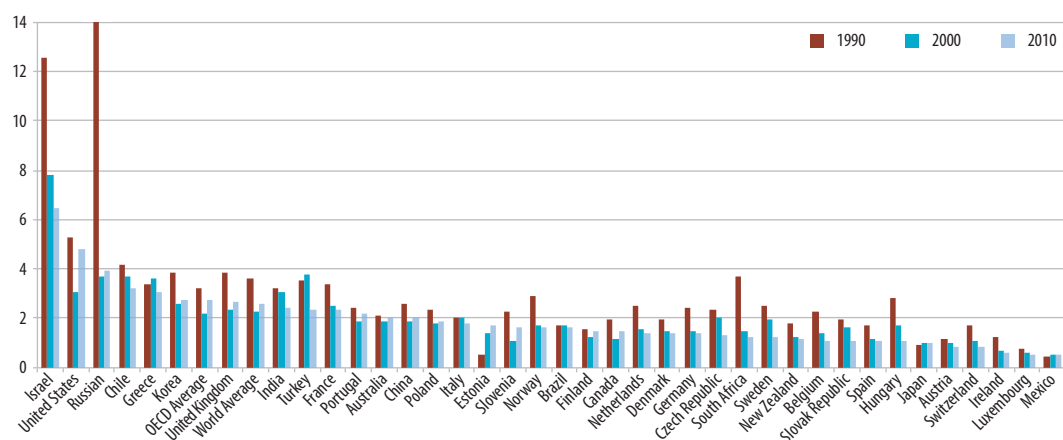
And education?

- Road safety is still a prominent issue. What action might educators take to raise student awareness of risks on the road, as well as ensuring safety within the physical proximity of the campus?
- Countries often turn to education to solve social problems. Does education have a role in preventing crime, for example, through keeping at risk youth engaged in the system or providing self-defence training for students? Should it?
- Are there examples of schools that have developed innovative solutions to minimise peer bullying within their student body? If so, how might mainstream schools learn from this?

WAR AND PEACE

National security issues are high on the political agenda in most countries. In an era of increasing globalisation, shifting social and community structures, and the development of new technologies, security, or a perceived lack of it, has an impact on the quality of life. National security is reinforced by strong economic ties and regional co-operation, as well as a strong military. Reductions in military spending and personnel in the armed forces across the OECD indicate increased room for economic trade agreements and regional co-operation to help maintain and improve national and international security. However, the reduction in spending on military-related research and development may have implications for innovation and technological advancement, in terms of funds available for research and development within the tertiary education sector.

Figure 2.7. **Military expenditure**
Military-related expenditure as a percentage of GDP, in 1990, 2000 and 2010



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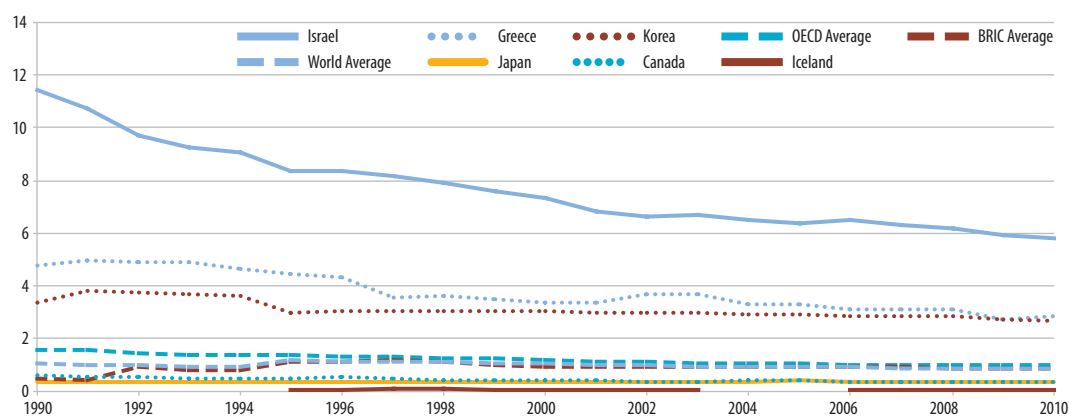
Note: Data for the Czech Republic and Slovak Republic are shown for 1993, and Estonia and Slovenia for 1992 instead of 1990. Data for Luxembourg are from 2007 instead of 2010.

Source: World Bank (2012), *World Databank: Military Expenditure*.

Military spending has been decreasing across most of the OECD and BRIC countries in the last 20 years. For a number of countries, including Chile, Israel and much of Europe, military spending has consistently decreased across that time period. For others, notably the United States, military spending decreased between 1990 and 2000, but then increased again from 2000-10. Continuing uncertainty and global tensions suggest that it is too early to be sure if the reduction in spending is a steady trend that will continue in the future. For the short term, the reduction in military spending has helped ease some of the burden of economic cuts and deficits in overall government spending. However, there is some concern about potential harm to national research and development, and innovation infrastructure, as defence spending has a long history of developing technologies with broad public benefits (for example, the Internet, jet engines and satellite navigation).

The armed forces have traditionally been a stable employer for many OECD countries. However, between 1990 and 2010 the percentage of the labour force employed by the armed forces has seen a slow but steady decline. On average across OECD countries, the military employed 1.6% of the labour force in 1990, a figure which was reduced to less than 1% by the year 2010. Yet, there is large country variation, with the top spender (Israel) seeing a decrease from 11.5% in 1990 to 5.8% in 2010, and the other top spenders (Greece and Korea) posting smaller but consistent decreases throughout this time. In contrast, those countries that have the lowest percentage of the labour force employed by the armed forces (Canada, Iceland, and Japan) have seen little to no change. As the threats faced by the armed forces transform with the modern world, so too do the skills they require of their labour force. Job scarcity in economic downturns allows the armed forces to choose those candidates with the best qualifications and aptitudes for their work. Conversely, the rise in student enrolment in tertiary education has led to a drop in voluntary applications for service in the armed forces and a rise in concerns about maintaining the quality of military recruits.

Figure 2.8. Fewer people involved in the armed forces
Percentage of the labour force employed in the armed forces, 1990-2010



StatLink  <http://dx.doi.org/10.1787/888932757979>

Note: Armed forces personnel are individuals on active duty within the military, including paramilitary and others involved in training and organisation of these personnel and in the provision of equipment.

Source: World Bank (2012), *World Databank: Armed Forces Expenditure*.

And education?

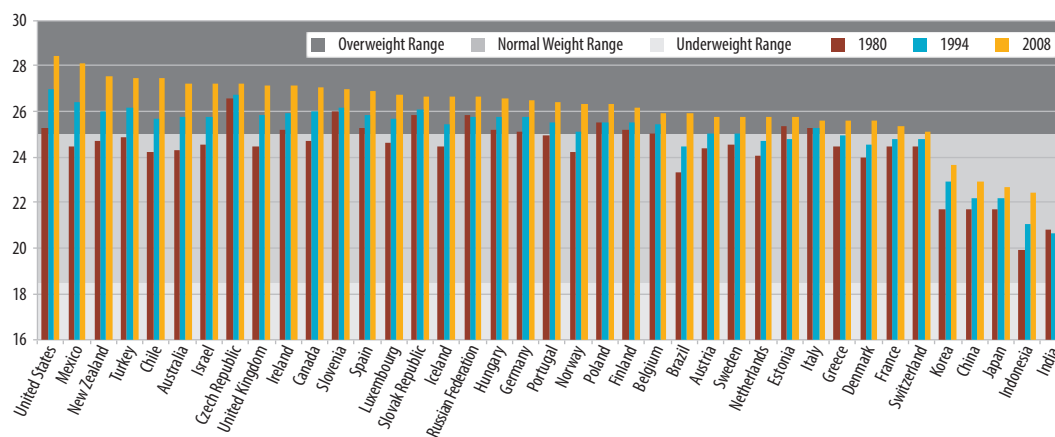
- Defence spending on research and development has produced major technologies (for example, the Internet, jet engines and satellite navigation). Will decreases in defence spending have an impact on national and international innovative capacity? What is the role of the university sector in supporting innovative research, and where will the funds come from?
- Civic education has been linked to increased tolerance, trust, and supporting nation building. Is this potential being fully exploited by our schools? Can we do more?
- Today's security challenges are remarkably different to those of 50 years ago, with growing threats of cyber attacks, biological weapons and international terrorism. Are education systems producing the highly-skilled and flexible workforce with the necessary skills (ICT, problem solving, critical thinking, languages, etc.) for addressing these challenges?

BODY AND SOCIETY: THE WEIGHT OF NATIONS

Growing affluence has had positive influences on the health of OECD citizens. Less premature death and infant mortality, and longer and healthier lives have all been associated with our increased economic well-being. But does affluence lead to indulgence? One of the most significant and widespread lifestyle-related health concerns is the growing obesity epidemic. In many OECD countries, obesity among adults and children threatens to grow into a severe public health crisis. As more “plump” children become obese adults, rates of heart disease, cancer, and especially diabetes will continue to grow. The toll of obesity is not only physical, but also psychological and social: obese people are more likely to suffer from poor self-esteem, anxiety, and depression. There is also evidence that society perceives obese people less positively, which could have an impact on perceived competence for employment, community work, and public office.

Figure 2.9. Fit or fat?

Average Body Mass Index of males and females in each country, in 1980, 1994, and 2008



StatLink  <http://dx.doi.org/10.1787/888932757998>

Note: Body Mass Index (BMI) is a calculated measure to classify adults as underweight, normal weight, overweight or obese, and is expressed as kilograms per square metre. The ranges for each of these classifications used here, consistent with WHO definitions, are underweight (<18.5), normal weight (18.5-24.99), overweight (25-30) or obese (>30).

Source: Gapminder (2011), Data in Gapminder World: List of Indicators.

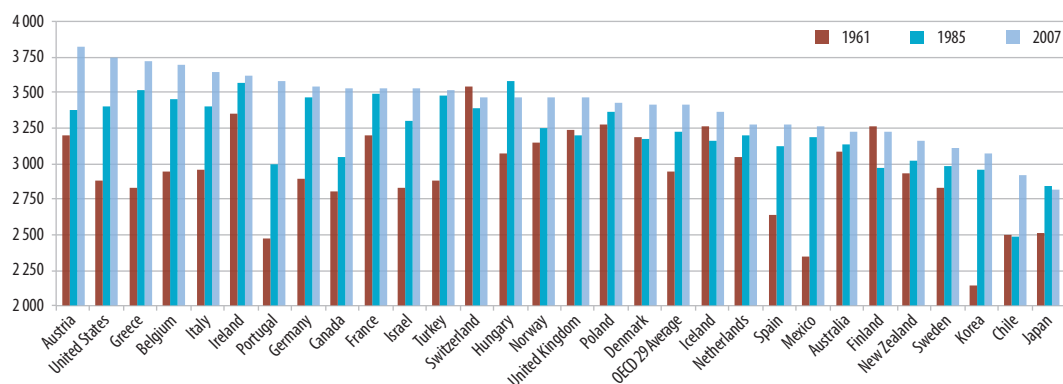
Across all OECD and BRIC countries, the average Body Mass Index (BMI) of the population increased between 1980 and 2008. This trend is universal, and it is swift. By 1980, there were already 14 of the 39 countries shown scoring “overweight” in terms of average calculated BMI, including the former Czechoslovakia, the Russian Federation and Slovenia. In 1994, this figure had grown to 27 countries, with several more hovering on the cusp between “normal” and “overweight”. By 2008, 34 of the 39 countries had an average BMI that fell in the “overweight” range on average, with Mexico and the United States at the top of the list. Only China, India, Indonesia, Japan, and Korea still on average fell within the “normal” range of calculated BMI in 2008. But their average is also on the rise and so

these countries are at risk for the future. Given the speed and uniformity of the trend, it is not an exaggeration to label it an epidemic for OECD (and increasingly BRIC) countries.

Combating obesity requires changes in behaviour and improvements in non-cognitive skills such as impulse control. It also requires access to affordable, nutritious foods and opportunities for physical activity. Yet despite the money spent on public health campaigns in schools and workplaces which encourage people to eat more healthily, our intake of calories continues to rise. Korea, Mexico, and Portugal in particular have seen the most rapid rise in caloric intake in the period from 1961 to 2007, well above the recommended caloric intake of 2 250 calories per person per day. In fact, all of the countries in the figure below were well over the recommended daily limit in 2007, with an OECD average of 3 400 calories. This appears to suggest that the obesity epidemic is in full swing and not likely to end anytime soon. Educators have a role in instilling healthy lifestyle patterns early, as well as in promoting greater public awareness, healthy eating, and more physical activity early in life.

Figure 2.10. Caloric intake is rising as weight rises

Total caloric intake per person per day, in 1961, 1985 and 2007



StatLink  <http://dx.doi.org/10.1787/888932758017>

Note: Caloric intake is the number of calories ingested; that is, the amount of calories in the foods and fluids an individual consumes.

Source: OECD (2012), *OECD Stat: Non-medical Determinants of Health*.

And education?

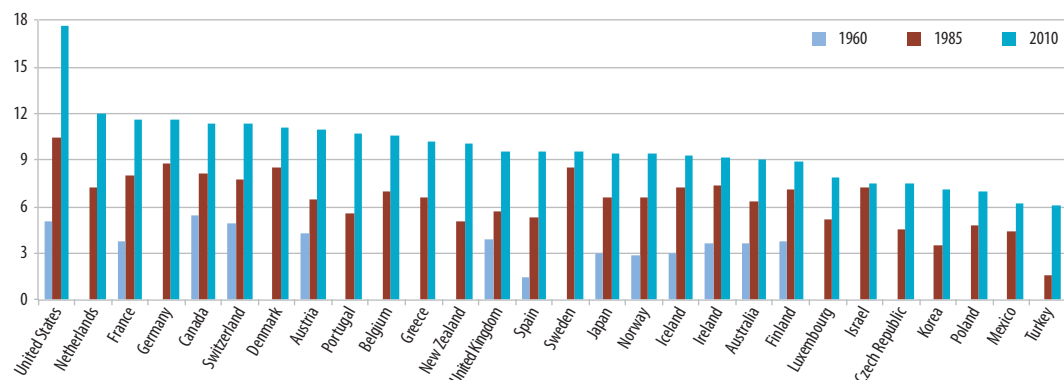
- What can schools do to improve physical health in addition to providing physical activity and nutrition programmes? Can they do more with well-being approaches such as teaching the skills needed to manage one's own body or informing about risks of obesity, without overloading the school curriculum?
- Should schools have vending machines that dispense sugary soft drinks and other snacks, or brand-name fast food outlets in cafeterias? What is the role of schools in encouraging healthy eating, for example, by providing nutritious meals?
- How might increasing rates of obesity impact on school infrastructure, for example, sturdier chairs or gym equipment?

INVESTING IN HEALTH

Our changing demography and lifestyles have profound effects on government expenditure in OECD countries. One of the great policy challenges is how to deal with increased health and pension expenditures while still covering other essential funding, for example for education. This section looks at health expenditure with a focus on one particular element: increasing longevity. Even though most countries are considering mechanisms to limit escalating health and pension costs, serious questions remain regarding the sustainability of present day budgets and strategic planning for the future. How will rising health and pension costs associated with living longer affect budgets available for other spending areas? And how can education partner with other sectors in order to tackle these issues from an intragovernmental perspective?

Figure 2.11. Rising health expenditure

Total public and private expenditure on health as a percentage of GDP, in 1960, 1985 and 2010



StatLink <http://dx.doi.org/10.1787/888932758036>

Note: Data presented for 2010 for Australia, Israel, Japan and Luxembourg are from 2009, while the figure for Turkey is from 2008.

Source: OECD (2012) OECD Stat – Health Expenditure and Financing.

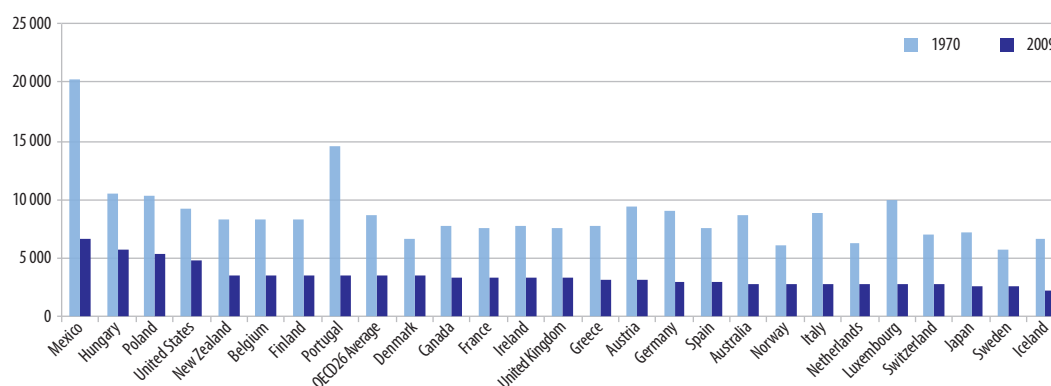
Public and private expenditure on health has increased in all OECD countries since 1960. At that time, health expenditure was on average just over 3% of GDP in the 13 countries for which these data were available. By 1985, this figure had risen to 6%, and by 2010, it had risen again to almost 10%. Except for Luxembourg, health spending has grown more quickly than GDP since 2000, which is in part driving this trend. It is important to note that within the averages, there is considerable country variation. In 2010 for example, the United States spent a total of 17.6% of their GDP on health, while Turkey spent only 6%. In terms of the balance between private and public expenditure, there is again wide country variation. Denmark spends the most on public funding as a percentage of their GDP, while Korea and Mexico have a more even split between public and private financing compared to other OECD countries.³


Potential years of life lost (PYLL), is an estimate of the average years a person would have lived if he or she had not died prematurely. These data are useful in setting priorities for health issues in society. In PYLL, deaths that occur at younger ages (e.g. accidents) receive

more weight than deaths that occur later in life. It is thus good news for OECD countries that the average PYLL across the OECD decreased by over 50% in the period between 1970 and 2009. Some countries made enormous gains, with Mexico reducing its PYLL by the biggest margin in this time period, followed by Portugal. However, there is still room for improvement: Mexico in 2009 remained the country with the highest PYLL in the figure below. Countries which had the lowest PYLL were Iceland, Japan, and Sweden. Fewer premature deaths mean more people living longer, which in turn means higher health and pension costs. In difficult economic times, extra pressure on already limited budgets is one of the most serious governmental challenges for the short and medium-term future.

Figure 2.12. People living longer, fewer premature deaths

Potential Years of Life Lost (PYLL), in 1970 and 2009



StatLink  <http://dx.doi.org/10.1787/888932758055>

Note: Potential years of life lost (PYLL) is a summary measure of premature mortality, where age specific deaths occurring at each age are added and weighted according to the number of remaining un-lived years up to age 70. The data is expressed per 100 000 females and males.

Source: OECD (2011), *Health at a Glance 2011: OECD Indicators*.

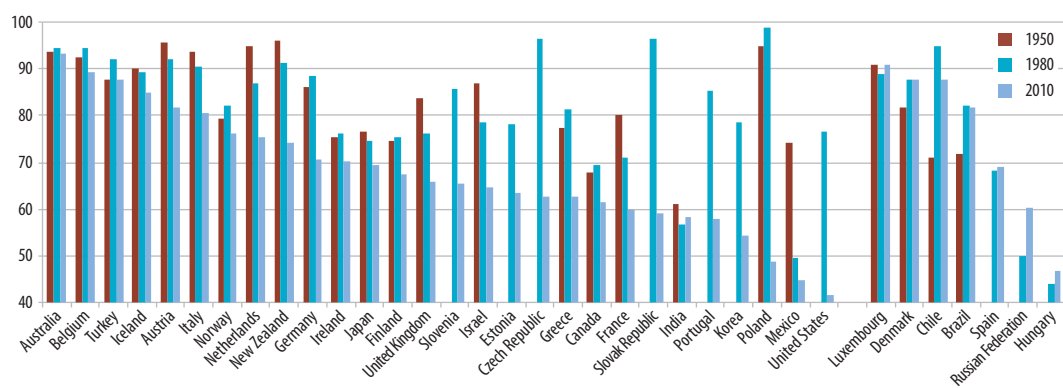
And education?

- Given increasingly tight budgets, how might education co-operate with other sectors to tackle these public policy challenges from a cross-governmental perspective?
- Can models of public-private funding on health and pensions be adapted to cover the rising cost of education?
- While the data show fewer premature deaths, the loss of a peer can be one of the most difficult things for a young person to handle. How can schools and teachers be better prepared to help them through such crises?

THE BALLOT BOX

Civic engagement is one way individuals can make a difference in their communities and societies. Measures of civic engagement include both political and non-political processes, such as voting, volunteering, and contributing to philanthropic initiatives. Higher levels of civic and social engagement have been linked to higher levels of trust and tolerance in communities, and are considered a fundamental aspect of a healthy democracy. Yet in many countries across the OECD, measures of civic participation, including voter turnout, have fallen throughout the last half century. Can education and schools play a role in improving civic and social participation? Research suggests that classroom climate and confidence in school participation are positively associated with some of the knowledge, skills and behaviours that underlie civic participation. A pressing question for many OECD countries is: can trust, tolerance, and collaboration be taught?

Figure 2.13. Fewer people engaged in their democracies
Parliamentary voter turnout, in 1950, 1980 and 2010 (or nearest available year)



StatLink <http://dx.doi.org/10.1787/888932758074>

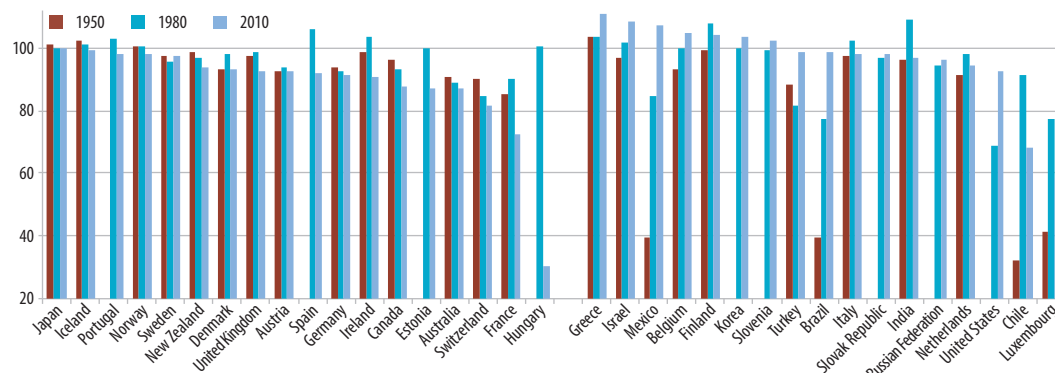
Note: Voter turnout is the total number of votes cast (valid or invalid) divided by the number of people registered to vote, expressed as a percentage. Where the data for countries were not consistently available in the same years, figures from the closest year are used. The year of each data point is provided in a table in the StatLink above.

Source: International IDEA (2011), *Voter Turnout Database*.

Voter turnout has declined in most OECD countries since the 1950s. In Austria, Italy, the Netherlands, and New Zealand, for example, the data show voter turnout over 90% in 1950, a figure which had dropped to just over 70% in 2010. In Hungary, Mexico, Poland, and the United States, voter turnout in 2010 was less than 50% of the eligible population, a marked decline from previous years. Some countries are resisting the trend: Australia, Belgium, and Luxembourg, which all have compulsory voting, hover around a 90% voter turnout since 1950. However, this is not necessarily the solution: voting is compulsory in Greece as well, and despite this, the country has seen voter turnout decline from around 80% in 1951 and 1981 to just over 70% in 2012. In contrast, Brazil, Chile, and Denmark all saw increases in voter turnout in the mid 20th century, with more or less stable turnout over the last 30 years.

In contrast to voter turnout, rates of voter registration vary across countries between 1950 and 2010. Voter registration has been declining steadily in that time period in Australia, Canada, and Switzerland. In Hungary, it declined dramatically from 1990 to 2010 (from 100% to only 30%). Other countries show the reverse pattern: voter registration has been increasing steadily in Belgium, Brazil, Greece, Israel, and Mexico. These figures suggest that in many countries more could be done to encourage and support civic participation. Education can play a role in fostering awareness of democratic principles and procedures, as well as highlighting the importance of civic and social participation in society.

Figure 2.14. Rates of voter registration down in some places, up elsewhere
Percentage of the voting age population (all persons aged >18 years) who are registered to vote, 1950, 1980 and 2010 (or nearest year available)



StatLink  <http://dx.doi.org/10.1787/888932758093>

Note: The proportion of voting age population in each country who are registered to vote exceeds 100% in some cases due to (inter alia) citizens with voting rights who do not reside in that country, and poor management of voter lists. It is also important to note that voting age population data includes individuals who are not eligible or able to vote, for example those who are residents but not citizens, or who have a prior felony conviction.

Source: International IDEA (2012), *Voter Turnout Database*.

And education?

- Developing responsible, active citizenship is fundamental to any system of education. What should be the specific role of schools and universities in fostering civic literacy?
- Should schools help build the attitudes necessary for student empowerment by giving pupils more opportunities to be heard, participate and collaborate in school decision making?
- How might schools pro-actively provide opportunities for students to take part in democratic exercises, such as student councils, youth parliaments, and model United Nations?

NOTES

1. OECD (2012), “Are Large Cities Educational Assets or Liabilities?”, *PISA in Focus*, No. 17, OECD Publishing. <http://dx.doi.org/10.1787/5k962hdqjflr-en>.
2. Road Safety Fund (2011), *UN Decade of Action for Road Safety*, FIA Foundation and the World Health Organisation, online, <http://www.roadsafetyfund.org/TagSymbol/Pages/default.aspx>, accessed October 2012.
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The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Definitions and measurement

- **Armed forces personnel:** Armed forces personnel are individuals on active duty within the military, including paramilitary and others involved in training and organisation of these personnel and in the provision of equipment. The total labour force is all economically active persons under the definition of the International Labour Organisation.
- **Body Mass Index (BMI):** Body Mass Index (BMI) is a calculated measure to classify adults as underweight, normal weight, overweight or obese, and is expressed as kilograms per square metre. The ranges for each of these classifications used here, consistent with WHO definitions, are underweight (<18.5), normal weight (18.5-24.99), overweight (25-30) or obese (>30).
- **BRIC countries:** The BRIC grouping of countries includes Brazil, the Russian Federation, India and China. The broader group acronym BRIICS also includes Indonesia and South Africa.
- **Caloric intake:** Caloric intake is the number of calories ingested; that is, the amount of calories in the foods and fluids an individual consumes.
- **Compulsory voting:** Where voting at an election is compulsory for all and has been regulated in constitutions and electoral laws. Some countries go as far as to impose sanctions on non-voters.
- **Health expenditure:** Total expenditure on health measures the final consumption of health goods and services, public health and prevention programmes, health-related administration and capital investment in health care infrastructure. Included are essentially all activities that involve the application of medical, paramedical and nursing knowledge and technology, from curing illness, to palliative care, to health promotion. The funds required to administer public health and health-related programmes are also counted. General public safety measures, such as technical standards monitoring and road safety are not considered part of expenditure on health. Activities such as food and hygiene control and health-related research and development are similarly not included.
- **Injury accident:** An injury accident refers to any accident involving at least one road vehicle in motion on a public road or private road to which the public has right of access, resulting in at least one injured or killed person. Injury accidents exclude accidents incurring only material damage, suicides and terrorist acts.

- **Military expenditure:** Military expenditure refers to all expenditure on the armed forces of a country, including those used for peacekeeping and paramilitary forces, within defense ministries, other government agencies engaged in defense-related projects and other organisations equipped to engage in military operations including in space.
- **One-person household:** Simply the act of providing for yourself alone. One-person households are those people who provide their own food, and other living essentials, without combining these activities or materials with any other person to form part of the alternative structure – namely, a multi-person household.
- **Particulate matter (PM):** The particulate matter is measured in micrograms per cubic metre in the air of urban residential areas of greater than 100 000 people. It is also known as PM10, which refers to fine suspended particulates that measure less than 10 microns in diameter and have the potential to cause significant damage to the respiratory system through deep penetration into the respiratory tract.
- **Potential years of life lost (PYLL):** Potential years of life lost (PYLL) is a summary measure of premature mortality. The calculation of PYLL involves adding age specific deaths occurring at each age and weighting them by the number of remaining un-lived years up to a selected age limit, defined here as age 70.
- **Prison population rate:** The prison population rate is the number of people incarcerated in a country per 100 000 people in the population. This correction for the population size enables cross country comparison.
- **Registered voters:** The IDEA provides data for both the number of people in each country who are registered to vote and the number of people in the resident population who are of legal voting age (voting-age population). The proportion of this voting-age population in each country who are registered to vote is calculated from these two indicators. It is important to note that the data does not take into account the existence of people who are citizens with voting rights but who are not part of the resident population in a country. Also, the voting-age population data includes people who are not eligible or able to vote for some reason, including those who are part of resident diasporas in a country but not citizens.
- **Total expenditure on health:** Data for the total expenditure on health is a sum of all public and private health-related expenditure, including the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health.
- **Urban agglomerations and megacities:** It is difficult to define the boundaries of the population of many cities. Rather than use the word “city”, the UN Populations Division refer to “urban agglomerations”, and define these as a de facto population contained within the contours of a contiguous territory inhabited at urban density levels, without regard to administrative boundaries. Further, these areas usually include both the city population and the inhabitants of the surrounding or adjacent suburban areas. The growth of city populations world wide over recent decades has led to the common use of the term “megacity” to describe those that are particularly large. In this context, large cities range in size from 5 million to over 20 million inhabitants.
- **Voter turnout:** Voter turnout is the total number of votes cast (valid or invalid) divided by the number of people registered to vote, expressed as a percentage.
- **Voting age population:** the number of people in the resident population who are of legal voting age.



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