



State of Our City Report 2004



A Time of Unprecedented Opportunity: Let's Get It Right!

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Sustainable Calgary takes full responsibility for the analysis and presentation of the information in this report.

Summary



This is the third Sustainable Calgary State of Our City report since 1998. After seven years we are beginning to get a better understanding of our collective achievements and challenges. To be sure, for some aspects of our community, it is hard to discern whether we are moving toward sustainability – information gaps still exist. But in many areas of our community we can now show steady gains and in others we are clearly stalled or faltering.

We continue to move toward sustainability in many of our community sector indicators and in our care for our natural environment. However, while our health and education systems are still strong and deliver high quality service, we see worrying signs in indicators related to these areas, and we cannot say with certainty that current trends are sustainable. We have not made significant gains in reducing resource consumption – our per capita use of resources remains unsustainably high. Since the 2001 report, our economic indicators have moved away from sustainability.

Many people see the current period in Calgary’s history and indeed, of the province, as a time of unprecedented opportunity. At the same time, the last *bust* remains in our collective memory and we are concerned that we not *blow it this time*. At Sustainable Calgary, we believe that if we cannot realize a clear directional change toward sustainability in this place and at this time, then no city can. In other words, few places on earth match the abundant social, natural, and financial capital that we have at our disposal to make the transformation to a vibrant, healthy city.

In this report we are calling upon Calgarians to dream big, to embrace the challenges of local and global citizenship, and to take bold decisive steps that will put us on a clear path toward sustainability. An assessment of the 36 indicators presents us with two key challenges. The most critical challenge we face is how to create an economy where not only the average Calgarian, but every Calgarian, has the opportunity to prosper and share in our city’s good fortune. A second challenge is how to shift to more socially, ecologically, and economically sustainable forms of community design, land use, mobility, and infrastructure provision – what some call Smart Growth.

Over the past eight years we have seen the growth of a critical mass of citizens, planners, politicians, and civic organizations who recognize the need to think long term about the future of our community. As a follow-up to the 2004 report, Sustainable Calgary will be inviting citizens to discuss and debate what changes we need, what policies we need to make those changes happen, and what actions we need to take now – in short, a Citizens’ Agenda for the Transformation to a Sustainable Community.

A new feature of this year’s report is the Citizens’ Dialogue. We have invited a group of prominent Calgarians to comment on the 2004 report. We hope these commentaries, along with the assessment of the indicators, will spur debate, dialogue, and the enthusiasm to create a Citizens’ Agenda for Calgary.

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Sustainability Trends



Sustainability trend information for each indicator is located in the upper right-hand corner of the indicator pages. There are three different trend designations.

- ☺ Trend is sustainable or is moving toward sustainability.
- ☹ Trend is far from sustainable or is moving away from sustainability.
- ☺ There is no discernible trend.

When designating the trend, several criteria were taken into account. Is the indicator currently at a sustainable level? Is the indicator moving toward or away from sustainability? Is the pace of change of the indicator such that it will reach a sustainable level in a reasonable time? The answers to these questions are necessarily subjective. The indicator project team has reviewed each indicator thoroughly and debated what the information is telling us before reaching agreement on what we believe the trend to be. After reading the report, you may or may not agree with our assessments. We hope you will agree that the report is an effective call to dialogue and action on our common future.

List of Indicators



Introduction to Community Sustainability	6
Is Calgary Sustainable?	9
A Call to Action	11
Our Process	12
Citizen’s Dialogue	13
Community Indicators	21
☺ Crime Rate & Rate of Victimization	22
☺ Leisure Activity.....	23
☺ Membership in Community Associations	24
☺ Number of and Attendance at Public Festivals.....	25
☺ Sense of Community.....	26
☺ Valuing Cultural Diversity	27
☺ Volunteerism	28
Economic Indicators	29
☺ Economic Diversification – Oil and Gas Reliance.....	30
☹ Food Bank Usage	31
☹ Hours Required to Meet Basic Needs at Minimum Wage	32
☹ Housing Affordability	33
☺ Income Equity: Gap between Rich and Poor.....	34
☺ Unemployment Rate	35
Education Indicators	36
☺ Adult Literacy	37
☺ Daycare Worker Salaries and Turnover	38
☺ Grade Three Achievement Scores.....	39
☺ Library Use.....	40
☹ Average class size	41
Natural Environment Indicators	42
☺ Air Quality.....	43
☺ Bird Population Surveys	44
☺ Food Grown Locally	45
☺ Pesticide Use.....	46
☺ Surface Water Quality.....	47
☺ Water Consumption	48
Resource Use Indicators	49
☺ Domestic Waste	50
☹ Ecological Footprint.....	51
☹ Energy Use.....	52
☹ Population Density	53
☺ Transit Usage for Work Trips.....	54
☺ Transportation Infrastructure Spending.....	55
Wellness Indicators	56
☹ Access to Primary and Alternative Health Resources.....	57
☺ Childhood Asthma Hospitalization Rate.....	58
☺ Healthy Birth Weight Babies.....	59
☺ Self Rated Health	60
☹ Support for the most vulnerable	61
☹ Youth Wellness.....	62

Introduction to Community Sustainability



"We stand at a critical moment in Earth's history, a time when humanity must choose its future,... We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life and to future generations." (*The Earth Charter*)

In 1992, the largest gathering of global leaders in the history of the world took place at the Earth Summit in Rio de Janeiro, Brazil. Preparations for this event consumed tens of thousands of people from all over the planet for two years. The focus of the meetings was to discuss an agenda for change. The Earth Summit was motivated by worldwide concerns about the twin scourges of poverty and environmental destruction and the desire to reshape our economies to eradicate both. This new vision of how the peoples of the world might live together within the limits of nature was called *sustainable development*.

As a first step toward the goal of sustainable development, the world's peoples and nations signed treaties, conventions, charters, and declarations that commit us to action. These foundational documents include Agenda 21 – Global Programme of Action on Sustainable Development, and various conventions to protect biological diversity, to combat desertification and to take action on climate change. Not only were the government of Canada and Canadians signatories to these documents, but individual Canadians, and our government, played a pivotal role in creating them.

Through these international agreements we have accepted certain obligations as our part in creating a sustainable world. In 1996 a group of Calgarians took up the challenge of fulfilling these obligations locally, in our own small way, through Sustainable Calgary.

Community Indicators project

"If a city measures success solely in traditional terms like job growth, housing starts and new road construction, it may interpret growth in these numbers as a rosy picture of a vital place to live in but end up with sprawl, air pollution and a dying downtown." (*Redefining Progress, Sustainable Seattle. 1997*).

At the Earth Summit, world leaders and regular citizens alike recognized that to achieve the goals we had set, we needed to measure our progress. Since 1992, many communities have learned that the conventional ways of measuring progress, which rely on a narrow set of economic indicators, are not adequate. Sustainability reporting moves beyond these conventional economic indicators and focuses on the need to bring a broad range of social, ecological, and economic indicators into our decision-making processes without reducing everything to dollars and cents. Around the world hundreds of community indicator projects are underway in places as diverse as Seattle, Austin, Boston, Venice, Melbourne, Toronto, and Edmonton. Many are designed, researched, and coordinated by community members themselves.

What Is a Sustainability Indicator?

When one tugs at a single thing in nature, you find it attached to the rest of the world. (John Muir, Conservationist [1838-1914])

An indicator helps us understand where we are, which way we are going and how far we are from where we want to be. A good indicator is an early warning of an emerging problem and helps us recognize what needs to be done to fix it.

What distinguishes a sustainability indicator is its ability to illuminate the interconnections among systems. Each of the indicator descriptions in this report includes a section on Linkages. A linkage is a direct or indirect relationship between two or more systems, where changes in one affect the status of another.



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Principles of Community Sustainability

A Sustainable Community:

1. Maintains or enhances ecological integrity. A sustainable community lives in harmony with the natural world. It protects the air, water, soil, flora, fauna and ecosystems that it depends upon for its survival. These are the life support systems for all human communities.
2. Promotes social equity. In a sustainable community each and every citizen is afforded access to the benefits and opportunities that a community has to offer without social or economic discrimination.
3. Provides the opportunity for meaningful work and livelihood for all citizens. A strong, resilient and dynamic local economy is essential for community sustainability. A sustainable economy provides the opportunity for meaningful work and livelihood for each and every citizen.
4. Encourages democratic participation of all citizens. We live in a democracy. The bedrock of a democracy is citizen participation in the functioning, planning and decision-making of society. In a sustainable community, participation is both a right and a responsibility and should be available to every citizen.

What Do We Want to Sustain?

To be successful, we must understand the ends we want to achieve and the means we choose to achieve those ends. The goal of a sustainable community is to achieve a high quality of life. The qualities we seek to achieve include love, comfort, health, education, physical sustenance, adequate shelter, meaningful work, caring relationships, spiritual meaning and a sense of belonging, diverse natural areas, and clean air, water, and soil. In a sustainable community, the means to attain these qualities is through the most efficient and wise use of time, effort, and resources.

For a long time now, economic growth has been the means we have chosen to achieve good quality of life. Sustainability reporting helps us examine whether economic growth is the appropriate means through which to achieve our desired ends. Perhaps a more fitting model, one that reflects the natural world, is a state of dynamic equilibrium where change, innovation, and development are possible and desirable, but are not dependent on constant growth.

Key to sustainability is the relationship between lifestyle and quality of life. Most Calgarians enjoy a high quality of life. High levels of resource consumption characterize the particular lifestyle that supports our quality of life. Sustainability reporting challenges the community to examine whether this lifestyle is sustainable for the long term and, if not, what changes can be made to create a sustainable lifestyle that can deliver an equal or greater quality of life for our children, grandchildren, and future generations.



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What Would a Sustainable Community Look Like?

A sustainable community would be resilient, self-reliant, creative, and resourceful. A sustainable community understands that there are limits in a finite world and lives within its economic, social, and ecological means. A sustainable community fosters ethical behaviour and stewardship of the natural environment, and takes seriously its rights and responsibilities. In a globalizing world, all human communities are becoming more and more interconnected. A sustainable community seeks to achieve balance and fairness in its relations with all other communities, wherever they may be.

Is Calgary Sustainable?



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The 36 indicators of community sustainability provide a diverse picture of the state of our community. On the whole, Calgarians are building a strong, diverse, creative community in a clean natural environment, and we are relatively well educated and healthy – but our use of natural resources is wasteful and costly, and the inequities in our community are making life difficult for growing numbers of us.

Our research suggests that current trends in our community sector indicators and our natural environment indicators are sustainable. The community sector indicators are among the most promising, with some qualifications. The number and diversity of festivals in our city continues to grow, as does our participation in those festivals. Calgary boasts the highest volunteerism rate in Canada, and our survey of Membership in Community Associations suggests an increase in community participation since 2001. The incidence of crime in our city continues its long-term decline in statistical terms, and Calgarians are generally feeling safer. Leisure and work indicators confirm our self-image as a community that works hard and plays hard, but the combination is resulting in greater levels of stress and neglect in other areas of our lives. There seems to be a growing realization of the diversity of our community and the benefits that diversity brings, but this has yet to translate into a representative diversity among our politicians, media personalities, and community and business leaders.

Over the past decade we seem to have turned the corner toward a more sustainable natural environment. Surface water quality has been steadily improving and the city has received high marks for its water treatment system and its wetlands conservation program. More locally-grown food is reaching the city through a growing number of community gardens and farmers markets. Our water consumption remains relatively high but has decreased significantly, and our attention to the issue promises sustainable levels of consumption in the foreseeable future. We have reduced the intensity of pesticide application, but overall, amounts applied within our city are increasing and there are only two pesticide-free parks in Calgary. Air quality is generally very good but improvement seems to have stalled. Relatively healthy bird populations attest to what is, all in all, a trend toward a sustainable local natural environment.

Based on our research, we cannot say with any certainty that current trends will result in a sustainable health and education system. Vigilance and continued improvement are the watchwords. The education sector is generally in good shape. Lifelong learning continues to be an important aspect of life in Calgary, with citizens making more and more use of our libraries. Grade three achievement scores continue to indicate a strong start to our children's academic lives. Class sizes are still generally too big, although there are signs the system is responding to this problem. Adult literacy statistics are too infrequently collected to give us a clear picture of how we are doing in this vital area. Salaries for daycare workers have seen some improvement in the past three years but with turnover rates of 45 percent, well above the national average, we have a long way to go in providing sustainable early childhood education.



While Calgarians generally enjoy good health and longevity, there are worrying signs in terms of access and equity in the system. Our indicators suggest potential problems for our youth and the most vulnerable in our community. Asthma rates are still very high and asthma remains the number one reason for school absenteeism. As many as 37,000 children in Calgary could be suffering from asthma. Obesity in younger children and a decreased sense of purpose among older youth are causing concern that they may not enjoy the relatively healthy lives of their parents. Despite a universal recognition of the importance of preventive health care, the proportion of resources we devote to it has been decreasing. Self-rated health responses have remained relatively stable over the past eight years, but low-income and less educated Calgarians continue to rate their health in less positive terms.

Our economic and resource use indicators suggest that we have not made significant progress in these areas over the past decade and we are moving away from sustainability. Two of our biggest challenges are the significant inequities in our community and the unsustainable rates of resource consumption.

While we have performed admirably in keeping our air and water clean, we have not addressed our costly resource consumption. Our energy consumption is among the highest in the world and growing. The number of Calgarians using transit to get to work has stalled. We have not made a decisive shift in funding toward a transit-, bicycle-, and pedestrian-oriented transportation system. Our city continues to sprawl. While we are making progress on domestic waste, we continue to put more material into our landfills every year.

Our economic indicators present us with an interesting paradox. The economic indicators in our report highlight most clearly the difference between a sustainable economy and business as usual. The conventional analysis is that our economy is strong and firing on all cylinders. Our economic indicators, however, point out that there is more to our economy than average incomes, low taxes, high personal consumption, and corporate profits. More people are using food banks, living on the streets, struggling to find affordable housing, and earning incomes or receiving social supports that do not even come close to providing basic needs.

Employment is strong, salaries are rising, and our province is debt-free – but is it? Our indicators suggest that the economic restructuring of the past decade has left us with a social debt to the most vulnerable in our society. They have paid dearly in order to balance the books of our province and our city. Through our unsustainable consumption of natural resources, we have also incurred a debt to the ecological support systems that ultimately all human communities depend on. With a provincial and city economy that is bursting at the seams, growing inequities are a black eye on our community. We have the capacity to change this, but we have not made a conscious decision, as a community, to do so.

A Call to Action



Calgarians have made their mark around the world as entrepreneurs and traders. Now is the time to make our mark as citizens of the world. Do we want to be the best conventional city or do we want to lead the transformation toward sustainable cities? At a household level, we make decisions to renovate when the resources are there and the time is right. As a city, now is the time for that big renovation. Our family is growing and our bank account may never again be as healthy as it is currently.

Recognizing the need to act decisively, Sustainable Calgary has embarked upon a new project – A Citizens’ Agenda for the Transformation to a Sustainable Calgary. In the coming months, as a follow-up to the 2004 report, Sustainable Calgary will invite citizens to discuss and debate what changes we need, what policies we need to make those changes happen, and what actions we need to take now so that in years to come we will have a safe, vibrant, and healthy community for ourselves, our children, and our grandchildren.

Sustainable Calgary has also convened a Citizens’ Forum to bring a broad cross-section of community organizations together to work toward a truly sustainable city. The first focus of the Citizens’ Forum will be Smart Growth. As the city grows, we need to ensure that we can create an inclusive community where all citizens enjoy its benefits. By growing smarter, we can reduce our energy and water consumption and suburban sprawl, we can create a more efficient transportation system, and we can put into place infrastructure that will be efficient and flexible as the city evolves in ways we cannot predict.

Calgary has a rich and colourful history. First Nations lived near the confluence of the Bow and Elbow Rivers for thousands of years. European settlement began in the 1870s with whiskey traders, missionaries, and Northwest Mounted Police. For most of its 125 years, Calgary has been an indisputably brash, hard-nosed frontier town. In the past 20 years that image has begun to change, especially with respect to the arts, our relationship to the environment, and our economy. Calgary is maturing. Human creativity, ingenuity, and passion are opening new doors to technology, to a more cooperative relationship with the natural world, and to a renewed desire for caring and nurturing communities.

We invite you to read this report, to share it with friends, to discuss and debate it with neighbours and work colleagues, and to join us in making good on the promise of a sustainable Calgary for the 21st century.



While producing this report was an important goal, the process of developing this tool is equally valuable. Experience with sustainability reporting suggests that the way to attain a set of indicators that is truly meaningful, useful, and representative of our city is to involve a broad cross-section of citizens in the indicator selection process. This helps develop new understandings of issues and new insights into potential solutions. The small businessperson begins to understand the ecological impacts of packaging choices, while the social worker sees new linkages between jobs, poverty, and habitat preservation.

Indicator Selection Criteria

1. Is the indicator consistent with our Sustainability principles?
2. Does the indicator link economic, social and/or ecological factors?
3. Will people understand and care about this indicator?
4. Will this indicator trigger action?
5. Is this indicator responsive to interventions?
6. Is there a way to accurately measure this indicator?
7. Is the data for this indicator cost effective to collect?
8. Is this indicator comparable to other reference points and standards?

Over 2000 Calgarians participated in the creation of the first two State of Our City reports. Our project team coordinated dozens of presentations and workshops across the city among groups as diverse as Rotary Clubs, City Council, the Developmental Disabilities Resources Centre, and various community associations.

In a tremendous volunteer effort, citizens led the way in choosing indicators, researching the data for each indicator, and writing the State of Our City reports. In the final analysis, the 36 indicators documented in this report were chosen in a democratic process open to all who had participated in the project.

Through their participation, citizens connected with city planners and transportation engineers, social planners, and aldermen. They learned the inner workings of the city and the complexity of the issues we face. They came to a greater understanding and appreciation of the concept of sustainability, and they formed new friendships and supportive networks.

In the first two reports we established a set of 36 indicators. The focus of the volunteer participation in this year's report was the 30+ volunteer researchers who gave generously of their time to update each of the indicators. The enthusiasm they showed for the project and the research they delivered to the project coordinator was exemplary.

With this report, Sustainable Calgary continues to be a catalyst for community-based indicator research. The Sense of Community indicator initiated by Sustainable Calgary continues to be refined, with the City of Calgary taking the lead on this initiative. This year Sustainable Calgary volunteers once again conducted original research to collect data on Valuing Cultural Diversity, Membership in Community Associations, Attendance and Participation at Public Festivals, and Food Grown Locally.

Citizens Dialogue



To generate debate and discussion around sustainability issues in Calgary we invited a group of prominent Calgarians and experts in the field of urban sustainability to comment on the 2004 State of Our City Report. Commentators were asked to respond to the report's findings and highlight the most critical issues that Calgary must address as we move towards a sustainable future. We hope that this Citizen's Dialogue inspires further discussion and action as Sustainable Calgary launches its citizen engagement initiative, *A Citizens' Agenda for the Transformation to a Sustainable Calgary*.

"Discussing sustainability is critical to the future of our city. This independent community perspective on Calgary's sustainability complements our efforts underway through the ImagineCalgary initiative." *(Dave Bronconnier Mayor, City of Calgary)*



Hon. Mike Harcourt
Chair, External Advisory Committee on Cities and Communities

Any effort to change the way a society thinks and works depends on early adopters to blaze the trail and create a living example for others. When the story of Canada's sustainable development transition is eventually told, Calgary will stand out as a city that coped with its share of challenges, and has come into its own as a community that could help point the way for others.

By documenting that effort in its triennial State of Our City Report, the Sustainable Calgary Society has done us all a great service. The Report is a solid reference point for some of the steps that communities must take along the road to sustainability, and for the type of review and measurement required to translate our fond hopes and best intentions into effective action.

It's all the more impressive that the Report is produced by a very committed group of volunteers. By their efforts and expertise, members of the Sustainable Calgary Society have demonstrated the role that civil society can play in the New Deal for Cities and Communities – a new partnership among federal, provincial, territorial and municipal governments aimed at changing the way of doing business and improving the quality of life in cities and communities. Civil society involvement is not an optional element of the New Deal—we see it as a key success factor that brings a new vibrancy to our work.

Precisely that vibrancy is reflected in this year's report, with the launch of an ambitious citizens' dialogue on Calgary's longer-term sustainability needs. I eagerly await the results of those deliberations.

As Chair of the federal government's External Advisory Committee on Cities and Communities, I can see a broader context for the work going on in Calgary. Many other Canadian communities have embarked on a similar path—which means Calgary can reach out to an innovative network of peers and practitioners who will be eager to share, explore and learn together. I salute Mayor Dave Bronconnier's leadership role in seeking a



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sustainable Calgary and in encouraging civil society's participation in this process.

Based on the activity we see across the country, the External Advisory Committee has agreed on four pillars of sustainability that will underpin the New Deal and the transition to sustainable cities and communities. In addition to the environmental, economic and social factors put forward by the World Commission on Environment and Development, we believe culture will be a key determinant of our success. And I applaud my fellow Advisory Committee member and the cultural sub-committee chair, Colin Jackson, President and CEO of the EPCOR Centre for the Performing Arts, for his work in weaving culture through the pillars of sustainability.

We also understand that the interpretation of the four pillars will necessarily vary by community. That's why we want to tailor the New Deal to smaller centres, medium-sized towns, and the larger gateway cities that account for a substantial share of Canada's international trade and serve as access points for the communities that surround them.

With our own work as a reference point, it's thrilling to see a local initiative that defines smart growth as a shift "to more socially, ecologically and economically sustainable forms of community design, land use, mobility and infrastructure," and cites social equity, meaningful work and democratic participation as sustainability goals on a par with ecological integrity.

This is precisely the kind of local experience and insight that can give depth and texture to our policy work and put a solid foundation under the ideas and concepts we've brought forward. A single document that brings together the latest local indicators in areas as diverse as resource consumption, surface water quality, urban sprawl, asthma incidence, literacy rates and participation in community festivals reflects the kind of inclusive vision that will help make the New Deal a reality. And as a starting point for citizen engagement, it's hard to imagine a better call to action than the words in this report: "Calgarians have made their mark around the world as entrepreneurs and traders. Now is the time to make our mark as citizens of the world."

For all these reasons, I am deeply grateful for the obvious effort and dedication that went into the State of Our City Report. Like any good written work, the Report has left me looking forward to reading the next installment, and to hearing more from the Sustainable Calgary Society in the weeks and months ahead.





Cesar Cala
Ethnocultural Council of Calgary

What makes a community sustainable? A community is propelled by the dreams, values, attitudes, wisdoms and behaviours of its members and of its public and private institutions. For it to be sustainable, a community needs a citizenry that is engaged in the shaping of their present and in their future and concerned over the welfare of their neighbours. It needs a citizenry that takes seriously its stewardship of the community's life-base. Most importantly it needs a citizenry whose notion of a good life is one that can be shared by all, that privileges all, that can be sustained and supported by the community's natural and social resources.

Sustainability means not having to apologize to future generations because we have squandered what we have in the present and left behind for them a blighted ecological and social landscape.

Calgary is at a crucial crossroads on the question of sustainability. Our population is nearing the million mark – making issues like resource use and urban sprawl all the more urgent. We have become a more diverse city, in terms of cultural, ethnic, and social composition of our population, highlighting the need to be more inclusive. We have become more thoughtful about what we want the city to be at this juncture and in the future. Sustainable Calgary is part of that growing thoughtfulness.

But being at a crossroads means that we as a community need to decide which paths to take. To be sure, our current ways of life are pushing us, consciously or otherwise towards particular paths, as the indicators in this report are telling us. Are these the directions we really want to go? Our economy is robust but are we becoming a more caring community? Our sense of community is getting stronger but are we investing enough in our children? Our natural environment is still relatively healthy but are we at the point of messing it up?

Calgary is proud of its growing diversity, as evidence that we are not the mono-chromatic, single-industry town that we are often pictured outside. But diversity is something that we haven't fully understood and tapped. We have to go beyond the mere recognition that we are diverse, that we come from different ethnic, cultural and social backgrounds. It is not enough just to acknowledge our differences and continue to live and occupy our own parallel universes. The question is what do we do with our diversity? We need to establish the common ground that defines us as a community - the things that define the way we interact, engage, get involved, contribute to and partake of the common good, and the ways in which our public institutions serve and govern us. The first step in diversity is inclusion. Are we there yet? The indicators in this report say not yet fully. The bigger challenges are the next steps, which are the fostering of meaningful interaction and participation.

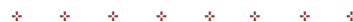
As I was reading the report, one thought came to mind. Individual indicators are not sustainable by themselves. Our community is one organic



whole and indicators are snapshots of parts connected to that whole. This means that even if some aspects of our community are healthy, the challenges posed by the other aspects may ultimately endanger the sustainability of the entire community. For instance, our growing income disparity and the increasing insecurity of our most vulnerable will at some point affect the more positive prognoses of our community sector indicators. Even the strength that we derive from the growing ethnocultural diversity, unless coupled with stronger awareness of the importance of a robust local economy, can result in bigger dependence on goods produced elsewhere, especially of food.

In the same vein, we can use our strengths, based on these indicators, to find ways of addressing the growing issues and challenges our community faces. How can we bring our “strong, diverse, creative and relatively well educated community” to bear on growing social inequities? How can we use the awareness that our environment is still relatively healthy to make changes in the way we consume and use our natural resources?

Lastly, the role of public policy in encouraging sustainability is fundamentally important. My suggestion is for us to have “listening posts” on key areas to give us an indication where economic, environmental and social policies are heading. What “landmark” policy discussions and decisions should we be closely following and participating in? How can we be meaningfully involved in the crafting of these policies?



Ruth Ramsden-Wood
President
United Way of Calgary and Area

On behalf of United Way of Calgary and Area I am pleased to provide a review of Sustainable Calgary’s 2004 State of Our City Report. United Way of Calgary and Area shares your vision of a sustainable community, which supports our fundamental belief that for a city to be truly great it must be great for everyone.

As you have requested that my comments be brief, in reviewing the Report I have focused on social issues. Indicators chosen for this purpose were community sector, economic, education and wellness indicators.

The Linkages sections play a valuable role in identifying the interconnect- edness of indicators. For example, within the homelessness section, link- ages to decreased sense of community, economic sustainability, food bank usage and income equity serve as an important reminder of the interconnectedness of all aspects of our economic, social and environmen- tal well being.

Poverty and lack of access to community resources are primary factors underlying the social issue categories which received neutral and



decreased sustainability ratings. Poverty is associated with lack of transportation, lack of free time and inability to pay user fees amongst economically challenged Calgarians, which underscores the decreased rating in leisure activities, sense of community and volunteerism. It also underscores decreased sustainability ratings in increased food bank usage, housing affordability, income equity, healthy birth weight babies, support for the most vulnerable and youth wellness. This highlights that although our community has one of the highest standards of living in the country, many Calgarians do not share in the opportunities and optimism for which our city is known.

An estimated 12.5 per cent of Calgarians (109,000 individuals or 1 in 8 Calgarians) were living below the Low-Income Cutoff in 2000. Approximately 30 per cent of people living in poverty do so for protracted periods of three years or more and the hardest hit are lone-parent mothers and their children, Aboriginal people, people with disabilities and immigrants who are visible minorities. The cost of poverty in Calgary is estimated to be upwards of \$500 million a year in lost income and social costs. Future versions of the Report might be enhanced by the inclusion of questions designed to create a clearer line of sight between poverty and its impacts in key areas. Questions to assess movement out of poverty and the impact of poverty on access to full democratic and social participation would be of value in helping us to assess Calgary's sustainability on this important social justice front.

Valuing cultural diversity is a second area that could be expanded in future to provide additional depth. Calgary is the fourth most ethnically diverse urban centre in Canada. According to the 2001 Census of Canada, Calgary's immigrant population of 197,410 made up 20.9 per cent of the total population. Over the past 20 years an average of 6,904 new immigrants came to Calgary each year from other countries. This section of the Report could be enhanced by the inclusion of a separate section measuring specific diversity indicators. For example: How many years does it takes for new Canadians to obtain employment in their field in Calgary? How many years does it take for new Canadians living in Calgary to achieve a standard of living comparable to Canadians born in Canada? What is the ability of new Canadians living in Calgary to access social and health services in their primary language?

Overall, I found the Report to be extremely well laid out, informative and easy to follow. The use of icons throughout is positive and aids comprehension. I will keep the summary, which provides valuable, condensed high level information, as a reference for future use. United Way will be able to reference this material in our work.

My sincere thanks to you and to your team for your hard work and dedication in creating and distributing this extremely valuable report.





**Murray Sigler
President & CEO
Calgary Chamber of Commerce**

Congratulations to those involved with the 2004 State of Our City Indicators Report. This document reflects many volunteers' time and energy, and harnesses the passion of grassroots Calgarians who strive to make their community a better place to live. This spirit is shared by more than 3,400 members of the Calgary Chamber of Commerce, including our Environment, Natural Resources, Civic Affairs, and other standing policy committees.

In a globally competitive environment, quality of life issues are increasingly important to attract and retain new businesses and employees. A clean environment, low crime rates, good schools, an efficient transportation system, and competitive taxes all play important roles to enhance Calgary's business advantage and encourage sustainable growth.

In the 21st century, maintaining Calgary's advantage will require an increased consideration of environmentally sound business practices. In fact, companies that address these issues in a proactive manner are likely to derive significant financial benefits.

For example, companies that invest in energy efficiency see a payback to the bottom line. It creates a win-win situation where companies save money, become more competitive, and reduce their environmental impact. Add to this the benefit of an enhanced company image, and you have a recipe for financial gain along with greater community sustainability. The Calgary business community needs to find more win-win situations like this. We have no doubt that Calgarians possess the innovative and entrepreneurial drive to find them.

Through participation in ImagineCALGARY, an initiative to create a 100-year vision for the City, the Chamber of Commerce hopes to continue the dialogue of "measuring what matters," and to discuss leading sustainable development practices within the business community. It is important for the community and for business to look ahead and define our long-term goals. We must monitor our progress, and correct our course to stay successful. The 2004 State of Our City Indicators Report is a reminder of the many things that keep our city great and make it a positive place for businesses to thrive!





**Professor Brian R. Sinclair, MRAIC AIA
Dean, Faculty of Environmental Design (EVDS)
University of Calgary**

To advance our lot in the context of our culture, our environment, and our times, demands new ways of seeing, thinking and acting. The great American intellectual William James once noted that "Genius means little more than the faculty of perceiving in an in habitual way." Calgary is at an important juncture, one that warrants our creativity, innovation, dedication and genius. To these ends, the Sustainable Calgary 3rd 'State of our City' report represents an important step in the appropriate direction.

As a native Calgarian, whose ancestors arrived to the city in 1884, I feel deeply connected to this unique place where the prairies greet the mountains. Returning back to Calgary in 2003, after more than a decade away, I have been impressed with the rich opportunities and exciting possibilities on our doorstep. Calgary is poised to become a global city, assuming leadership in many areas of urban settlement, economic development, and environmental sustainability. We are positioned well, for many reasons, to realize an urbanity that proves exemplary in the realms of quality of life, inclusion of the breadth of citizenry, and importance of design. To get to this point will necessitate some critical decisions being made, some major risks to be taken, and some real vision to be exercised.

Design is essential to our becoming a world class, attractive, competitive and successful city. Design by necessity is integrative and interdisciplinary. At its best design is holistic and inclusive, attending to a broad array of needs and wants while pushing the envelope in innovation and creativity. There are many areas of the city that must be attended to as we chart a promising future. Many of the indicators in the 'State of the City' are appropriate – touching upon the economic, environmental and social parameters that together contribute to a healthy and vibrant Calgary. One dimension that is vital, from my perspective, is the realization of more mixed-use development. The notion of messy vitality, whereby neighborhoods incorporate and celebrate a wide range of uses and users, is central. Clinical zoning, where land uses are separated and segregated, needs to be avoided. Attention must be directed to creating places and spaces that are diverse and dynamic, alive and exciting. Many European cities teach us that many types of activities, many types of people, and many types of buildings, can happily coexist. While we needn't directly imitate other models of city building, we certainly should consider models of successful urban design and be willing to employ the genius noted earlier to pioneer and ensure wonderful environments for Calgary.

Balance is an essential part of the equation. Rather than falling back into positions that are polarizing – black and white with no shades of gray – we need to explore the richness of possibilities before us. For example, we need to avoid the 'no growth' versus 'unbridled growth' debate. Instead, we need to converse, discuss and consider how we progress to maximum benefit. This likely means some version of smart growth where urban edge development and inner city intensification are both possible and



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necessary. Cities are intensely complex entities – their heavily interconnected parts demand systems thinking and cybernetical approaches. Fragmentation too often complicates our journey. Bureaucratization puts barriers on our path.

Tibetans refer to our desire to cut through illusion and dispel delusion. To achieve these ends they deploy a double-edged sword – one edge is wisdom and the other compassion. For Calgary to improve its record, to become a better city, to be more sustainable and exemplify a civil society, we must couple wisdom with compassion. It is not an easy task to shift a culture, to change a community, to make a difference. We need to employ potent methods. We need to conduct good research. We need to link evidence to decision making. We need to have knowledge shape policy. We need to connect art and science. We need to couple head and heart. We need to consider the range of stakeholders, their needs and their aspirations. We need to raise awareness, build excitement, secure resources, and garner commitments. We need to educate our citizens about the environment. We need to teach our children the value of design. We need to instill in Calgarians an appreciation for and expectation of excellent industrial, interior, architectural, urban and environmental design. We need to enlist communities, empower individuals, and evoke change. We need to aim high and commit ourselves to the challenges at hand. We need to open our eyes and our minds. We need to act responsively and responsibly. Calgary has remarkable potential and outstanding promise. A bright future beckons. Buckminster Fuller emphasized that “The best way to predict the future is to design it.”

Community Indicators



This section contains the following indicators

- **Crime Rate & Rate of Victimization**
- **Leisure Activity**
- **Membership in Community Associations**
- **Number of and Attendance at Public Festivals**
- **Sense of Community**
- **Valuing Cultural Diversity**
- **Volunteerism**

Highlights

Between 1998 and 2002, person crime rates declined 6.5 percent, while property crime rates declined 16.2 percent.

In 2002, 60 percent of Calgarians were physically active enough during their leisure time to experience health benefits.

In 2003, an estimated 19 percent of Calgary households were members of their community associations, slightly more than in 1999. Of all members, approximately 77 percent were registered in community programs.

In 2003, approximately 496,000 people attended ten major city festivals. Since 2001 several new festivals have emerged in the city, including Global Fest, Asian Heritage Month, and the Calgary Roots and Blues Festival.

In 2000, approximately 39 percent of Albertans volunteered, each contributing an average of 139 hours. These numbers have not changed significantly since 1997.

Crime Rate & Rate of Victimization



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The Facts

In 2002, the estimated person crime rate per 100,000 people in Calgary was 960. The estimated property crime rate was 5,950. Both of these numbers are lower than those for recent years.

Definitions

These statistics were drawn from the Calgary Police Service Annual Statistical Report: Person & Property Crimes 1998-2002 and the 2003 Calgary Police Service Citizen Survey. Person crime includes: attempted and committed homicide; street, financial, and commercial robbery; sex offences; assault; kidnapping; extortion; and harassment. Property crime includes: break and enter, theft, and fraud.

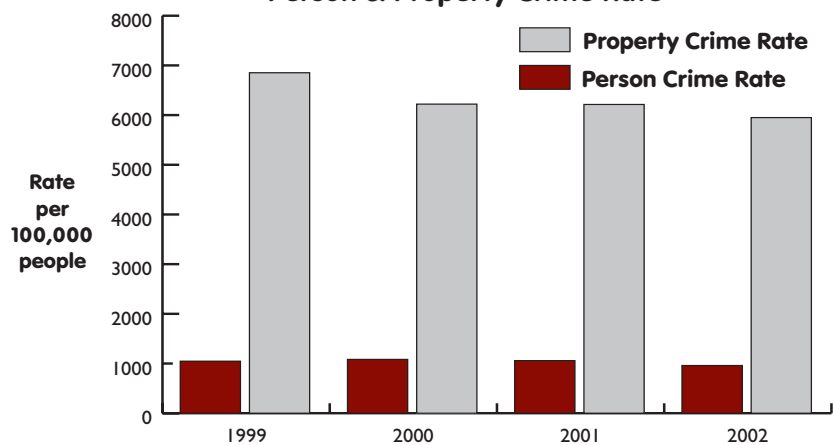
Trends

Person and property crime rates in Calgary have both been decreasing since the early 1990s, with a relatively rapid decline in more recent years. Between 1998 and 2002, person crime rates declined 6.5 percent, while property crime rates declined 16.2 percent. Rates of robberies, break and enters, and vehicle thefts, as well as the total number of assaults in the city, have dropped since 1998, while fraud and drug offences have both increased.

Since 1998, the first year that rates of domestic violence were documented, the total number of reported incidences has declined almost 4 percent. However, because domestic violence is notoriously under-reported, these statistics may underestimate the amount of domestic violence in Calgary.

On a per capita basis, rates of criminal charges against youth declined between 1997 and 2001. Although the rate is falling, Calgary has higher rates of youth-related crime than many other Canadian cities, including Vancouver, Toronto, and Montreal. The total amount of school crime has

Person & Property Crime Rate



decreased slightly since it was first recorded in 1997.

Calgarians' opinions about safety have become more positive over the past six years. According to the 2003 Calgary Police Service Citizen Survey, the percentage of Calgarians who believe crime is increasing in their neighbourhoods has declined 4 percent since 1997. The survey also reports that there has been a 4 percent reduction in respondents who feel 'very unsafe' walking alone after dark on Calgary streets and a 6 percent increase in those who feel 'very safe.'

Importance

A sense of safety is a key component of a sustainable community. Crime directly decreases the quality of life of victims through financial loss, physical injury, emotional trauma, and alienation. The repercussions of a crime spread beyond the immediate victim; parents, children, friends, co-workers, witnesses, and the community also suffer after a crime has occurred. Fear of crime can lead people to stay behind locked doors and resist stepping out into the community, whether to take a walk or to participate in community life.

Linkages

Crime costs millions of dollars each year and therefore affects the com-

munity's economic development. In areas hard hit by crime, housing prices drop and people who can afford it move to other neighbourhoods. Businesses bypass high crime areas.

Building healthy, caring communities is one of the best ways to prevent crime. Key factors in this approach include the provision of employment and educational opportunities, access to services, adequate housing, and accessible play and recreational facilities. Local gathering spots like community gardens can deter crime by building ties between neighbours and encouraging feelings of community ownership and pride.

Individual & Collective Actions

- Support agencies and programs that help develop local crime prevention through social development strategies, such as the Action Committee Against Violence and the Alberta Community Crime Prevention Program
- Get involved in constructive activities for youth.
- Get to know your neighbours and other community members.

Leisure Activity



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The Facts

In 2002, 60 percent of Calgarians were physically active enough during their leisure time to experience health benefits. This activity level is slightly lower than in 1999. Increasingly, Calgarians use the city's pathway system for exercise or recreation. Albertans have slightly more time available for leisure activity than most other Canadians.

Definition

Information about physical activity levels in Calgary was derived from the 2002 Alberta Survey on Physical Activity. Statistics about the usage of Calgary's pathways came from the City of Calgary's 2002 Pathwatch survey. According to the Alberta Centre for Active Living, Canadians should burn at least 2,000 kilocalories of energy each week through exercise to reduce the risk of heart disease.

Trend

Based on results from the 2002 Alberta Survey on Physical Activity completed by the Center for Active Living, Calgarians are slightly less active than they were in 1999. Physical activity levels have declined by 3 percent, with around 60 percent of the population burning at least 2,000 kcal of energy each week through exercise. Despite this decline, Calgarians remain more active than most other Albertans and are more likely to state that they can easily find places to exercise.

Data from the 2002 Pathwatch survey indicate that more and more Calgarians are spending their leisure time on the city's pathway system. The overall average hourly use of the pathways has increased by 54.2 percent since the first Pathwatch survey in 1994. Most pathway users walk (43.4%), cycle (37.9%), run (11.3%), and inline skate (6.3%). The most common reason for using the pathways is exercise (43%), followed by recreation (27%) and commuting (18%).

According to a 2004 poll by Leger Marketing, the average Albertan works 39.2 hours a week, just under the national average of 40.3 hours. Only residents of Quebec work fewer hours, at 38.3 hours per week. Of all the provinces, Albertans spend the least amount of time watching television and surfing the Internet during their leisure time (an average of 10.6 hours and 6 hours per week, respectively). They spend on average 11.7 hours per week with friends or doing family activities, a rate just under the national average of 12 hours.

The 2001 Canadian Mental Health survey found that 51 percent of Canadians consider work to be a moderate or major source of stress. A 2004 COMPAS survey reports that 80 percent of Canadians reported that work and professional responsibilities take away from personal and family time. In 2001 the Canadian Policy Research Network found that, compared to 1991, Canadians experienced higher levels of work-related depression and stress. Workplace stress induces employees to work longer hours, take work home, visit the doctor more frequently, and take more sick days. Stress-related absences cost Canadian employers \$3.5 billion each year.

Importance

Leisure time helps to create healthy, balanced individuals and communities. Physical activity, the reduction of stress levels, and the pursuit of hobbies promote physical, mental, and emotional well-being. People who lead rich, active lives in their leisure time often bring positive, productive energy to all other aspects of their lives. At the community level, leisure activity can help to foster social support networks and caring, vibrant communities.

Linkages

Leisure activities can be linked to ecological indicators. For example, according to the 2000 Alberta Recre-

ational survey, birdwatching is one of the fastest growing activities in Calgary. People who use Calgary's parks for activities like birdwatching are more likely to value natural spaces than those who do not. Some leisure activities are highly resource intensive, such as motorized sports, downhill skiing, and golf. While leisure is an essential part of a well-balanced life, the most sustainable leisure activities co-exist with natural environments.

According to the Alberta Centre for Active Living survey, income is an important determinant of physical activity. Albertans with annual incomes larger than \$100,000 report higher levels of leisure-time physical activity than those earning less than \$59,000. Unfortunately, this disparity in physical activity levels can lead to a disproportionate number of people from lower income brackets having health-related concerns such as obesity, diabetes, and heart disease.

Individual & Collective Actions

- Take up a new hobby.
- Accumulate 10,000 steps in total throughout the day.
- Take advantage of Calgary's extensive (~500km) pathway system.
- To reduce stress, bank time-off in lieu of overtime pay.



Membership in Community Associations



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The Facts

In 2003, an estimated 19 percent of Calgary households were members of their community associations, slightly more than in 1999. Of all members, approximately 77 percent were registered in community programs. Also in 2003, in a survey of seven Calgary neighbourhoods, approximately 13% of respondents stated that they sit on a board or a committee in their neighbourhood.

Definition

Membership information was gathered through a Sustainable Calgary survey of Calgary's community associations. Community associations were contacted by telephone, email, and fax, and of the 120 community associations surveyed, 36 (30%) responded. Statistics about board and committee participation were derived from a City of Calgary research initiative investigating the sense of community in the city.

Trend

In the 2001 State of Our City Report, our survey of 21 community associations (14% of Calgary's community associations) found that 16 percent of Calgarians were members of a community association in 1999. Membership rates have climbed slightly between 1999 and 2003, although the small sample sizes in each survey mean that it is difficult to make a conclusive statement about the magnitude of this increase.

Of the community associations that answered the 2003 survey, 10 percent more respondents had experienced an increase in membership over the past three years than those who had experienced stable membership numbers or a decline in membership. Those experiencing increases in membership were generally new, growing communities, while those facing declining numbers were often older communities or communities with limited access to financial and other resources.

Importance

Participation in the social and cultural life of a community is a necessary ingredient for sustainability. In Calgary one measure of such participation is membership in community associations. Calgary is unique in the status and responsibility afforded to community associations in large part because of their proactive history. Participation can enhance the amenities available in a community, including recreational facilities, schools, and meeting spaces.

Linkages

Community-level sustainability depends upon a strong sense of community that includes ingredients such as social support, neighbourliness, cooperation, shared visions, and trust. Our survey indicates that many households join their community association to take advantage of sports and recreational opportunities for themselves and their families. These activities can play a role in creating a level of familiarity with neighbours and building a sense of community. Community associations also give residents the opportunity to improve local neighbourhoods through volunteer involvement on environment, transportation, and planning committees.

Such participation facilitates a familiarity with neighbours and contributes to the creation of 'social capital' – the sum of our relationships that help us dream together and plan, coordinate, and carry out activities to achieve our goals. Every friendly nod, hello, or chat on the street corner builds social capital.

A feeling of belonging to a community develops over time. Surveys have shown that 30 percent of Calgarians have moved six or more times in ten years. This level of transience may inhibit a person's participation in community life.

Health Canada notes that people with stronger support networks and social contacts experience less heart disease and have lower premature death rates. Individuals who have a support network and a sense of community are also more likely to participate in community life. Additionally, a strong sense of community is self-perpetuating. Positive interactions increase opportunities for social, cultural, and economic benefits, which in turn reinforce one's sense of community.

Individual & Collective Actions

- Become an active member of your community association.
- Get involved in community recreation and leisure activities.
- Check out the Federation of Calgary Communities website: www.calgarycommunities.com.



Number of and Attendance at Public Festivals



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The Facts

In 2003, approximately 496,000 people attended ten major city festivals. Since 2001, several new festivals have emerged in the city, including Global Fest, Asian Heritage Month, and the Calgary Roots and Blues Festival.

Definition

Attendance information was obtained for ten major festivals in Calgary through each festival's office or website. The festivals included Calgary Folk Music Festival, Calgary International Children's Festival, Calgary International Film Festival, Calgary International Jazz Festival, Calgary Winterfest, Carifest, Enbridge playRites Festival, Lilac Festival, One Yellow Rabbit High Performance Rodeo, Shakespeare in the Park, and WordFest. Information about new festivals in the city came from Calgary Tourism and a review of online festival postings.

Trend

In 2003 attendance at many of Calgary's festivals was higher than in 2000, with significant jumps in attendance at the Calgary International Film Fest (400%) and WordFest (25%). For the few festivals that experienced declines in attendance, weather, new venues, or competing attractions like major sports events were the cause.

Alongside rising festival participation, the number of festivals in Calgary continues to grow, with Global Fest, Asian Heritage Month, and the Calgary Roots and Blues Festival among the most popular of the newer festivals. Other local festivals such as the Calgary International Film Festival, the Lilac Festival, and Funny Fest, have made significant contributions to Calgary's arts and cultural environment in recent years. Of important note is the overall increase in multicultural events in the city such as Global Fest and Asian Heritage Month. The emergence of such festivals suggests that Calgary's

festival scene is increasingly reflecting its culturally diverse population.

While the increasing numbers of festivals and festival attendance in Calgary is encouraging, of equal importance is the growing number of festivals that are free or offer free events. Festivals like the Lilac Fest and Winterfest enable all Calgarians to participate, regardless of income.

Importance

Arts and cultural development is directly linked to the sustainability of a community. Support for this type of development gives citizens of all ages and backgrounds the opportunity to develop their imagination, creativity, and awareness. These opportunities make a community more vibrant and attractive. Arts and cultural experiences often afford a new outlook to those who take part, whether as participant, spectator, or volunteer.

Beyond a certain level of material well-being, quality of life and happiness are less likely to be linked to higher income but rather to intangibles such as the enjoyment derived from creating and participating in the arts. A sustainable community places great value on the importance of the arts for finding and expressing meaning in our daily lives.

Linkages

Festivals are linked to a greater sense of community. According to Alberta Community Development, local festivals and special events can increase tourism, generate revenue, develop recreation opportunities for visitors, and develop a positive community image. These events also encourage Calgarians to volunteer. The Calgary Folk Festival, for example, relies on over 900 volunteers.

On the other hand, lower income families and individuals often find that festivals and other arts and cultural events are out of reach econom-

ically. If this becomes a common phenomenon, the full potential of the events as positive contributors to the community will not be realized.

At the provincial level, cultural events and festivals are an important part of Alberta's prosperity. The Alberta Foundation for the Arts states that "Alberta's economy significantly benefits from the work of artists and arts organizations – not only through expenditures and tax revenue, but also through export and tourism dollars. The competitive advantage of Alberta is increased by the arts, which can be used to market the province and make it more attractive for investors."

Arts and cultural events are unique in their ability to promote tolerance and appreciation of diversity. When a community supports a strong contingent of artists, there are multiple benefits. Artists contribute to lifelong learning opportunities (e.g., puppet-making workshops, music lessons) and to the arts in our school system.

Individual & Collective Actions

- Watch for and attend local performances, festivals, and exhibitions.
- Become a volunteer at your favourite festival.
- Support local artists, arts organizations, events, and funders.
- Help develop guidelines for environment-friendly and socially inclusive event planning.

Sense of Community



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The Facts

In 2001 and 2003 Calgary's Sense of Community Partners (Calgary Health Region, City of Calgary, Sustainable Calgary, The Calgary Foundation, and United Way of Calgary and Area,) surveyed Calgarians about their sense of community (SOC) using a set of 18 statements. In 2001, Calgary as a whole expressed an average SOC score of 75.2 on a scale of 0-100, where 100 is the best possible score. In 2003, 703 respondents from seven different Calgary neighbourhoods expressed an average SOC score of 72.2.

Definition

Sense of community is defined as the sense of belonging, fellowship, *welness*, or identity experienced in the context of a group or neighbourhood. While it is challenging to measure, the 18 statements used in the 2001 and 2003 surveys create a reliable index that reflects SOC. By exploring issues such as citizens' experiences with neighbourhood volunteerism, feelings of safety, and sense of belonging, the index is a tool that helps gauge the effectiveness of community programs, select communities in which to implement community development efforts, compare the levels of SOC between cities, and assess the social effects of controversial development projects.

Trend

Over the past four years, much progress has been made in Calgary in defining and measuring SOC. Initiated by the 2001 State of Our City Report, which called for the creation of a more direct measure of SOC, a working group formed to explore Calgary's SOC and suggest ways that it could be improved

Measuring SOC is a difficult task as no one statistic captures it in its entirety. While the 2001 and 2003 SOC surveys serve as a benchmark for future comparisons, they cannot be compared with one another since the

2001 survey explored SOC at a city-wide level and the 2003 survey focused on the phenomenon at the neighbourhood level. While the individual surveys suggest that Calgarians have a relatively high SOC, only after further application of the tool and comparison of different neighbourhoods and cities can the SOC in the city be accurately measured.

One important finding that arose from the seven neighbourhood-level surveys is that SOC varies considerably in Calgary, depending on the neighbourhood. With some neighbourhoods enjoying significantly higher SOC than others, these surveys suggest that citizens should be engaged at the local, neighbourhood level to improve Calgary's SOC as a whole.

Importance

An increased SOC makes Calgary a better place to live and work. Most people understand SOC intuitively. Yet it is a complex idea, composed of several elements – a feeling of belonging or membership, having influence on your community, being able to meet most of your needs through your community, and being emotionally connected with and committed to your community. We recognize it in neighbourly and friendly actions like waving, chatting, visiting, and borrowing and lending items, and assistance. These types of interactions often help us feel at home in our neighbourhoods and rooted within the larger city.

Linkages

SOC has both community and individual benefits linked to many spheres of life. Studies show that a strong SOC is related to greater feelings of safety and security and increased levels of voting, recycling, helping others, and volunteering. Individuals with higher SOC are shown to be happier and less worried, and have a greater sense of competence. A strong SOC is also related to

lower mental illness and suicide rates, less child abuse, higher quality of child rearing, physical improvements in neighbourhoods, reduced crime, and greater 'hardiness' among individuals. While it cannot be stated that having a high SOC always results in these outcomes, there appears to be a link between SOC and individual and community well-being.

Beyond this, studies have shown that SOC can have a significant influence on the relative success of economic development efforts. Strong, connected communities are more able to keep money circulating in the community, in effect 'plugging the leaks' in the local economy. Transportation is also linked with SOC. A good transit system can facilitate mobility, especially for youth, the disabled, and the elderly, allowing people to participate in community life more fully, and pedestrian-friendly streets invite more social interaction.

Individual & Collective Actions

- Get to know your neighbours. Try organizing an annual block party.
- Volunteer with agencies that assist those who are isolated.
- Join community and school organizations.
- Enhance your own support system.
- Check out the Calgary Sense of Community website at: www.calgary.ca/cs



Valuing Cultural Diversity



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The Facts

In 2004, of 232 positions within a selection of Calgary's most influential boards, councils, elected bodies, and media, 31 percent were held by women, 9.1 percent by visible minorities, and 0.9 percent by Aboriginal people. These groups make up 50, 19, and 3.3 percent, respectively, of Calgary's population.

Definition

Canada's Employment Equity Act defines visible minorities as "people other than Aboriginals who are non-Caucasian in race or non-white," and Aboriginals as "persons who are Indians, Inuit, or Métis." The corporate boards of directors examined for the indicator include five of the top private sector employers with head offices in Calgary (Petro-Canada, EnCana, ATCO, Nova Chemicals, and TransCanada). The five boards of directors in the non-profit sector include the Calgary Foundation, Calgary United Way, Volunteer Calgary, the Epcor Centre for the Performing Arts, and the Calgary Inter-Faith Food Bank. Elected officials in the survey include the 2004 Calgary Public School Board, Aldermen, provincial MLAs, and federal MPs. The media survey includes the supper-hour news anchors for each local television station, radio morning show anchors for the top five rated radio stations, and membership on the editorial boards of Calgary's two leading dailies. Demographic information was derived from the 2001 Canadian Census.

Trend

Since this indicator was last examined in 2001, some influential bodies have become more representative of Calgary's diverse population, while others have become less so. Relative to 2001, 60 percent more women now hold positions on the boards of major corporations. However, representation by women in government has fallen by 12 percent and on the boards of non-profits by 17 percent.

The proportion of high profile media positions held by women has remained stable since 2001, at 40 percent.

Compared to 2001, the number of people belonging to visible minorities on non-profit boards has more than doubled, and the number filling high profile positions in the media has more than tripled. However, 42 percent fewer high-profile government positions belong to people from visible minorities, and the boards of the surveyed corporations continue to have no representation from visible minorities.

Aboriginal representation in Calgary's major boards and organizations continues to be very low relative to representation in the total population. Aboriginal people held 2.4 percent of non-profit board positions and have no other representation among the surveyed corporate, media, or government positions.

A comparison of the proportion of visible minorities, Aboriginal people, and women holding leadership positions to the total populations of these groups suggests that Calgary still has far to go in ensuring equal representation of its citizens. In none of the sectors studied does representation match the demographic reality of Calgary's diverse population. Of all the groups surveyed, corporations have the lowest overall cultural diversity and gender balance.

Importance

The richness of community life is closely related to the diversity of its constituents. Our valuing of cultural diversity reflects the extent to which we, as a city, benefit from the diversity that surrounds us. As diversity increases, so does the breadth of our collective experience and creativity, as well as the quality of political debate.

As the fourth most common urban center for immigration in Canada, Calgary is strengthened by the diversity of its citizens. Beyond ethnic diversity, respect and acceptance of other differences (for example, sexual orientation or physical or mental ability) is an important mark of a mature society and is inherent to a sustainable society.

Linkages

Cultural diversity can enrich our city in many ways. For example, a diversity of cultural groups brings investment, business, employment, new art forms, restaurants, and unique skills and talents. Our diversity creates an exciting and cosmopolitan culture in Calgary.

Individual & Collective Actions

- Speak out when you see discrimination happening in your community or workplace.
- Make an effort to meet someone from a background that you might not otherwise encounter and be open to a diversity of ideas and perspectives.

Representation in Leadership Positions

Sector	# of positions		% Women		% Visible Minority		% Aboriginal	
	2001	2004	2001	2004	2001	2004	2001	2004
Non-Profit	82	85	46.0	38.0	7.0	15.0	2.4	2.4
Government	49	51	33.0	29.0	14.0	8.0	0.0	0.0
Media	30	35	40.0	40.0	3.3	11.0	0.0	0.0
Corporate	59	63	10.0	16.0	0.0	0.0	0.0	0.0
Totals	220	232	34.0	31.0	5.9	9.1	0.9	0.9

Volunteerism



☺ SUSTAINABILITY TREND

The Facts

In 2000, approximately 47 percent of Calgarians volunteered, representing an increase of more than 27 percent since 1997. Calgary has the highest volunteer rate in Canada.

Definition

These data are derived from the 2000 National Survey of Giving, Volunteering and Participation conducted by the Canadian Centre for Philanthropy. This indicator measures the rate of formal volunteerism among Calgarians 15 years and older. Formal volunteerism can be defined as intentional, organized participation in a volunteer or charitable activity. In contrast, informal volunteerism occurs at a more spontaneous level, when people casually assist friends, neighbors, and family members outside of their household.

Trend

This survey was last conducted in 1997, when an estimated 37 percent of Calgarians volunteered. With volunteerism rising 10 percentage points between 1997 and 2000, Calgary now has the highest volunteer rate in the country. Calgary is also one of only two Canadian municipalities to experience an increase in volunteerism since 1997.

According to a 2003 telephone survey commissioned by Volunteer Calgary, 87 percent of respondents said they have volunteered at some point in their life, and 56 percent are currently engaged in volunteer work, suggesting that rates of volunteering in Calgary could be even higher than those estimated by the Canadian Centre for Philanthropy.

Importance

The spirit of volunteerism is a defining characteristic of Calgary. It indicates the sense of belonging people have in their community, the responsibility they accept for it, and the care they afford it. Volunteers are the lifeblood of many organizations and pro-

grams. Without volunteers, many important initiatives, from Block Watch to literacy programs in schools, would struggle to survive. The actual effectiveness of work accomplished by volunteers is of top quality because it most often comes from a place of caring and concern.

On a personal level, volunteerism offers individuals the opportunity to gain a sense of satisfaction based on making a contribution to a cause or to their community. It is also an excellent way to make new friends, network, learn, and gain new skills.

Linkages

Volunteerism has been recognized as a significant contributor to our social capital. Unfortunately it is not captured in official economic statistics. Volunteer activity is often the catalyst for activities that contribute to the ecological sustainability of our community, such as habitat protection programs. Most city festivals rely heavily on volunteers, as do many lifelong learning programs and food banks. Our school system is also enriched by the contribution of parents on a volunteer basis.

Many individuals volunteer to learn a skill that will help them find a career and increase their contribution to the formal economy. Volunteer activity provides opportunities for exposure to the diversity of our community and thus contributes to the sense of tolerance within the community.

On a cautionary note, as education, health, and social services are withdrawn by government, volunteer levels may rise to fill the gaps. Volunteer activity may also mask a situation where valuable work in our community is not being recognized as important enough to be paid, and unemployed or underemployed individuals are expected to give of their time freely.

Individual & Collective Actions

- Volunteer your time.
- Support the adoption of economic measures such as the Genuine Progress Indicator that factor volunteer work into assessments of our economic well-being.
- Check the Volunteer Calgary website at www.volunteercalgary.ab.ca



Economic Indicators



This section contains the following indicators

- **Economic Diversification – Oil and Gas Reliance**
- **Food Bank Usage**
- **Hours Required to Meet Basic Needs at Minimum Wage**
- **Housing Affordability**
- **Income Equity: Gap between Rich and Poor**
- **Unemployment Rate**

Highlights

In 2001, Calgary's oil and gas sector contributed approximately 7 percent of the city's employment, 23 percent of the city's GDP, and 66 percent of the city's net exports.

In 2003, the Calgary Inter-Faith Food Bank Society (CIFB) gave out 51,820 hampers to 130,797 clients and provided \$2.6 million in food to over 120 city charities and non-profit agencies.

To meet basic needs at minimum wage in Alberta in 2003, a single Calgarian had to work 71 hours per week and a two-person family had to work 43 hours each per week.

At \$5.90 per hour, Alberta has the lowest minimum wage in Canada.

In 2003, the average unemployment rate in Calgary was 5.4 percent, and it has remained under 6 percent since 1997.

Economic Diversification – Oil and Gas Reliance



☺ SUSTAINABILITY TREND

The Facts

In 2001, Calgary's oil and gas sector contributed approximately 7 percent of the city's employment, 23 percent of the city's GDP, and 66 percent of the city's net exports, for a reliance index of 0.32 (1.00 being total reliance). Compared with previous years this number is down, indicating less reliance on the oil and gas industry.

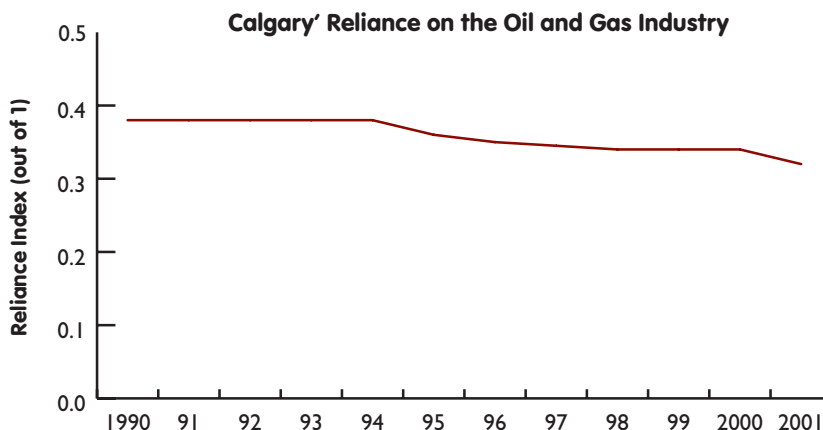
Definition

This indicator is derived by determining the oil and gas industry's influence on three areas of Calgary's economy: employment (the Conference Board of Canada Metropolitan Outlook Report, Winter 2003), contribution to GDP (the Conference Board of Canada), and net exports (Canadian Association of Petroleum Producers). These three values are reflected as percentages, tallied, and divided by 300 percent.

Trend

Calgary's economy appears to be becoming less dependent on the oil and gas industry. A significant decline in reliance has occurred since the late 1980s, when a large proportion of Calgary's employment, GDP, and exports were tied to the industry.

Reliance on the oil and gas industry has continued to decline in more recent years. Between 1999 and 2001, the reliance index decreased by 0.02. Though the influence of the industry on Calgary's employment and GDP actually increased during this period, greater diversification in net exports brought the index as a whole below 1999 levels. In particular, exports increased in the manufacturing sector, with values rising to \$2 billion in 2000. Other industrial sectors, such as wholesale, retail trade, and non-commercial services like tourism and education, have maintained a gradual growth rate and strong employment rate over the past few years and account for some of the diversification away from oil and gas.



Although its influence appears to be declining, the oil and gas industry continues to comprise a substantial part of Calgary's economy and can impact our city's economy in ways not measured by the economic diversification calculation. For example, related industries like engineering, exploration, drilling, and pipeline companies are not included in the economic diversification calculation but, together with the oil and gas industry, account for 8.9 percent of Calgary's employment.

Importance

A sustainable community values economic diversity just as it values cultural and ecological diversity. A diverse economy that does not rely on a single resource, employer, or sector is better able to withstand economic downturns and fluctuating market prices and can provide a stable environment for long-term community sustainability.

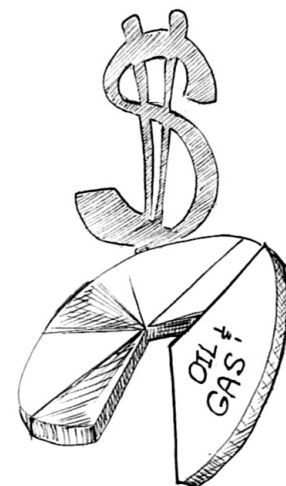
Linkages

Our sense of community is linked to business diversification. Boom-and-bust economies tend to promote more transience, making it difficult for people to put down strong roots. This type of economy also tends to have a negative effect on equity, as wealth becomes more concentrated during the boom periods, while bust periods are associated with increased crime rates and homelessness. In a

boom-and-bust economy it is especially important to maintain strong economic stabilizers for the bust times, including unemployment insurance and a progressive taxation system.

Individual & Collective Actions

- Support policies that strengthen the diversification of the local and regional economies.
- Support local and small businesses.



Food Bank Usage



SUSTAINABILITY TREND

The Facts

In 2003, the Calgary Inter-Faith Food Bank Society (CIFB) gave out 51,820 hampers to 130,797 clients and provided \$2.6 million in food to over 120 city charities and non-profit agencies. CIFB received 825,557 kg of donated food in 2002/2003. Food bank usage is increasing, though at a slower rate in recent years.

Definition

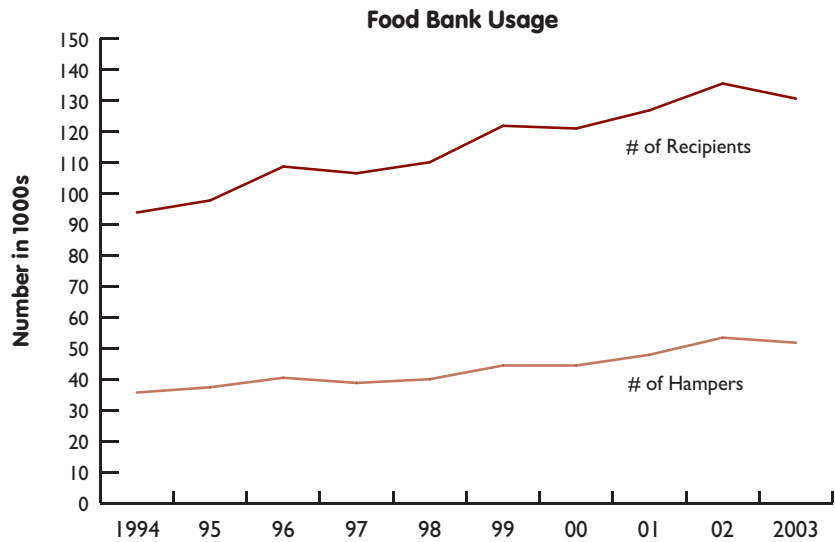
CIFB is a crisis facility that provides food from nine depots to Calgarians in times of financial trouble. Individuals and families can receive three hampers per year through self-referral and up to three more when they are referred by an agency or organization where they are participating in programs or services.

The CIFB has been tracking its distribution of food since 1992. The number of recipients measured in this indicator includes people who make multiple visits.

Trend

Food bank usage has climbed steadily since food banks first appeared in Calgary in the early 1980s, although the increase in usage has slowed in recent years. It is too early to determine whether this slowed increase is a short-term phenomenon or will continue into the future. Usage, measured by the number of hampers distributed, increased by 16 percent from 1994 to 1996, by 14 percent between 1997 and 1999, and by 7 percent between 2000 and 2003.

Between 1999 and 2003, the CIFB experienced a 25% increase in new clientele, with 17,583 new visitors requiring food in 2003. During this time, while the proportion of food bank users who are children fell from 45 to 41 percent, there was still a net increase of 2,680 children using CIFB services. Finally, a large proportion of those depending on food banks are wage-earners, comprising 38 percent of all food bank users in 2003.



CIFB's policy of requiring clients who need more than three hampers in a 12-month period to obtain a referral from a third-party agency has only recently been introduced and explains some of the drop in food bank demand in recent years. Through this change, CIFB hopes to ensure that its clients are receiving help from appropriate agencies to address their reason for using the food bank.

The Canadian Association of Food Banks reports that on a national scale, Alberta has the second lowest rate of per capita food bank usage, at just over 1.5 percent of the population. In comparison, approximately 6 percent of people from Newfoundland, 2.5 percent from Ontario, and 1 percent from the Yukon use food banks. Still, relative to other provinces Alberta had the second largest increase in food bank use between 1998 and 2003, at 33.6 percent.

Importance

Food bank usage indicates to what extent we are fulfilling our societal responsibility to more vulnerable citizens. Historically, food banks have been considered a temporary phenomenon, dedicated to resolving a food distribution crisis. Over time they have become a fixture in our

towns and cities. According to the Canadian Association of Food Banks, more than 750,000 Canadians used a food bank in March 2003 alone. From 2002 to 2003 food bank usage rose 5.5 percent across Canada. Single-parent families, families relying on social assistance, and off-reserve Aboriginal families are over-represented among the hungry.

Linkages

Research indicates that hunger has adverse impacts on the health of mothers and children and can result in impaired physical development and a lack of readiness for school. In families who depend on food bank support, parents often have to go hungry to try to provide for their children. CIFB cites a combination of low minimum wages, rigidly controlled and inadequate support payment structures for vulnerable groups, the high cost of public transportation, and the continuing scarcity of affordable housing in Calgary as key impediments to independent living for many of their clients.

Individual & Collective Actions

- In the short term, be generous to food banks.
- For long-term sustainability, support policies and programs that tackle the root causes of poverty.

Hours Required to Meet Basic Needs at Minimum Wage



 SUSTAINABILITY TREND

The Facts

To meet basic needs at minimum wage in Alberta in 2003, a single Calgarian had to work 71 hours per week and a two-person family had to work 43 hours each per week. These numbers have increased since 1999. At \$5.90 per hour, Alberta has the lowest minimum wage in Canada.

Definition

This indicator is derived by dividing Alberta's minimum wage of \$5.90 per hour into the before-tax Low Income Cutoff (LICO) levels established by Statistics Canada for various household sizes in cities of over 500,000 people. A low-income household is defined as one that requires at least 54.7 percent of its income just for food, shelter, and clothing. Additional expenses would include taxes, transportation, childcare, medical/dental premiums and services, and personal and household expenses. For this calculation it is assumed that an average work week is 40 hours, that an individual has two weeks of vacation a year, and that she takes all 13 statutory holidays.

Trend

Albertans working at minimum wage have to work longer hours to meet their basic needs than residents in any other province or territory. Since minimum wage was last adjusted in 1999 from \$5.65, the LICO has risen almost 11 percent. In 2003, relative to workers in 1999, a single Calgarian earning minimum wage had to work nine more hours each week, and a two-person family had to work a total of six hours more each week, just to meet their basic needs. In order to make ends meet on a regular 40-hour work week, a single Calgarian in 2003 would need to earn \$10.44/hour. A single parent with two children would need to earn \$13.31/hour.

Hours Required at Minimum Wage

Family Type	Hours of Work
Single Person	71 hours
Couple	86 hours
Single Mom / 2 kids	110 hours
Couple / 2 kids	133 hours

Nunavut provides Canada's highest minimum wage, at \$8.50/hour. With the exception of Alberta, all of the other provinces and territories have increased their minimum wages since 2001. Almost two-thirds of minimum wage workers in Canada are adults. Approximately the same amount are female, and nearly half have some post-secondary education. Fewer than one in five people earning minimum wage are young adults still living at home.

Importance

Equity is an important element of a sustainable community. Every member of the community should have the opportunity to have meaningful work for a reasonable wage. Adequately remunerated employment can increase self-sufficiency, decrease reliance on social programs, and, in the long term, reduce costs to society.

Over the past decade, the focus on public debt has meant cutbacks at all levels of government. These cutbacks have disproportionately affected the social service, education, and health sectors. Low-income people rely most heavily on these services.

Linkages

Long working hours over an extended period of time can lead to poor physical and mental health, including stress and substance abuse. Long working hours leave little time for family, community, physical fitness, lifelong learning, volunteer activities, or participation in local governance. For all these reasons, increasing minimum wage would

likely improve our overall sense of community.

In families where parents are working long hours for low wages, inequities are potentially exacerbated from one generation to the next. Parents who work long hours outside the home are less able to support the learning and development of their children. This can have an adverse effect on the opportunities of children to reach their full potential.

As inequity grows in a community, so does the risk of rising crime. Increasingly, low-income people experience reduced access to health care and educational programs, both of which often have hidden or additional costs. Low minimum wage can be a disincentive to work when the income is not enough to cover costs like transportation and childcare.

Individual & Collective Actions

- Support a significant rise in the minimum wage.
- Support a more equitable tax system.
- Support the provision of affordable housing, childcare, and other social services for the working poor.

Housing Affordability



 SUSTAINABILITY TREND

The Facts

In 2001, 17.6 percent of all Calgary households, representing 58,560 homes, spent more than they could afford on housing. The 2004 Calgary homeless count registered 2,597 persons, an increase of 861 people from 2002.

Definition

The Canada Mortgage and Housing Corporation states that for housing to be affordable, a household should spend no more than 30 percent of its gross income on shelter. Affordable housing projects are targeted at households earning 65 percent or less of the area median income, which in Calgary translates into a before-tax gross income of \$37,621 per year or less.

Calgary's homeless count has been conducted by the City of Calgary every two years since 1992. In 2004, the count measured the number of homeless people living in facilities and service agencies, as well as on the street.

Trend

In 2001, we measured housing affordability according to the percentage of renters with incomes sufficient to purchase a starter home. City of Calgary staff have since adopted the measurement of annual income versus income spent on shelter in order to determine affordable housing needs. Though this measure provides a more relevant indicator of housing affordability, it does not currently allow for direct comparison with historic data. Still, some significant trends do emerge from this new data set. With 17.6 percent of the city's households spending more than 30 percent of their gross income on shelter, Calgary's housing situation is currently not sustainable.

The struggle to find affordable housing does not affect all Calgarians equally. Renters are more likely to require affordable housing than

homeowners (34% versus 10%, respectively). Forty-two percent of all renter households with the presence of a disability and 40 percent of all renter households with an Aboriginal primary household maintainer are overspending on shelter.

Since reported in the 2001 State of Our City Report, Calgary's number of homeless individuals has more than doubled, from 1,128 in 2000 to 2,597 in 2004. This increase mirrors a general rise of homeless individuals in the city since Calgary's first homeless count in 1992, when 447 people were counted, only one-fifth of the 2004 count. Homeless numbers rose 46 percent between 2002 and 2004, the second highest rate of increase since the count began.

Nonetheless, these numbers must be interpreted with caution. Since the 2004 homeless count included data from a greater number of facilities and shelters than was included in previous counts, the total number of homeless people may be disproportionately large relative to 2002. If data from these additional facilities and shelters had not been included in the latest homeless count, 2004's growth rate over 2002 may have been only 23 percent, representing the slowest rate of growth in homelessness since 1994. However, the real number of homeless persons in Calgary increases in both scenarios.

Number of Homeless People counted biennial homeless count in Calgary

Year	Homeless Count	% of Total Population
1992	447	0.06
1994	461	0.06
1996	615	0.08
1998	988	0.12
2000	1,296	0.15
2002	1,736	0.19
2004	2,597	0.28

Importance

Without the basic human right of affordable shelter, many other sustainability objectives cannot be achieved. If lower-income families spend more than 30 percent of their income on shelter, they are less able to afford other basic goods and services. When health suffers as a result of these circumstances, citizens' ability to support themselves may be compromised at further economic, physical, and social cost to themselves, their families, and the community.

Linkages

Lack of affordable housing is linked to a decrease in sense of community. People who have insecure access to housing and/or who may have to move frequently are less able to integrate into and contribute to their communities. This also creates difficulties for children and youth, and can affect their health and education outcomes.

This indicator is linked to several other indicators of economic sustainability. Food bank usage, unemployment rate, income equity, and the hours required to meet basic needs at minimum wage are each related to housing affordability. For people living in poverty, action must be taken to improve each of these indicators in order to enhance quality of life.

Individual & Collective Actions

- Take time to volunteer at a homeless shelter to gain a better understanding of the situation.
- Support the implementation (not just policy making) of affordable housing strategies throughout the city, not just in the downtown core.

Income Equity: Gap between Rich and Poor



☺ SUSTAINABILITY TREND

The Facts

In 2000, the top 10 percent of Calgarians earned 19 times the income of the bottom 10 percent.

Definition

This indicator is derived using figures from the Federation of Canadian Municipalities 2003 report titled *Falling Behind: Our Growing Income Gap*, which depends largely on the Statistics Canada census conducted in 2001 and tax filer data from 2000. Income includes the following sources: employment, employment insurance, social assistance, and other government transfers.

Trend

Calgary is a relatively rich city in Canada. Between 1990 and 2000, the median family income in the Calgary metropolitan area increased by 6.6 percent, after adjusting for inflation. It is estimated that Calgary workers have the highest average annual income in Canada, at almost \$40,000.

Between 1995 and 2000, median income increased by a greater rate for the lowest income tax filers (bottom 10 percent) than for the top 10 percent income tax filers – 19.5 percent vs. 11.1 percent, respectively – thereby narrowing the gap between the richest and poorest Calgarians. But the numbers show a wide absolute gap – families in the lowest 10% had an average income of \$13,000, while families in the top 10% had an average income of \$248,000.

The increase in median income in the late 1990s counters a trend of previous decline for the poor. From 1992 to 1996, family income for the bottom decile had decreased 10.7 percent. The rate of low income in Calgary decreased from 19.9 percent in 1995 to 15 percent in 1999.

In general, income equity between rich and poor appears to be increasing in Calgary. A focus on income

equity at the neighbourhood level is important to ensure that Calgary does not become 'ghettoized.' In 2000, 27 percent of tax filers in Calgary's lower income neighbourhoods were of low income. In Saskatoon the figure was 47 percent. This indicates that Calgary's neighbourhoods have a greater mix of income types. However, the highest income neighbourhood in Calgary in 2000 had 3.6 times the median income of the lowest income neighbourhood, and people who earn lower incomes are becoming increasingly concentrated in the inner city. These two trends point toward income stratification by neighbourhood.

Importance

A community that is increasingly split by income inequity cannot sustain itself over time. Poverty breeds isolation and exclusion, with less opportunity for interaction between people of different income levels.

Linkages

The social and physical implications of income disparity are profound. Segregation, marginalization, discrimination, crime, decreased health, and lack of opportunities for minorities, the disabled, recent immigrants and single-parent families are but a few of the deleterious effects of income disparity.

If Calgary's neighbourhoods become more polarized by income stratification, crime and the development of ghettos could increase. Poorer communities find themselves more likely to be near industrial sites and pollution sources. As school funding is cut back, low-income communities find it more difficult than richer communities to raise supplemental funds for computers, textbooks, and educational enhancements. The less educated become poorer. And the vicious circle spirals downward.

Income inequity leads to inequities in health and well-being. In a 2001 report from York University, *Inequality is Bad for Our Hearts*, researchers state that income level is the greatest predictor of the incidence of heart disease. The physical and psychosocial stresses of a low-income existence damage the cardiovascular system and lead to the adoption of health-threatening behaviours such as alcohol and tobacco use. If all Canadians were as heart healthy as the wealthiest Canadians, there would be 6,366 fewer deaths a year from heart disease. The cost of income-related differences in heart disease among Canadians is estimated at \$4 billion annually.

Gender inequity is also evident in Calgary's income patterns. Males in Calgary earn on average \$20,000 more per year than do females.

Another link is between poverty and transportation. The 2001 transit strike in Calgary highlighted the limited resource base of Calgary's poorest citizens, who had no form of independent transportation.

Individual and Collective Action

- Beware of user fees and flat taxes. Support the reform of taxation systems to ensure that they are not regressive and do not burden low-income households.
- Support standard and accessible municipal services throughout the city.
- Support rent control and increases to minimum wage.

Unemployment Rate



😊 SUSTAINABILITY TREND

The Facts

In 2004, the average unemployment rate in Calgary was 5.0 percent, and has remained under 6 percent since 1997. On average, there were just over 46,600 Calgarians looking for work. The labour force participation rate was 75.1 percent.

Definition

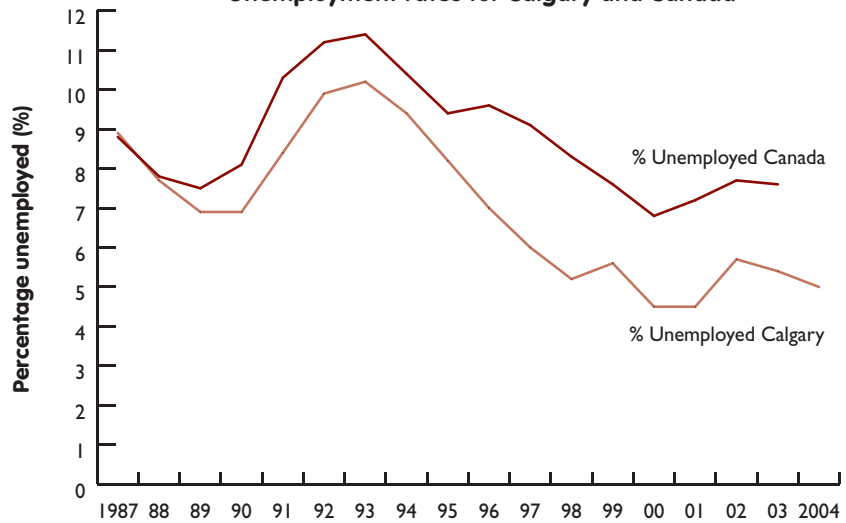
The unemployment rate measures the proportion of the population in the labour force who are without work. The labour force represents all individuals over 15 years old who are employed (part-time and full-time positions) or actively looking for work. These figures are for the Calgary Census Metropolitan Area and are collected by Statistics Canada.

Trend

This indicator appears to be moving in a sustainable direction. Since 1997, the unemployment rate in Calgary has remained under 6 percent. Relative to other Canadian cities, Calgary has a low unemployment rate (Toronto, 7.5 percent, Vancouver, 6.8 percent). As a province, Alberta enjoys the lowest unemployment rate in Canada (Alberta: 4.4%; Canada: 7%), with Edmonton also boasting a low unemployment rate of 4.8%.

While these statistics are promising, they hide two important points. First, youth between 15-24 years old have a harder time finding a job. In 2003 in Calgary, the unemployment rate was 9.1 percent for this age group, whereas it was 4.5 percent and 5.1 percent for the 25-54 and 55 and over age groups, respectively. Secondly, 24.9 percent of Calgary's population over 15 years old is not in the labour force. This group includes people who are discouraged from job searching, students who remain in school for lack of finding work, people on job creation programs, premature retirees and involuntary part-time workers. In 2001, estimated hidden unemployment increased the Canadian unemployment rate by 3% (GPI

Unemployment rates for Calgary and Canada



Atlantic Study). It should be noted that low unemployment rates do not necessarily translate into a healthy workforce. The Calgary and Region Socio-Economic Outlook 2003-2008 indicated that the proportion of Albertans working overtime has increased from 22.6% in 1998 to 26.6% in 2002. Overtime work can cause stress, other health problems, and reduce overall job satisfaction.

Importance

The vitality and productivity of a society depends on the work of its citizens. Each individual has the potential to contribute to the betterment of society. In a sustainable community all people should have that opportunity.

Maintaining a low unemployment rate also helps to boost the economic sustainability of a city. High employment means better finances, resulting in lower employment insurance claims and more income tax. More revenue in public funds enables more spending on health, education, transportation and other public services.

Linkages

High levels of unemployment can drain a city of its prosperity. With fewer people earning wages, fewer

tax dollars are available to support programs for unemployed citizens, while demand for these programs increases. Services such as affordable housing and food banks can be overloaded in times of high unemployment, and the basic health of unemployed citizens and their families can suffer.

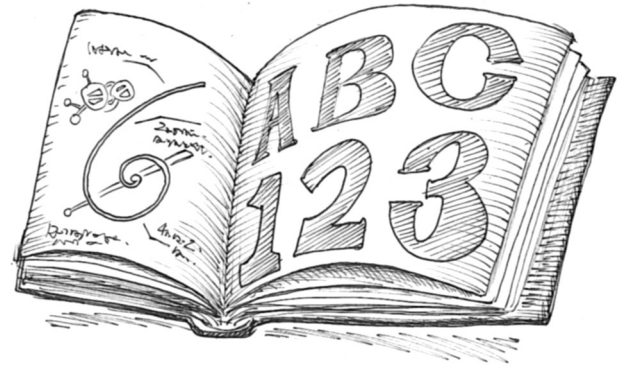
Level of education and literacy are strongly linked to unemployment rates, since most jobs require a certain level of education or literacy. Workers with little education or poor literacy skills are vulnerable to layoff and displacement, and once unemployed, they can find it very difficult to secure new jobs.

Sometimes structural barriers such as a lack of transportation can prevent people from gaining employment. Public transit that is convenient, affordable, and efficient can help people who do not drive or do not own a car to become employed.

Individual & Collective Actions

- Support initiatives such as job sharing, cooperatives, peer lending groups, and entrepreneurship training.

Education Indicators



This section contains the following indicators

- **Adult Literacy**
- **Daycare Worker Salaries and Turnover**
- **Grade Three Achievement Scores**
- **Library Use**
- **Average class size**

Highlights

In 2001, daycare staff in Alberta worked for an average starting wage of \$8.39/hour. After three years of employment in a daycare, staff earned an average of \$10.58/hour, with an average maximum wage over the longer term of \$12.10/hour. These wages have increased since 1999.

On the 2002/2003 Provincial Achievement Tests for Language Arts, 90.2 percent of grade three students in Calgary achieved the acceptable standard as identified by Alberta Learning, and 18.3 percent achieved excellence. These achievement levels exceed the targets set by Alberta Learning.

In 2003, Calgarians used the Calgary Public Library (CPL) approximately 25 million times, or 27 uses per capita, representing an increase of more than five uses per capita since 1999.

In 2003/2004, the average class size in Calgary schools was 27.2 students. Class sizes in Calgary are larger than the Alberta average and are well above the guidelines recommended by Alberta Learning.

Adult Literacy



☺ SUSTAINABILITY TREND

The Facts

In 1996, 60% of Calgarians functioned at literacy level three or higher; only 28% functioned at level four or five.

Comparative % of Level 4/5 Literacy

Type/Place	AB	U.S.A	Sweden
Prose	29	21.1	32.4
Document	30	19.0	35.5
Quantitative	27	22.5	35.8

Definition

This indicator is based on statistics compiled for *Reading the Future: A Portrait of Literacy in Canada*, a Canadian report on the 1996 International Adult Literacy Survey (IALS). The report defines three types of literacy – prose, document, and quantitative – each with five levels of proficiency. At level three, an individual can do simple research and integrate information. At level four, an individual integrates and contrasts information well. At level five, an individual can integrate complex information and perform multiple numerical operations.

Trend

There have been no new surveys of literacy in Canada since 1996, although Statistics Canada will conduct a new IALS in 2004, with results to be released in 2006.

While it cannot be determined from existing data whether 60 percent of Calgarians continue to have a literacy level of level three or higher, Human Resources Development Canada cautions that in today's information-rich and knowledge-intensive society, citizens must continually improve their reading and writing skills to function effectively in both the workplace and everyday life. Still, less than 10 percent of Canadians in need of literacy support actually enroll in programs to upgrade their skills. According to the ABC Canada Literacy Foundation,

financial instability, lack of childcare, and lack of accessible transportation are some of the barriers that prevent people from enrolling in literacy programs.

With the increasing demand for a literate workforce, several initiatives have emerged in recent years to improve literacy skills across Alberta. Family literacy programs for parents and children, which integrate adult instruction with early language development assistance for young children, are increasingly popular. Also emerging are community-based literacy programs, in which literacy specialists work to build literacy skills in individual communities. Five Calgary neighbourhoods participated in such a program in 2002. Finally, places of employment are increasingly sponsoring literacy skill development programs for employees.

Importance

Higher literacy skills tend to correlate with healthier lifestyles. They also enable citizens to participate more fully in their communities and to gain meaningful work. Literacy also supports lifelong and independent learning by helping people to acquire new competencies and skills.

Linkages

According to Literacy Alberta, illiterate adults suffer higher rates of poverty and unemployment. On average, Canadians with level one literacy skills make \$28,000 less each year than those with level four or five literacy skills. Literacy Alberta notes that people with lower literacy skills experience higher unemployment and are more likely to require social assistance and to become involved in crime.

Literacy plays an essential role in the development of vocational skills. Those without the requisite literacy skills have difficulty keeping up with the changing demands of the workforce. Workers in areas with less

stringent literacy requirements often lack opportunities to exercise and develop their literacy skills, thus perpetuating lower literacy levels. Globally, a literate population is important for economic development. A 2004 Statistics Canada study of the literacy rates in 14 OECD countries, including Canada, found a link between high levels of literacy within a nation's workforce and increased growth in per capita GDP.

Literacy enables full participation in all aspects of community life. Literate adults and seniors are better able to maintain their quality of life and independence, thereby reducing the need for social services. They can participate fully in democratic processes, access required services, and read and understand safety and instructional materials. Literate parents can read to their children and help them with their homework, thus passing their literacy skills on to the next generation.

Individual & Collective Actions

- Read to and with children.
- Support literacy training and English as a Second Language (ESL) training.
- Find out about volunteering in a literacy program through Literacy Alberta: www.literacy-alberta.ca
- Develop your own literacy skills by reading widely, joining a book group, and/or participating in the annual WordFest.

Daycare Worker Salaries and Turnover



☺ SUSTAINABILITY TREND

The Facts

In 2001, daycare staff in Alberta worked for an average starting wage of \$8.39/hour. After three years of employment in a daycare, staff earned an average of \$10.58/hour, with an average maximum wage over the longer term of \$12.10/hour. These wages have increased since 1999.

Alberta daycares experienced a 45 percent turnover rate from December 2003 to May 2004.

Definition

Daycare staff wage information was obtained through the government of Alberta's Wage and Salary Survey. Hourly wage figures assume full-time employment and apply to all early childhood educators, including daycare staff, preschool teachers, and supervisors.

Information about staff turnover rates came from a study in the May 2004 edition of Today's Parent.

Trend

Since 1996, daycare workers in Alberta have earned progressively higher wages, particularly after three or more years of employment. In 2001 starting wages were 42 percent higher than Alberta's \$5.90 minimum wage, and average maximum wages were more than double minimum wage values.

Daycare Staff Wages in Alberta

	1996	1999	2001
Starting wage	\$6.75	\$7.35	\$8.39
Wage after 3 years	\$8.01	\$8.50	\$10.58
Top Wage	\$9.25	\$9.85	\$12.10
Minimum wage	\$5.00	\$5.65	\$5.90

Nonetheless, relative to other provinces, Alberta daycare workers are poorly paid. Historically, starting daycare staff in Quebec and Ontario have been paid 74 percent and 83 percent more than the provincial minimum wage, respectively.

The relatively low wages that daycare staff in Alberta receive can be traced in part to lack of government support. Five other provinces allocate more funding for childcare per child aged 0-12 years than Alberta, at \$110 per child annually. According to Child Care Canada, the largest provider is Quebec, spending \$980 per child, almost nine times the amount allocated by the Alberta government. Quebec's spending not only helps to maintain daycare staff wages at a median of \$11.04 per hour, but also ensures that more than 20 percent of Quebec children aged 0-12 years have access to a regulated childcare space. After Quebec, Manitoba provides the second largest number of childcare spaces, at 12.4 percent. Alberta provides regulated space for 9.1 percent of children.

Daycare staff turnover rates have not changed since 1998 levels. Still, 45 percent turnover remains very high relative to Alberta's average turnover rate of 13.7 percent (across all sectors). Low pay is the most commonly cited reason for staff leaving their jobs.

Importance

Education during early childhood has a tremendous effect on child development and the overall path that is laid down for future learning. In their 1999 book, *The Learning Revolution: To Change the Way the World Learns*, researchers Dryden and Vos state that 50 percent of a child's ability to learn is developed during the first four years of life, while another 30 percent is developed by age eight. However, early childhood programs receive proportionally lower government funding than other educa-

tional programs. Daycare workers' low wages and strenuous working conditions lead to high turnover rates, which in turn can create instability in daycare programs. Lack of stability and consistency in those programs can be hard on children, and make it difficult to justify professional development activities that would improve the quality of programming.

Linkages

As single-parent households and two-income families become an increasingly common reality, the need for high-quality, accessible childcare is growing. Adequate compensation of daycare staff, along with benefits programs, safe and healthy working conditions, and access to resources and professional development, help to ensure a high-quality experience for children and provide peace of mind to working parents. In particular, access to high-quality childcare programs may help more mothers to return to the workforce. Along with promoting greater gender balance in our society, high-quality childcare programs can reduce stress levels among working parents and enable them to achieve more balance in their lives.

Individual & Collective Actions

- Support government action on a comprehensive national childcare strategy that addresses the needs of working and stay-at-home parents.
- Support an immediate increase in the wages paid to childcare workers.

Grade Three Achievement Scores



☺ SUSTAINABILITY TREND

The Facts

On the 2002/2003 Provincial Achievement Tests for Language Arts, 90.2 percent of grade three students in Calgary achieved the acceptable standard as identified by Alberta Learning, and 18.3 percent achieved excellence. These achievement levels exceed the targets set by Alberta Learning.

Definition

This indicator is based on the results of Alberta Learning's Provincial Achievement Tests in Language Arts for grade three students in Calgary's public and separate schools. An acceptable performance is a score of 50 percent or better, and an excellent performance is a score of 80 percent or more. The provincial targets are 85 percent of students achieving acceptable performance and 15 percent achieving excellent performance.

Trend

Calgary's grade three achievement scores fluctuate widely each school year but continue to remain generally above provincial targets. Though the 2002/2003 scores have fallen very slightly since last reported in the 2001 State of Our City Report, they remain high relative to other scores over the past nine years. During the first year of testing in the 1994/1995 school year, only 84.7 percent of students achieved acceptable performance, and 13.9 percent achieved excellent performance. The city's achievement scores are generally consistent with provincial averages.

In an effort to continue boosting literacy skills of young Albertans, Alberta Learning has invested in an early literacy program since 1998. Through this program, students in kindergarten through grade two with underdeveloped literacy skills are provided with special support and resources. This program is evaluated in part by using provincial grade three achievement scores.

Language Arts Achievement Scores

School Year	Acceptable	Excellent
1994/95	84.7%	13.9%
1995/96	87.4%	21.4%
1996/97	88.0%	14.4%
1997/98	85.9%	15.0%
1998/99	88.5%	15.7%
1999/2000	91.6%	20.1%
2000/01	89.4	17.4
2001/02	81.6	16.4
2002/03	90.2	18.3

Importance

Children who establish healthy patterns of learning during the early elementary years are likely to continue to learn successfully into adulthood. While achievement testing occurs in a number of curricular areas, language arts scores have been selected for reporting because literacy is so fundamental to participation in today's world. It allows us to function independently, to contribute to our community, and to be productive in the workplace.

Linkages

Illiterate children tend to have a lower sense of self-esteem, higher dropout rates, and higher rates of incarceration. As people develop literacy skills, they are generally better able to function in society, have greater independence, can contribute to public debate, and can learn additional skills. Volunteerism that supports community building and participation tends to be higher among more educated and more literate members of the population.

Children who struggle to read and write may have parents who also have literacy challenges. Since parents have a strong influence on the enthusiasm and interest with which

children approach reading and writing, children from families with low levels of literacy may not receive the encouragement and support they require to develop strong literacy skills. Parents with literacy challenges may also lack the information, confidence, or skills to ensure that their children are receiving sufficient support at school. After struggling through lower grade levels, children in this situation often drop out of high school or graduate with low levels of literacy.

Individual & Collective Actions

- Read to your children from a very early age and encourage them to read and write.
- Provide a good example to children by reading widely yourself.
- Volunteer to read and be read to in literacy programs at local schools.
- Support your local public library in order to help build a culture of reading in your community.



Library Use



☺ SUSTAINABILITY TREND

The Facts

In 2003, Calgarians used the Calgary Public Library (CPL) approximately 25 million times, or 27 uses per capita, representing an increase of more than five uses per capita since 1999. Sixty percent of Calgarians used the library at least once during 2003.

Definition

The data for this indicator come from CPL records and user surveys. Library usage includes electronic and in-person visits, circulation of materials, and in-library use of resources.

Trend

Between 1994 and 2003, the per capita use of the CPL increased by 44 percent. At over 5.2 million in-person visits in 2003, the CPL had more visitors than the Stampede, Calgary Zoo, Heritage Park, Science Centre, recreation arenas, and all professional sporting events combined. Also in 2003, the CPL circulated over 12.3 million items, representing the second highest circulation in Canada and one of the highest in North America.

Increasingly, libraries do much more than provide citizens with books. Many patrons use the CPL's computer resources for research, job search, and personal communications. In 2003, 1.5 million electronic visits were made to the library through the CPL website.

Usage of the Calgary Public Library

	Uses (millions)	Use/Capita
1994	13.8	18.7
1999	18.2	21.6
2003	25	27

In 2003, a majority (62%) of library customers used the CPL to obtain materials or information for informal or personal study. This suggests that a high proportion of customers continue to depend on the library for

resources that support ongoing, casual learning. An increasing number of patrons use the CPL's public computers and databases for research, job searches, and general interest.

In 2003, a large proportion of Calgarians stated that the CPL is a valuable part of their lives. A full 98 percent agreed that the library is an important part of their community, and 84 percent considered it important to their household.

Importance

In a sustainable community, all citizens should have access to the information they need to participate in community life and understand their world. The public library plays an essential role in providing an inclusive place for citizens to engage in ongoing learning in a changing environment, rivaled only by the Internet.

The public library, sometimes called 'the people's university,' fosters personal empowerment and community development through universal access to learning resources. Children's programs, literacy programs, and large-print and 'talking' books serve community members who are sometimes marginalized or isolated.

Linkages

The lifelong learning that libraries promote is important for personal growth and well-being. It broadens horizons, stimulates curiosity and creativity, leads to increased health and fulfillment, and creates a more enlightened and involved community.

Libraries help people to acquire and enhance their literacy skills. Because the library is an inclusive and democratic institution, all citizens are welcome to use its resources, regardless of age, ability, cultural background, or income. Specialized programs such as home-book delivery services for

people who are housebound, summer reading clubs for children, and the availability of print materials for new adult readers all help to encourage literacy skills. Library volunteers play a crucial role in ensuring that these and other programs run smoothly and effectively.

A library is an environment-friendly means of disseminating information since it allows resources to be shared among citizens, saving countless trees in the process.

Individual & Collective Actions

- Use your public library.
- Take advantage of continuing education opportunities.
- Support adequate levels of funding for public libraries.
- Learn more about lifelong learning through the Calgary Community Adult Learning Association: www.learning-resource.com.



Average class size



 SUSTAINABILITY TREND

The Facts

In 2003/2004, the average class size in Calgary schools was 27.2 students. Class sizes in Calgary are larger than the Alberta average and are well above the guidelines recommended by Alberta Learning.

Definition

Class size is defined as the ratio of students to full-time equivalent teachers in a classroom. A 2003 Alberta Learning report published class size statistics collected from the Calgary School District and the Calgary Roman Catholic Separate School District for kindergarten through grade 12. Given that students may spend time in several classes, the Alberta Learning report limits the data to the four core subject classes: language arts, math, sciences, and social studies. These numbers do not include data about special needs classes.

Trend

The method of measurement for this indicator has changed in recent years. Titled *Pupil/Teacher Ratios* in the previous State of Our City Reports, *Class Size* provides a more accurate measure of the relationship between numbers of students and teachers because it does not include educational professionals who do not teach in classrooms, such as principals, counselors, and librarians. In 2001, we reported that the Pupil/Teacher Ratio translated into an actual average class size of 25 in primary schools and as high as 40 in high schools.

Elementary school class-size data were first collected in 2001/2002, junior high data in 2002/2003, and senior high data in 2003/2004. The limited data from these years suggest that class sizes have remained relatively stable during this period. However, class sizes in Calgary are larger than the Alberta average and are well above the guidelines recommended by Alberta Learning.

Budgetary constraints in the 1990s forced local schools to cut spending in other areas in order to maintain stable class sizes. In the process, many teaching positions were cut from public schools, particularly the positions of fine arts and other specialists, whose jobs were then absorbed by other staff. Recently, the Alberta government has provided school boards with additional funds earmarked for reducing class sizes.

Importance

Education is the foundation upon which a community can build ecological, social, and economic sustainability. A strong education equips youth to become contributing, committed, compassionate, and skilled citizens of tomorrow. Positive environments for teachers and students, including smaller class sizes, can also raise morale and lower stress levels, thereby improving the overall quality of education.

Linkages

Smaller class sizes and increased individual attention can play a critical role in socialization that contributes to healthy lifestyles as youth become adults. Consequently, children in smaller classes may experience fewer health problems, reduced incidents of antisocial behaviour, and less involvement in crime.

Volunteers have always been a part of our school system. With budget cutbacks, volunteers become even more critical as they work with students, help staff, and assist with

fundraising and extra-curricular activities. Obligating parents to provide more time and money to programs and activities, however, works to the disadvantage of lower-income communities, where parents may already be working long hours to make ends meet.

Large class sizes can also spur parents to investigate private schools, which can offer class sizes as small as twelve students. The shift toward private education in Calgary has social and economic implications, since only families with significant financial resources are able to access these schools. Per student, private schools receive 60 percent of the funding that public schools receive from the government, and they are also eligible for government grants like the Alberta Initiative for School Improvement. Combined with tuition, the resources available to private schools enable them to provide educational opportunities that may not be available in public schools, thus potentially perpetuating inequities.

Individual & Collective Actions

- Support increased funding for public education.
- Volunteer your time and skills to your local school and get active with parent councils.
- Get to know the issues faced by your local school board and trustees, so that you can participate in the debate.

Average and recommended class sizes 2003/2004

Grade level	Calgary Average	Alberta Average	Alberta Living Recommendation
K-3	23.6	21.9	17
4-6	26.4	24.7	23
7-9	27.5	25.5	25
10-12	29.5	25.1	27
Average	27.2	24.7	23.0

Natural Environment Indicators



This section contains the following indicators

- Air Quality
- Bird Population Surveys
- Food Grown Locally
- Pesticide Use
- Surface Water Quality
- Water Consumption

Highlights

In the 2003 Calgary Christmas Bird Count, 295 birdwatchers recorded 78 species and 54,680 individual birds. In the same year, the Fall Migration Monitoring (FMM) program recorded 70 species and 1,966 individual birds. These numbers have increased slightly since 1999.

There were four Alberta Farmers' Market (AFM)-approved farmers' markets in the city with approximately 294 vendors and well over 6,000 daily visitors.

In 2001, Calgary Parks and Recreation applied approximately 0.73 kg of active pesticide ingredients per hectare in the city. The rate of application has declined since 1998.

In 2003, Calgary's average per capita water consumption was 512 litres per day, continuing a trend of declining consumption since the 1970s.



The Facts

In 2003 the Air Quality Index at Calgary's three monitoring stations – Central (downtown), Northwest (residential), and East (industrial) – was rated as good 96, 95.4, and 93.6 percent of the time, respectively. During the same year, annual average nitrogen dioxide (NO₂) concentrations were 84, 54, and 83 percent of the 32 parts per billion (ppb) guideline value for the three respective stations. The maximum hourly average NO₂ concentrations for the year were 40, 36, and 54 percent of the hourly guideline value (212 ppb) for the Central, Northwest, and East stations, respectively. These numbers have not changed significantly from previous years.

Definition

Alberta Environment uses the Air Quality Index (AQI) to measure air quality in the province. The AQI combines measures of carbon monoxide, fine particulate matter (PM_{2.5}), NO₂, ozone, and sulphur dioxide to represent overall air quality. NO₂ is formed primarily as a result of high temperature combustion from vehicles, residential and commercial heating, and industry, and is known to aggravate asthma symptoms. Air quality samples are collected continuously from monitoring stations at 611-4 St. SE (Central), 39 St. and 29 Ave. NW (Northwest), and 49 Ave. and 15 St. SE (East).

Trend

AQI levels and measures of NO₂ at each of Calgary's monitoring stations have changed only slightly over the past five years. AQI levels, measured in the number of hours with good air quality, declined by about 3 percent at each of the monitoring stations since 1999. While NO₂ concentrations have fallen 9.5 percent since 1999, they have increased 8 percent and 6 percent at the Northwest and East stations, respectively.

On most air quality measures, Cal-

gary fares slightly worse than Edmonton, particularly in the industrial zones of the cities. Since 1995 the Calgary East station has had consistently higher levels of carbon monoxide, haze (dust and smoke), hydrogen sulfides, sulfur dioxides, and nitrogen oxides than the Edmonton East station. At downtown monitoring stations, the differences between the two cities are less dramatic, although Calgary continues to have a higher level of haze than Edmonton.

Importance

The air we breathe is a common good. Air quality can affect our health, economy, aesthetics, and the environment. Health effects can be short term, affecting people with respiratory problems, or long term, increasing the incidence of illnesses such as asthma and cancer. Health Canada estimates that each year 5,000 Canadians die prematurely due to air pollution. Poor air quality can result in economic losses totaling millions of dollars through damage to materials such as paint, metal, and rubber, and through reduced property values in areas that become known for poor air quality. Environmental degradation occurs when air contaminants damage vegetation, soil, and water bodies. Aesthetic values can be reduced by haze that obscures views of the city and the mountains.

Linkages

The City of Calgary's 2002 State of the Environment report notes that the personal vehicle is the largest source of air pollution in the city. Carpooling and increased transit usage reduces air pollution. In turn,

as air quality improves, more people may be persuaded of the benefits of walking and cycling to work and other destinations. Leaving our cars at home and using alternative modes of transport improves our health, enhances our sense of community, and deters crime.

Calgarians sometimes blame poor air quality on atmospheric inversions. These inversions, however, do not create the pollutants but merely trap them near the ground, limiting their dilution in the atmosphere. In these conditions, we can breathe (and often see) the condensed effects of everything we put into the air!

Individual & Collective Actions

- Walk, cycle, rollerblade, or take public transit to work and other destinations.
- If you do drive, turn your engine off when your vehicle is stopped for more than ten seconds. Less fuel is needed to restart your vehicle than to leave it running.
- Undertake energy efficiency measures at home (e.g., insulate, turn down the thermostat, seal cracks).

Average NO₂ Concentrations (ppb) in Calgary

	1999	2000	2001	2002	2003
Calgary Central	28.2	28.1	26.5	26.5	26.8
Calgary East	24.9	25.8	24.2	24.6	26.4
Calgary Northwest	16.2	16.1	16.1	16.1	17.5

Bird Population Surveys



☺ SUSTAINABILITY TREND

The Facts

In the 2003 Calgary Christmas Bird Count, 295 birdwatchers recorded 78 species and 54,680 individual birds. In the same year, the Fall Migration Monitoring (FMM) program recorded 70 species and 1,966 individual birds. These numbers have increased slightly since 1999.

Definition

The Calgary Christmas Bird Count is part of the National Audubon Society's North American Christmas Bird Count. This is the 104th year of the count in North America and the 52nd in Calgary. The survey involves an all-day census of birds for each day between December 14 to January 5 and covers a 15-mile radius from the city centre. The count is coordinated locally by the Calgary Field Naturalists Society and is conducted by volunteer observers. The FMM program began in Calgary in 1992. This program monitors changes in the populations of birds during the fall migration period by bird banding. All data is entered into a national database with Bird Studies Canada.

Trend

Since the 2001 State of Our City Report, the diversity and total number of birds counted in the Christmas Bird Count and the FMM program have increased. This information should be tempered with some qualifiers. Annual differences in weather conditions, food availability, and the number of volunteer observers can heavily influence the final tally of birds in a given year. Nonetheless, monitoring long-term population trends is the first step toward a better understanding of how our activities affect bird habitat.

According to the Inglewood Bird Sanctuary, some bird species have experienced significant changes in population size over the past few years. For instance, populations of solitary sandpipers, northern waterthrushes, and dark-eyed juncos have

declined in recent years. Other birds, like savannah sparrows, are growing in number, and harlequin ducks, red-breasted nuthatches, and many finches are increasingly overwintering in Calgary. The relatively heavy evergreen cone crop in the city in recent years may be supporting these birds through the winter.

In 2002, for the first time in recent memory, a pair of bald eagles nested in the city, across the river from the Inglewood Golf Course. In 2003 and 2004 the eagles moved their nest slightly downriver and had two successful young each year. Since the Bow River has had a relatively large amount of open water in recent winters, more ducks and geese have been able to overwinter and have provided a regular food source for the eagles.

Importance

Birds are intricately linked to our ecosystems, and long-term changes in their populations can show us where our environmental protection is lacking. The extension of our city into farmland and acreages means that our zone of influence has encompassed increasing numbers of grassland bird species.

Migrating birds that only spend part of their lives in Calgary are vulnerable to changing land-use practices, as important habitats such as wetlands or woodlots are developed. Opportunistic species such as cowbirds and magpies survive well in the urban environment, often to the detriment of less adaptable songbirds.

Birds are affected by the same environmental pollutants as humans, but their smaller bodies make them more vulnerable to toxic substances. Bird species diversity can be used as a proxy for overall biological diversity. The more diverse an ecosystem, the more resilient it is over the long term.

Linkages

People interact with birds in a variety of ways, from setting up a bird feeder to birdwatching in one of Calgary's natural environment parks. Nature observation is a relaxing pastime that can have significant health benefits as well as encourage interaction with other community members. Birds also help to connect city dwellers with nature's rhythms: nothing marks the spring and fall in Calgary like the appearance of the V-formations of the Canada goose.

Individual & Collective Actions

- Support the protection of natural areas from development.
- Naturalize your yard with prairie species that attract birds.
- Since cats kill birds, keep them indoors at dawn and dusk when birds are most active.
- Become involved in the Christmas Bird Count or the Fall Migration Monitoring program.
- Avoid using pesticides in your yard.
- Check out the Calgary Field Naturalists Society website: www.cfns.fanweb.ca



Food Grown Locally



☺ SUSTAINABILITY TREND

The Facts

In 2004, there were nine active community gardens in Calgary with 227 individual plots, two communal vegetable plots, and one communal wildflower garden, as well as a commercial venture renting out 250 individual garden plots just outside the city. There were four Alberta Farmers' Market (AFM)-approved farmers' markets in the city with approximately 294 vendors and well over 6,000 daily visitors.

Definition

A community garden is a place where people come together to grow food and flowers alongside neighbours on a common piece of land. The data for community gardens come from the Calgary Horticultural Society, while the statistics for the farmers' markets come from the AFM Specialist at Alberta Agriculture, Food and Rural Development and from the individual market coordinators. In order to receive approval from the AFM division of Alberta Agriculture, Food and Rural Development, markets must ensure that 80% of their goods are created, baked, or grown in Alberta and sold directly by producers.

Trend

A growing number of Calgarians are producing food and flowers in local community gardens, which are increasingly vulnerable to land development as inner-city property becomes more scarce and valuable. Three of the largest community gardens in the city, including Calgary's first community garden, Varsity Courts, lost some or all of their land to development between 2001 and 2004. However, in the same time period, two new communal gardens and one wildflower garden were established in the city. Additionally, a privately owned commercial garden plot venture just outside the city limits grew from 50 plots in 2001 to 250 in 2004.

Since 2001, the numbers of Calgary

farmers' markets, vendors, and visitors have all increased. In 2001, there were four registered farmers' markets in the city. By 2004, there were seven farmers' markets, four of which had received AFM approval, including a large, new, year-round market in Garrison Woods. One market awaits approval. Two of the previously existing approved markets report an increase in vendors and visitors since 2001, while the others report the same levels as 2001.

Importance

As Calgarians eat more locally produced food, we become less dependent on inputs from outside of our region and we reduce pollution and greenhouse gas emissions related to transporting food long distances. We also gain greater control over food safety because we can communicate with farmers about their use of pesticides, hormones, antibiotics, and genetically modified seed.

Linkages

Conventional food production is an ecologically expensive process. The fossil fuel-intensive nature of food production and transportation results in the expenditure of 10 to 15 calories of energy for every calorie of food delivered. In contrast, locally produced food requires less transportation, refrigeration, packaging materials, and preservatives.

Local food is fresher and, many say, tastes better than food shipped long distances. Local farmers and domestic gardeners can offer produce varieties bred for taste and freshness rather than for their ability to withstand industrial harvesting equipment and extended travel, thereby both conserving biodiversity and offering more nutrient-rich food than food picked and transported before it becomes ripe. Small-scale urban agriculture is also better suited to sustainable agricultural techniques, such as organic production.

The loss of agriculturally viable land is a growing issue in the Calgary area, as rising urbanization and the increased domination of food production by a few large corporations puts pressure on family farmers and ranchers to sell out to urban land developers. Local family farmers who sell directly to consumers receive a larger share of the profit for their food, which in turn helps to make farming more profitable and selling farmland for development less attractive. Local farmers spend their money locally, and supply more local jobs and contribute more to the local economy than do large, corporate-owned farming operations.

Individual & Collective Actions

- Grow food in your yard or participate in a community garden.
- Become more aware of where the food you buy is produced.
- Support local farmers' markets.
- Ask your local food store to carry local and organic produce.
- Support food stores that already carry local, organic produce.
- Check out Slow Food Calgary's website: www.slowfoodcalgary.ca



Pesticide Use



☺ SUSTAINABILITY TREND

The Facts

In 2001, Calgary Parks and Recreation applied approximately 0.73 kg of active pesticide ingredients per hectare in the city. The rate of application has declined since 1998.

Definition

This indicator measures the amount of herbicides, fungicides, insecticides, and rodenticides used to control pests on city-owned land, as reported in the City of Calgary's 2002 State of the Environment Report. The indicator is calculated by dividing the weight of active (non-inert) pesticide ingredients by the total area of land maintained by the City of Calgary.

Trend

Between 1998 and 2001, the City's rate of pesticide application decreased by 27 percent. This reduction appears to be linked in part to the City's 1998 adoption of its Integrated Pest Management (IPM) Plan, which describes IPM as "an ecological approach to vegetation and pest management that strives to reduce reliance on pesticides as well as integrate preventative measures and alternative control technology." Through IPM, staff are mandated to explore alternatives to pesticides, including encouragement of natural predators and use of mechanical controls like manual weeding and strategic pruning.

Pesticide use on Municipal land

	Kilogram of active ingredient per hectare relative to 1997
1997	1
1998	1.2
1999	1.1
2000	1
2001	0.73

Although the City is making progress in reducing the amount of pesticides sprayed on municipally owned land,

residents continue to use pesticides at a disproportionate rate. Calgarians use an estimated six times more pesticides than municipal staff, in part due to the popularity of multi-purpose products that combine fertilizers with herbicides. As part of its IPM strategy, the City is working to ban these products and is aiming to reduce residential pesticide use by 30 percent by 2007.

While we appear to be moving in a positive direction, several other Canadian cities outshine Calgary in their efforts to reduce pesticide use. Since 2003 the cities of Halifax, Ottawa, Toronto, and Montreal have each taken measures to ban the use of pesticides within city limits. Calgary has considered banning pesticides in the past but remains supportive of the controlled use of pesticides through the IPM strategy.

Importance

A sustainable community strives to eliminate or reduce to a minimum the use of toxic substances. Growing evidence suggests that pesticide use can have serious consequences on environmental and human health. A 2004 study by the Ontario College of Family Physicians uncovered compelling evidence that pesticide exposure can result in cancer, neurological diseases, and reproductive disorders.

Linkages

In addition to their association with numerous acute and chronic human health problems, pesticides also pose a threat to the natural environment. Stormwater runoff can bring pesticides into the river system, contaminating our water supply and harming the aquatic ecosystem. Pesticides bioaccumulate in animals at the top of the food chain, posing a very real risk to animal and human health. Across Canada levels of pesticide residues found on Canadian-grown produce, while still generally below threshold amounts, have been increasing and are now at levels comparable to

imported produce.

Children are particularly vulnerable to pesticide exposure, since pound for pound they drink, eat, and breathe more than adults. They also tend to play on grass, crawl in dirt, and put things in their mouths. Studies point to negative effects of pesticide exposure on children's motor skill, brain, and emotional development. Pesticides are designed to attack the neurosystems of pests, yet no Canadian government studies have focused on neurotoxic effects of chemical exposure on children. The Canadian Institute of Child Health states that "in the case of pesticides to be used for purely cosmetic reasons around schools, child care centres, and homes, we feel that the only acceptable risk is zero risk."

Individual & Collective Actions

- Research and employ alternative methods of pest control for lawns and gardens.
- Support a ban on the aesthetic use of pesticides on city-owned land and for home gardening.
- Visit New Edinborough Park, Calgary's first pesticide-free park, in Sunnyside. Gather the support of your neighbours to make a local park in your community pesticide-free.
- Check out the Pesticide Action Network website www.panna.org and the Sierra Club Chinook Group's pesticide-free yard campaign website at www.pesticidefreeyards.org

Surface Water Quality



☺ SUSTAINABILITY TREND

The Facts

In 2002, the fecal coliform counts in the Bow River downstream of Calgary recorded a median count of 90/dL (bacterial colonies per decilitre of water samples) and an average of 185/dL. Fecal coliform counts ranged between 10/dL and 580/dL over a 12 month period. These measures have improved since 1994.

Definition

Fecal coliform is one of many standard measures of water quality. According to the Canadian Water Quality Guidelines (CWQG) for contact recreation (e.g., swimming) the maximum fecal coliform count allowable for a single sample is 400/dL. The CWQG for the mean of five samples in 30 days is 200/dL. The data for this indicator come from the Alberta Environment Stiers Ranch site downstream of Calgary.

Trend

Water quality at the Stiers Ranch site appears to be improving over time. In 1994 the site had a median fecal coliform count of 406/dL, which improved to 219/dL by 2000, and then to 90/dL by the end of 2002. In 2002 only three samples were at or above the contact recreation limit of 400/dL, and the highest concentration of fecal coliform, 580/dL, was less than one-half of the highest concentration in 1999/2000 of 1,300/dL. Upgrades to the sewage treatment plants at both Bonnybrook and Fish Creek are likely responsible for the improvement in water quality at Stiers Ranch.

Calgary's sewage treatment is considered one of the best in North America. It disposes of waste sludge through its state-of-the-art sewage sludge land spreading operation. Calgary rated an A+ from the Sierra Legal Defence Fund in 2004 for its sewage treatment system. This rating was an improvement from its 1999 grade of A, due to the UV disinfection system that the City has added

to achieve 100 percent tertiary treatment of sewage.

While the Stiers Ranch data suggest a low level of biological contamination in water downstream of Calgary, this indicator does not capture other components of water quality, including physical characteristics such as temperature, colour, suspended solids and turbidity, and chemical characteristics like nutrients, minerals, metals, oxygen, and organic compounds. Alberta Environment monitors water quality using a comprehensive index that measures metals, nutrients, bacteria, and pesticides. In the future, this indicator could evaluate water quality in more detail using a combination of biological, physical, and chemical measures.

Another critical component of water quality is storm water management. Historically, overflow storm water has been discharged untreated directly into Calgary's major watercourses. Since 1998, however, the City of Calgary and Alberta Environment have worked to reduce such run-off by making it mandatory that new housing developments contain an internal system of storm water management. Increasingly common is the use of existing and constructed wetlands to manage storm water while preserving habitat and providing an educational green space.

Importance

Calgarians depend on the Bow and Elbow Rivers for drinking water, industrial use, recreation, and tourism, as well as being a receiving body for treated sewage and storm water. With recent tragedies such as the deaths in Walkerton, Ontario in 2000 due to water contamination, municipalities face extra pressure to ensure clean drinking water. Maintaining clean waterways in Calgary helps to improve water quality of both human and aquatic communities downstream of our city.

Linkages

Calgarians identify strongly with the Elbow and Bow Rivers. These waterways and their surrounding lands are important to our sense of community, our sense of well-being, and our leisure activities.

Urban run-off is a major threat to water quality. Pesticides and other toxins enter the rivers through run-off and can harm birds, fish, and invertebrates that live in these sensitive aquatic ecosystems. Once in the water, these toxins can bio-accumulate and threaten human populations downstream.

Good water quality also has economic benefits. The Bow River is an internationally recognized sport fishing river. Water quality affects the health of the aquatic system that the sport fishing industry relies upon. Additionally, if we consume less water and introduce less pollutants into our water system, water treatment costs will diminish, leaving more tax dollars for other sustainability initiatives.

Individual & Collective Actions

- Become more aware of how chemicals, road salt, pesticides, oil from cars, paints, and other products end up in our storm sewer systems.
- Support effective legislation to minimize or eliminate the use of contaminants that eventually pollute our water systems.

Water Consumption



☺ SUSTAINABILITY TREND

The Facts

In 2003, Calgary's average per capita water consumption was 512 litres per day, continuing a trend of declining consumption since the 1970s.

Definition

The average amount of water used per person per day includes total water use for the city, including industrial, commercial, institutional, and residential consumption, divided by the total population. Consumption levels also include water not paid for through accounts such as public use, leakage, and fire fighting. These statistics come from the City of Calgary Waterworks.

Trend

Since the 1970s, Calgary's per capita water consumption has steadily declined, with 2003 levels more than one-third less than late 1970s levels of approximately 800 litres per person per day. In more recent years, this trend has continued. In 1999 an average of 527 litres of water were used per capita per day.

Nonetheless, Calgary has not yet reached a sustainable level of water consumption. In 2003, Calgary had a gross daily water consumption of nearly 476,000 cubic metres. With a projected 2035 population of 1.4 million people, we must change our consumption patterns today to ensure that future Calgarians have access to an adequate supply of high quality water. The City of Calgary Waterworks estimates that to ensure that Calgarians living thirty years from now can access the same quality and quantity of water that we enjoy today, present day consumption levels must be reduced by about a third to 339 litres per person per day.

Compared to other countries, Canadians consume an extraordinary amount of water. Canada is second only to the United States in per capita water consumption. Some European countries have residential water

consumption levels as low as 150 litres per person per day, relative to Canada's residential average of 343 litres.

Importance

Like all living things, humans depend on a clean and reliable supply of water. To be sustainable, a community must monitor and protect its water supply, thereby ensuring long-term health through conservation and stewardship.

Calgary's drinking water originates in the snow pack of the Rocky Mountains, flows to our city via the Bow and Elbow River basins, and is stored in the Glenmore and Bears paw Reservoirs. We share our water sources with many users upstream and downstream of the city, which puts additional demands on Calgary's water supply. Moreover, climate change appears to be shrinking the glaciers that are the source of Calgary's drinking water, making it even more important that we act to conserve water today and address climate change.

Linkages

High levels of water consumption put pressure on existing municipal infrastructure. As water demand increases, costly upgrades to treatment plants, pump stations, reservoirs, and pipes are required. The need for technological improvements can be deferred if Calgarians commit to reducing their own water consumption. In saving water, energy is also conserved, since electricity is used to process and distribute water.

Quite aside from our own savings and conservation, our water consumption affects aquatic life. For example, the amount of water flowing through the city's rivers changes based on human water use. Low water levels can cause the water to warm up, disrupting aquatic life and natural systems. Additionally, wastewater treatment uses chemicals,

which are returned to the rivers. The province has embarked on watershed-based land-use planning that will decrease the amount of runoff that enters our surface water sources, particularly during storms.

To encourage citizens to conserve water, Calgary City Council passed a bylaw in 2002 that will put water meters in every home by 2014. In the meantime, all new houses and newly purchased homes require meter installations, and Calgarians are being encouraged to have free water meters installed in their homes. By using these meters, citizens are only charged for the amount of water they consume, as opposed to a flat rate. In fully metered cities, water consumption averages 420 litres per capita per day.

Individual & Collective Actions

- Have a water meter installed.
- Retrofit your home with low-flow devices such as a low-flush toilet.
- Check your home for leaks and repair them. Water leaks are one of the most common sources of water loss.
- Water your lawn in the early morning or late evening only – or do not water it at all!
- Install a rain barrel and plant drought-tolerant species in your garden.



Resource Use Indicators



This section contains the following indicators

- Domestic Waste
- Ecological Footprint
- Energy Use
- Population Density
- Transit Usage for Work Trips
- Transportation Infrastructure Spending

Highlights

In 2003, Calgarians generated 221 kg per person or a total of 204,000 tonnes of hand-collected domestic waste. Since 1987 per capita production of domestic waste has declined.

In 2001, Calgary's ecological footprint was approximately 9.86 hectares/person, for a total footprint area of approximately 93,800 km². This footprint has continually expanded throughout Calgary's development.

In 2003, Calgary had 922,315 people and 722 km² of land within its municipal boundaries, for a gross density of 1,278 people/km².

In 2001, transit accounted for 41 percent of all work trips into downtown Calgary and 8.7 percent of all trips to places of employment outside the downtown core. City-wide, transit accounted for 15.1 percent of all work trips. These numbers have not changed substantially from those measured in 1999.

Domestic Waste



☺ SUSTAINABILITY TREND

The Facts

In 2003, Calgarians generated 221 kg per person or a total of 204,000 tonnes of hand-collected domestic waste. An additional 37,529 tonnes of Calgary's waste (newspaper, mixed paper, metal, glass, electronics, tires, plastics, and organics) was recycled or composted and diverted from landfills in 2003. Since 1987 per capita production of domestic waste has declined.

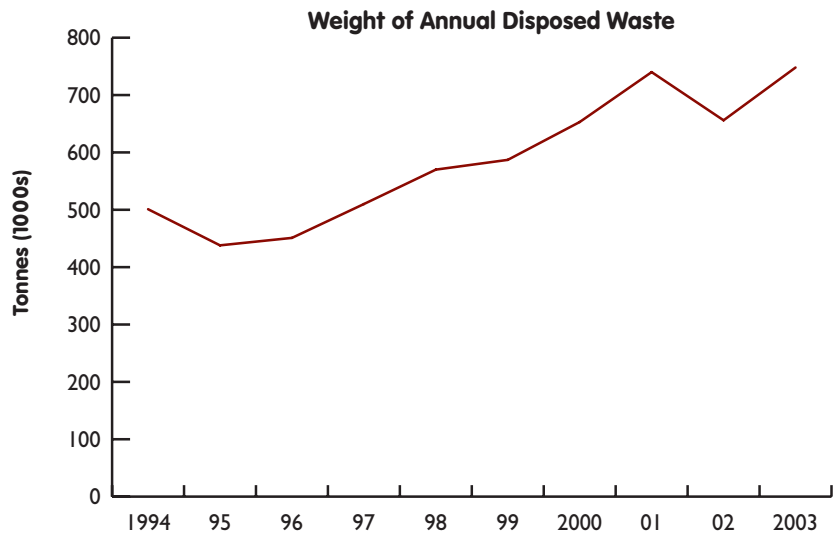
Definition

This indicator measures the amount of household waste generated annually per capita within the city. The data is from the City of Calgary, Solid Waste Services Annual Report and is based on the volume of hand-collected waste delivered to the three city landfills by residential sanitation crews. Residential crews do not collect waste from centralized receptacles, so most apartment, townhouse, and condominium residents are not included in these calculations. This must be kept in mind if the proportion of the population living in this type of housing changes significantly in the future.

Trend

Since 1987, Calgarians have reduced the amount of waste they generate on a per capita basis by 28 percent, with a 7 percent decline since this indicator was last measured in 1999. Part of this reduction is linked to the fact that in 2003 Calgarians recycled 68 percent more materials at residential recycling depots than they did in 1999, thereby diverting 5 percent of materials from city landfills.

While per capita landfilled waste levels are declining, Calgary's landfills received more waste in 2003 than they did during any other year over the last decade. Despite a reduction in landfilled waste in 2002, which municipal staff suggest may have been caused by lower levels of economic activity and development, a total of 748,000 tonnes of municipal,



regional and privately hauled waste were deposited in the three landfills operated by The City of Calgary in 2003. This represents a nearly 50 percent increase over 1994 levels, and signifies that non-domestic waste currently accounts for two-thirds of total waste in Calgary.

Calgary's efforts to reduce waste lag behind those of many Canadian municipalities, where programs such as curbside recycling are well-established. Edmonton boasts Canada's most progressive waste management strategy: through an extensive curbside recycling, composting, and recovery program, the City of Edmonton landfills only 30 percent of its waste.

Importance

This indicator focuses on the overall goal of waste reduction. The volume of waste we generate is influenced in large part by the consumption patterns of our society. Disposable, heavily packaged, and limited lifespan products are a major factor in the generation of waste. Inherent in waste reduction is reducing consumption, reusing materials and goods, recycling, and composting.

Linkages

The handling and disposal of waste materials is an economic drain. Increased waste generation requires more land for landfills and demands more tax dollars. While it is preferable to deal with waste through recycling and reuse, the best solution is to reduce the use of materials in the first place. Reducing our consumption will free up more of our time and resources to enjoy leisure activities, to volunteer, and to engage in non-consumptive activities. Producing less waste will also lead to cleaner air, water, and soil.

Decreasing municipal waste will save valuable land. If we modify our lifestyles and change our throwaway mentality, we can reduce our impact on forests, farmland, and other natural resources, and ultimately shrink our ecological footprint.

Individual & Collective Actions

- Refuse, reduce, reuse, recycle, and above all, rethink! Calgarians must begin to view waste as a resource and not as throw away items.
- Compost – it can save up to 30 to 50 percent of your domestic waste. Contact Clean Calgary for composters, workshops, and information.
- Buy bulk grocery, cosmetic, and cleaning products.

Ecological Footprint



SUSTAINABILITY TREND

The Facts

In 2001, Calgary's ecological footprint was the largest in Canada at approximately 9.86 hectares/person, for a total footprint area of approximately 93,800 km². This footprint has continually expanded throughout Calgary's development.

Definition

An ecological footprint estimates the amount of productive land and sea area needed to sustain a given human population relative to annual consumption levels of food, fibre, wood, energy, and other manufactured goods, and the production of wastes and pollutants that result from human activity.

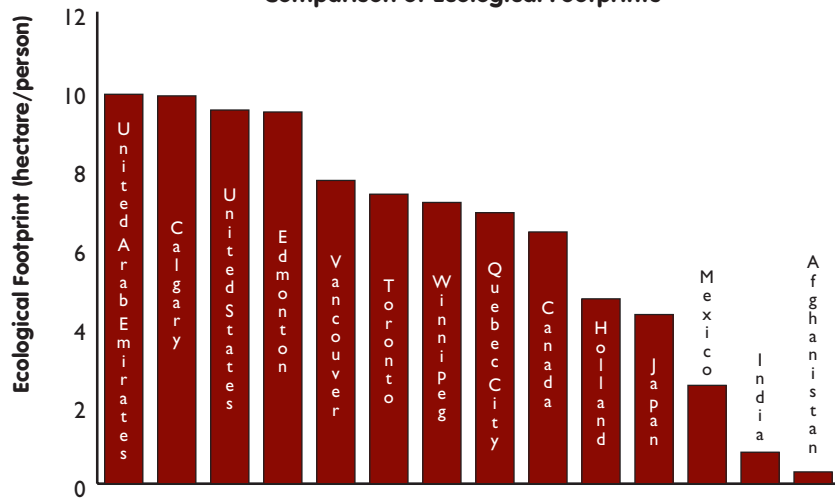
Calgary's ecological footprint is derived from a 2004 report titled *Ecological Footprints of Canadian Municipalities and Regions* by Aniel-ski Management Inc. The ecological footprint was calculated by tallying the demands that local human populations place on six different land categories in a given year: crop land, pasture land, forest land, sea space, built area, and energy land (the area of forest required to absorb the carbon dioxide emissions resulting from energy consumption).

Trends

It is estimated that in 1900 Calgary's footprint was one hectare per person, and it rose to two hectares by 1950. Today, with over nine hectares needed to sustain the average Calgarian, we have one of the largest ecological footprints in the world. At current global population levels, the earth can provide approximately 2.2 hectares of productive land and sea for each human. With an ecological footprint of over four times this limit, Calgarians are using much more than their share of the earth's resources.

Calgary has the largest ecological footprint of any Canadian municipality with a level more than two hect-

Comparison of Ecological Footprints



ares/person (or 36%) over the national average. Calgary has the highest Energy Land demand of all of the municipalities, comprising 6.03 hectares of each Calgarian's footprint. The Energy Land demand is particularly high because of Alberta's use of coal-derived electricity compared to hydro-derived electricity in other provinces. Calgary also has a high household expenditure profile, which is linked to higher overall energy and material consumption.

Globally, Canada has the eighth largest ecological footprint. According to the 2004 Living Planet report, the per capita footprint of the world's wealthiest nations, including Canada, is over four times greater than that of low and middle income countries, and more than double the earth's biological capacity. Still, countries that enjoy high quality of life but have relatively small footprints, such as the Netherlands and Japan, suggest that it is possible to attain a high standard of living without overusing the earth's resources.

Importance

The ecological footprint is an important indicator of a sustainable community because it helps us to understand whether our lifestyle is sustainable from a global perspective

and to identify wasteful practices and effective strategies for eliminating or adjusting them. From an ethical standpoint, it challenges us to examine our lifestyle in relation to what the earth can provide.

Linkages

Sustainability indicators related to resource consumption, such as energy use, population density, and water consumption, factor directly into ecological footprint calculations. More broadly, ecological footprint is an economic indicator in that it demonstrates the resource cost of our lifestyles and enables us to reflect on the unequal access and use of resources throughout our city, country, and planet. The ecological footprint can also encourage us to preserve natural areas that provide us with leisure opportunities and, perhaps more importantly, a stronger spiritual connection to the living world.

Individual and Collective Actions

- Seek out non-consumptive ways to enhance your quality of life (e.g., walk to work).
- Become more conscious of how your daily choices affect your ecological footprint.
- Buy locally whenever possible.



The Facts

In 2002 the average Calgarian consumed the equivalent of 40 barrels of oil, or the energy equivalent of 7,055 litres of gasoline, up 1.5 percent since 1997.

Definition

This indicator tracks the energy use per capita in key energy categories. It combines electricity usage (ENMAX data), natural gas usage (ATCO data), and petroleum product (e.g., gasoline) usage (per capita figures based on provincial data).

Electricity and natural gas figures include residential, commercial, and industrial consumption. Petroleum product usage figures refer to the total of refined petroleum products used in all three sectors, including motor gas, diesel fuel, fuel oils, kerosene, aviation fuels, and petroleum gases.

Trend

The level of energy consumption in Calgary is not sustainable for the long term. From 1997 to 2002, there was a 1.5 percent increase in energy consumption per capita. This trend is demonstrated across the province as well. According to Statistics Canada, between 1990 and 2002 Alberta's overall energy consumption soared 30.7 percent – the largest increase in Canada, far surpassing our population growth of only 22 percent. In contrast, in the same period energy consumption went up only 12.1 percent in Ontario and 16.6 percent in Quebec.

A large portion of this increase can be attributed to car use. The City of Calgary's Mobility Monitor newsletter (July 2003) indicated that traffic growth, measured by total vehicle kilometers traveled on a typical weekday, grew by 56 percent between 1991 and 2001. During the same period, Calgary's population increased by 24 percent.

On the bright side, however, Calgarians are consuming more renewable forms of energy. Since 1993 more than 18 wind farms have been constructed in southern Alberta. These contribute 170 megawatts of electricity to the grid – enough power to serve almost 60,000 homes – and represent half of Canada's total wind-generating capacity.

Importance

A sustainable community should expend the absolute minimum in energy resources to meet its needs, leaving future generations with the ability to enjoy the same quality of life. In order for Calgary to become a sustainable community, we need to reduce our consumption of electricity, natural gas, and petroleum products.

Linkages

Calgarians' quality of life is intricately linked to our use of energy. As a city, we use ever-increasing amounts of energy to heat and light our homes, operate our appliances, produce the goods and services we desire, and move ourselves around. In Calgary the main source of energy is fossil fuels – a non-renewable form of energy. The production, refinement, and consumption of fossil fuels has a significantly greater impact on the environment than that of renewable energy.

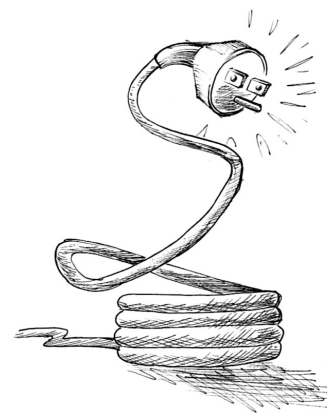
The way we design new neighbourhoods impacts our reliance on the automobile and our consumption of fossil fuels. Constructing satellite communities with few or no amenities encourages us to drive our cars to interact with people or to perform even minor errands. This design also affects our ability to create a sense of local community and isolates those without easy access to an automobile.

Energy conservation is increasingly becoming an economic and social concern, as much as an environmen-

tal one. Throughout 2004, the price of oil routinely set record highs. Many researchers are forecasting the peak of world oil production within the next 15 years, which will push the price of petroleum to levels well beyond the present. This may have a positive impact on Alberta's largely oil-based economy, but increased consumption and higher prices will tax Calgary's social and environmental sustainability.

Individual and Collective Actions

- Retrofit your house for low-energy consumption. See the Energuide for Houses Program at www.oee.nrcan.gc.ca
- Buy appliances that have the Energy Star label.
- Purchase locally produced food.
- Use wind-generated electricity to power your home. See www.pembina.org/wind_power.asp or www.enmax.com



Population Density



SUSTAINABILITY TREND

The Facts

In 2003, Calgary had 922,315 people and 722 km² of land within its municipal boundaries, for a gross density of 1,278 people/km². In the same year, the city had a gross residential area of 294 km² for a gross residential density of 3,137 people/km².

Definition

Calgary's gross area includes all land within the city's boundaries. Calgary is a unique city since all its major services and a 30 year supply of land reserved for future development are located within its boundaries. As a result, Calgary's gross density may be understated when comparing it to that of other cities.

Calgary's gross residential area includes residential, commercial, and park land but excludes industrial land, large non-developable land, non-developable river valleys, federal land, Nose Hill Park, and Fish Creek Park.

Trend

The City of Calgary has limited historic population density data, and those data are confined to residential land. Nonetheless, it can be determined that the general residential density of the city has increased from 3,069 people/km² in 1970 to 3,137 people/km² in 2003, an increase of 2 percent.

According to Statistics Canada's 2001 census data, Calgary is one of the least compact cities in Canada. In comparison to other cities, Calgary's gross density is above that of Edmonton (974/ km²) but below that of Winnipeg (1,332/ km²), Montreal (3,625/ km²), Toronto (3,939/ km²), and Vancouver (4,759/ km²).

City of Calgary policy requires that new communities be built at densities of six to eight dwelling units per gross residential acre. Is this sustainable? In their study of 32 major cities around the world, Peter Newman

and Jeffrey Kenworthy recommend densities above 12 to 20 units per residential acre for public transit-oriented urban lifestyles. In those terms, while some progress has occurred, the City must make a greater effort to increase urban densities to a sustainable level.

Importance

Compact cities can have less impact on the environment. Car usage generally decreases and alternative modes of transportation become more viable with intensified densification, which in turn leads to reductions in air pollution. The destruction of natural habitat, watersheds, and farmland by urban development can be minimized by restricting low-density urban sprawl.

The social advantages of high-density living are also significant. A compact city can put amenities within reach of those who cannot drive or afford a vehicle, such as the elderly, youth and children, and the poor. Higher density can also mean shorter commuting distances, less time spent in traffic, and more time spent with family and friends.

High-density living results in important economic benefits. A number of studies in both Canada and the United States have shown that high-density development costs less to maintain on a per capita basis and generates more tax revenue than comparable lower-density developments.

Linkages

A major study by the Canadian Heart and Stroke Foundation titled *The Suburban Dream Gone Sour* estimates that for every one hour per day spent in a car, there is a 6% increase in the likelihood of obesity. Conversely, for every 1 hour per day spent walking there is a 5% reduction in the likelihood of obesity. Research summarized by the US Natural Resources Defense Council suggests

that as cities become more compact, a greater proportion of the population will choose to walk, cycle, or use public transit. With more people using alternative modes of transportation, the consumption of fossil fuels can be reduced and air quality enhanced. Improving air quality means fewer cases of respiratory disease.

Individual and Collective Action

- Educate yourself about the benefits of more compact urban design.
- Choose to live in a compact community.
- Support efforts to increase density, like cleaning up contaminated lands to allow for redevelopment, concentrating growth in existing urban areas, and establishing growth boundaries and agricultural land reserves.



Transit Usage for Work Trips



☺ SUSTAINABILITY TREND

The Facts

In 2001, transit accounted for 41 percent of all work trips into downtown Calgary and 8.7 percent of all trips to places of employment outside the downtown core. City-wide, transit accounted for 15.1 percent of all work trips. These numbers have not changed substantially from those measured in 1999.

Definition

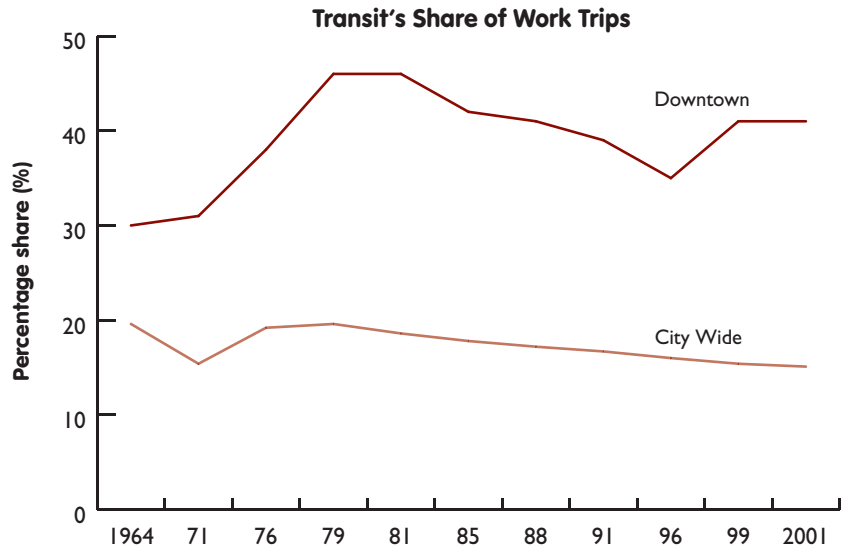
Information for this indicator was derived by polling 10 percent of employed Calgary residents during the 2001 City Census. A full report, entitled *Travel to Work Survey, 2001* is available from the City of Calgary Planning Policy Information Centre. Transit usage includes community shuttles, buses, and light rail transit (LRT).

Trend

Between 1999 and 2001 there was a 0.3 percent decrease in work-related transit usage in Calgary, with most of this reduction related to a slight decline in the transit share of trips to non-downtown work sites. Alongside this decline, automobile usage dropped 0.6 percent over these two years while the number of people who walked to work increased by 0.7 percent.

Over the longer term, work-related transit usage in Calgary has been declining since the early 1980s. However, in more recent years, transit's share of downtown work trips has been increasing since a low in the mid-1990s.

With the LRT expansion in 2003 and 2004, it is possible that transit will account for an increasingly large share of work trips in the city. The opening of the Dalhousie (NW) and the Somerset/Bridlewood (SW) stations has lengthened the LRT tracks to over 37 km, and dedicated transit lanes along some streets help to ensure high frequency, efficient transit service.



Importance

In a sustainable community, the movement of people and goods is accomplished using the most efficient means possible. The more we use our cars or build our city to support the movement of the automobile, the less livable the city becomes. Thousands of people are moving to Calgary, making it one of the fastest growing cities in Canada and putting increasing pressure on the transportation system. Exacerbating the problem is the fact that many people do not live near where they work. For instance, downtown and city centre jobs have grown by 37 percent whereas the population in those areas has only grown by 4 percent. Population growth has concentrated in the outer edge of the city, where transit usage is below average.

Linkages

The primary effect of low transit usage is high personal automobile usage, resulting in more congested and dangerous roads, air and noise pollution, the creation of greenhouse gases, and the loss of valuable land to roads and parking lots.

Living in a car-dependent city, Calgarians spend a considerable amount of money to own and maintain their

vehicles. According to Statistics Canada, the average new vehicle has a fuel efficiency rating of 10 liters per 100 km (this includes cars and light trucks), making a 20 km commute cost approximately \$96 each month for fuel alone. Add insurance and maintenance costs, and drivers can spend as much as \$400/month on their cars. In comparison, a monthly transit pass cost \$65 in 2004.

Making communities more transit-friendly by providing bus shelters, benches, and pleasant and safe pedestrian environments can increase ridership and promote positive interaction among community members. Transit also allows people who do not have a private automobile to participate in the social and economic opportunities offered in the city.

Individual & Collective Actions

- Consider all the costs in choosing your mode of transportation
- Volunteer to be a carpool coordinator at work and at clubs where your children are members.
- Encourage your workplace to participate in Calgary's annual commuter challenge. Learn more at www.commuterchallenge.net

Transportation Infrastructure Spending



☺ SUSTAINABILITY TREND

The Facts

In 2003, the City of Calgary spent \$512 million on transportation infrastructure, including roads, public transit, and pathways. About 42% of this spending was dedicated to roads and 58% was for public transit. When revenue generated from transit users is deducted, the actual amount spent on roads in 2003 represents 51% of expenditures, compared to 49% for public transit. Of the total transportation infrastructure budget, 0.24% (\$1.2 million) was spent on construction of new regional pathways.

Definition

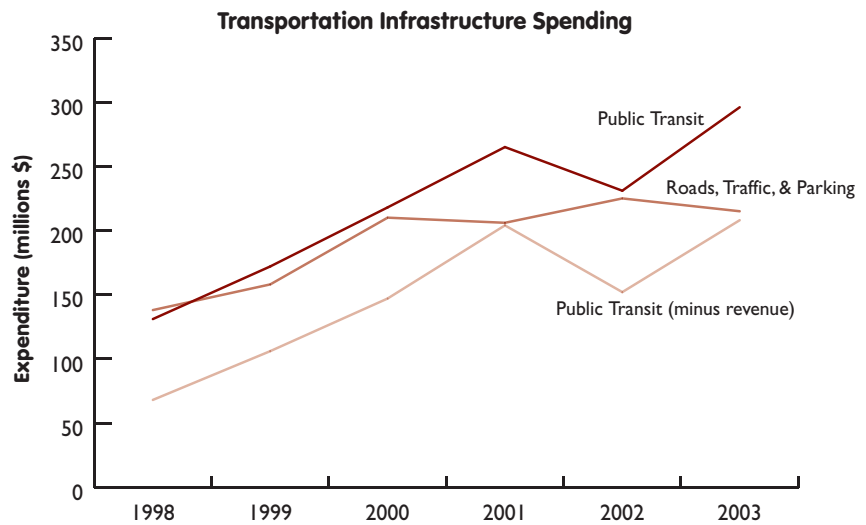
These statistics come from the 2002 and 2003 City of Calgary Annual Reports. Expenditures include operating and capital funds for public transit and for roads, traffic, and parking. The figures do not include spending by developers on roads within new subdivisions.

Trends

While the City of Calgary historically has spent more money on roads than transit (not including transit-derived revenue), in recent years this trend has become more sustainable, with nearly equal amounts of spending dedicated to each type of infrastructure in both 2001 and 2003. While spending on roads has remained stable at around \$225 million since 2000, the increase in capital spending for transit in recent years is largely due to extension of the LRT lines in the southwest and northwest.

As Calgary expands, the personal vehicle remains the choice mode of transportation. Between 1964 and 2001, the vehicle kilometres traveled on Calgary streets on a typical weekday grew from 12.4 to 44.5 kilometres per person, an increase of more than 350 percent.

The City of Calgary is currently preparing an update of the 1995 Calgary Transportation Plan (CTP) to be



released by the end of 2005. CTP 2005 will consolidate all existing City of Calgary transportation policies and guidelines based on the 1995 CTP vision and current land use strategy. Future plans for Calgary transit and the city's regional pathway system will be outlined in the document, as well as links between Calgary's transportation system and social and environmental issues.

Importance

The widespread use of automobiles has many unsustainable side-effects that are evident in terms of public health, energy dependence, the increasing cost of providing and maintaining transportation infrastructure, and greenhouse gas emissions. Many of these costs are being transferred to subsequent generations, making the current system both socially inequitable and economically and ecologically unsustainable.

Linkages

As a city grows, the form it takes is fundamentally linked to its transportation network. In Calgary, transportation networks have been created primarily to accommodate the personal automobile. Car-oriented design often overlooks the needs and preferences of pedestrians and

cyclists, thereby reducing the potential for person-to-person interaction in communities and commercial areas. Such interactions can foster sense of community, reduce crime rates, and provide support for more vulnerable citizens.

The Canadian Urban Transit Association states that while cars and light trucks produce 54 percent of all transportation-related greenhouse gas (GHG) emissions, public transit accounts for less than one percent of GHG emissions. Roadways also take up vital urban space. The average municipality commits 25 percent of its land area to roads, parking, and automobile infrastructure. With less dependence on automobiles, more land would be available for housing, green space, and other amenities.

Individual & Collective Actions

- Educate yourself and talk to your alderman about the Calgary Transportation Plan and infrastructure spending priorities.
- Telecommute or change your work schedule to avoid traveling during peak hours.
- Investigate car pooling & carsharing options for your transportation needs. Check out the Calgary Alternative Transportation Co-operative at www.catco-op.org

Wellness Indicators



This section contains the following indicators

- Access to Primary and Alternative Health Resources
- Childhood Asthma Hospitalization Rate
- Healthy Birth Weight Babies
- Self Rated Health
- Youth Wellness

Highlights

Approximately 3.8 percent of the Calgary Health Region's (CHR) 2002/2003 budget was directed toward preventive health care; this is slightly less than was spent in 1997.

In 2003, there were 2,614 emergency asthma cases and 150 hospitalizations per 100,000 children under 18 at the Alberta Children's Hospital in Calgary. Asthma-related hospitalizations have been declining in recent years.

In 2000, 93.5 percent of babies born in Calgary had a healthy birth weight. Rates of unhealthy birth weights have varied unpredictably over the last ten years.

In 2002, the welfare income for a disabled person in Alberta was 39 percent of the Low Income Cutoff (LICO). In 1992, this figure was 60 percent.

Access to Primary and Alternative Health Resources



SUSTAINABILITY TREND

The Facts

Approximately 3.8 percent of the Calgary Health Region's (CHR) 2002/2003 budget was directed toward preventive health care; this is slightly less than was spent in 1997. Between 1998 and 1999, 60 to 70 percent of Canadians used some form of alternative therapy.

Definition

Preventive health care includes all interventions to reduce the risk of illness or injury, including the promotion of regular physical activity, good nutrition, sanitation, and immunization. Alternative health care covers a wide range of wellness treatments from Chinese and naturopathic medical treatment, to chiropractics, to relaxation and massage.

Information about the CHR's spending on preventive health care came from the CHR 2003/2004 Annual Report and includes all spending on promotion, protection, research, and education that is related to preventive health care. Statistics about Canadians' use of alternative health care were derived from a 1999 Fraser Institute study.

Trend

The 2001 State of Our City Report labeled this indicator an *Indicator in Progress* because only approximate data for preventive health care spending could be obtained. Since that time, the CHR has tracked preventive health care spending in more detail, and the statistics suggest a slight decline in the proportion of resources devoted to preventive health care since 1997.

Health Canada notes that Canadian females are more likely to use alternative therapies than males, except in the use of chiropractic. Most users of alternative therapies are between 25 and 64. Use of these therapies increases with education and income and most commonly takes the form of episodic visits rather than contin-

ual, ongoing contact. Of all Canadians, Albertans are most likely to use some form of alternative health care.

Importance

Increasingly, preventive and alternative health strategies are gaining acceptance as reliable complements to conventional health practices. While conventional health care will always play an important role in treating disease and injury, a sustainable community should also adopt practices that promote wellness and reduce the need for more intrusive health interventions. Preventive health care practices such as mammography and immunization not only offer important benefits to individual health, but they also help to achieve large financial savings. Alternative health care practices can be a strong component of a preventive health care strategy, given their focus on overall lifestyle and well-being.

Linkages

Satisfaction of basic human needs is the most fundamental element of health. In modern society, this satisfaction is closely tied to income. The increasing number of hours required to meet basic needs at minimum wage and the rising numbers of food bank users in Calgary both point to an increasing proportion of Calgarians who struggle to meet their most fundamental needs.

A health promotion approach has been one response to the need for preventive care. This approach includes multisectoral collaboration, community building, and health services reorientation to address issues

such as smoking, clean air and water, and nutrition. The Alexandra Health Centre in Inglewood and the Calgary Urban Project Society embody this type of approach.

An increase in physical activity and a growing interest in organic foods are both linked to preventive health care. However, in Calgary, accompanying these positive contributors to health is an increase in the consumption of junk food and obesity among youth. Smoking remains the single leading preventable cause of premature death and disability in Canada.

Individual & Collective Actions

- Support the maintenance of universal and equitable access to health care.
- Develop a health strategy clearly focused on prevention.
- Support programs like amateur sports, which promote healthy lifestyles and lower the need for health treatments.

Percentage of CHR budget spent on preventive health care

	1997	1998	1999	2000	2001	2002
Promotion and protection	2.5	2.5	2.6	2.1	2.2	2.5
Research and Education	1.5	1.6	1.4	1.4	1.3	1.3
Total proportion of budget spent on preventive health care	4.0	4.1	4.0	3.5	3.5	3.8

Childhood Asthma Hospitalization Rate



☺ SUSTAINABILITY TREND

The Facts

In 2003, there were 2,614 emergency asthma cases and 150 hospitalizations per 100,000 children under 18 at the Alberta Children's Hospital in Calgary. Asthma-related hospitalizations have been declining in recent years.

Definition

Asthma is a chronic inflammatory condition in the airways of the lungs. Symptoms such as chest tightness, wheezing, and coughing are sudden or persistent and can vary from mild to life threatening. In-patient asthma cases include only those in which asthma was the most significant condition leading to a hospital stay. The Alberta Children's Hospital provided the data for this indicator.

Trends

Asthma-related hospitalizations have been declining in recent years. The highest number of emergency asthma cases at the Alberta Children's Hospital came in 1995, when there were 3,562 asthma-related visits. Hospitalization rates were at their highest in 1996, when 222 children were hospitalized due to asthma.

Relative to the peak of asthma cases at the Alberta Children's Hospital in 1995 and 1996, 2003 statistics declined by 27 percent and 32 percent for emergency visits and hospitalizations, respectively. While it seems that fewer asthmatic children are spending time in the hospital, Alberta has the third highest asthma rate in the country. With an estimated 15 percent of Canadian youth having asthma, more than 37,000 young people in Calgary may be suffering from this disease.

Compared to data from the 1970s, today's childhood asthma rates are very high. Statistics Canada figures for Canada show that in 1978/1979, 2.5 percent of children under 15 were diagnosed with asthma. By the mid-1980s that rate had risen to 3.1 per-

cent, and by 1994/1995, the rate was approximately 11.2 percent.

Importance

Asthma sufferers are like the canaries in the coal mine in terms of indicating the health of our city and air quality. Asthma is a growing global problem, with as many as 300 million people affected worldwide. These numbers are increasing, and researchers are struggling to find out why.

In Canada, approximately 20 children and 500 adults die each year from the disease. Regardless of the severity of the condition, people who have asthma face a variety of challenges, including reduced activity levels, sensitivity to certain environments, and more days off from work and school.

Linkages

The Canadian Institute for Child Health warns that the growing burden of chemicals to which children are exposed is likely a significant factor in the development of asthma. Airtight homes and offices seal chemical emissions from sources such as carpets, glue, plywood, and paint, thereby concentrating asthma triggers within our living environments. Additionally, increased car dependency is creating more air pollution in our cities. A 2002 report in the Journal of Environmental Health found that children living in cities with high levels of exhaust-related ozone (or smog) are at greater risk of developing asthma.

Since people suffering from asthma tend to be less productive at work and in their communities as a result of having to devote time and energy to dealing with their symptoms, rising asthma rates could affect other indicators like sense of community, income equity, and unemployment over time.

Dealing with asthma is costly to the health care system. Since physical

exercise can trigger asthma attacks, young asthmatics may not be physically active enough to maintain wellness, which could lead to health problems later in life. Asthma is also a serious issue in our schools, not only for the health of children but also for its effect on their education. One-quarter of all time lost from school is as a result of asthma.

Individual & Collective Actions

- Ensure that your home is constructed with non-toxic materials and that air-tight homes have a high-volume air exchange system.
- Support smoking prevention programs and smoke-free policies in public places.
- Support incentives for public transport and for low emission energy sources to improve air quality in Calgary.
- Work with your child's school to improve indoor air quality.

Healthy Birth Weight Babies



☺ SUSTAINABILITY TREND

The Facts

In 2000, 93.5 percent of babies born in Calgary had a healthy birth weight. Rates of unhealthy birth weights have varied unpredictably over the last ten years.

Definition

The Calgary Health Region defines a healthy birth weight as over 2,500 grams (5.5 pounds). This standard was set by the World Health Organization and is used internationally to monitor birth weights. Low birth weight occurs as a result of shortened gestation and/or inadequate fetal growth. Data was derived from Calgary Health Region statistics.

Trend

It is difficult to determine an obvious trend for this indicator. Since 1990 the incidence of low birth weight babies in Calgary has varied widely, ranging from a low of 5.9 percent in 1994 to a high of 6.9 percent in 1998. In the years since 1998, the rate of low birth weights has declined slightly, but it is not easy to predict whether this trend will continue.

Historically, Calgary has had a higher incidence of low birth weight babies than the rest of Alberta. Several factors may help to explain this trend, including the larger proportion of mothers over 35 in Calgary, the higher rate of multiple births in the city, and Calgarians' access to fertility drugs and advanced levels of care that can facilitate risky pregnancies and sustain low birth weight babies.

Importance

The National Council of Welfare estimates that up to 75 percent of infant deaths can be attributed to low birth weight. By promoting practices and behaviours that lead to healthy birth weights, we can protect one of Calgary's most important resources, its children.

Never was the axiom *getting a good start in life* more true than with birth

weight. Low birth weight is strongly associated with poor health outcomes. Low birth weight babies are more at risk of developing health complications such as asthma and hearing problems. They are also more likely to have developmental disabilities and to perform poorly in school.

The economic costs associated with low birth weight babies are enormous. They are two to four times more likely to be hospitalized during the first five years of life than normal birth weight babies, and they comprise the Calgary Health Region's fourth highest category of expenditure.

Linkages

Poverty is one of the most potent factors contributing to low birth weights in Canada. Low-income families may have less knowledge about prenatal health and reduced access to nutritional foods, and they are more likely to practice high health risk behaviours such as smoking during pregnancy. In Calgary, prenatal classes are available on a user-pay basis, which may limit access for those with limited financial resources. With the advent of new fertility technologies, low birth weight is also becoming an issue in more affluent communities in Calgary, where expensive fertility technologies are more commonly used and delayed childbearing is increasingly common.

In one respect, an increase in low birth weight babies may be regarded as a positive health indicator in that medical advances allow us to better support pregnancy and resuscitate and sustain more low birth weight babies. Research has also shown that neglected low birth weight babies are more prevalent among families that lack social support from the extended family and the community. Conversely, a strong community can be a factor in reducing the negative outcomes of low birth weight.

Individual & Collective Actions

- Support pregnant women you know in eating healthy foods, avoiding alcohol, and quitting smoking.
- If you know of family friends or neighbours with low birth weight babies, be more conscious of their need for support.



Self Rated Health



☺ SUSTAINABILITY TREND

The Facts

In 2000, more than 90 percent of Calgarians rated their health as good or better relative to others their age. Among Calgarians with relatively low levels of education, 7 percent more rated their health as good compared to 1998.

Definition

The data for this indicator come from a Calgary Health Services survey conducted in 2000 that randomly sampled 420 respondents from each of seven age and gender groups. The question asked was "Compared to other people your age, how would you describe your state of health? Excellent, Very Good, Good, Fair, or Poor."

Trend

Levels of self-rated health have remained relatively stable in recent years. In all age, gender, and educational groups, most Calgarians perceive their health to be equal to or better than that of their peers. The lowest level of self-rated health is found among people who have a junior high education or less. Still, the number of people in this education class who have a high level of self-rated health increased 6 percent since 1999. Compared to all other gender and age categories, this jump represents the most significant increase in self-rated health since the survey was last conducted in 1999.

Percentage of respondents who self-rated their health as Good or Better than people in the same age bracket.

Age	Sex	1996	1998	2000
18-34	M	93	93	92
18-34	F	93	92	91
35-64	M	88	89	90
35-64	F	91	88	90
65+	Both	85	78	79

Percentage of Respondents, by level of education who self-rated their health as Good or Better than people in the same age bracket

Level of Education	1996	1998	2000
University	94	94	94
Technical College	94	90	92
Senior High School	91	89	89
Junior High school or less	79	71	77

Importance

A person's mental and emotional sense of well-being is often as important as objective assessments of physical health. The notion of self-rated health not only explores an individual's subjective assessment of physical, mental, and emotional health, but also provides an indirect assessment of family well-being, connection to community, economic well-being, and sense of security. Self-assessments provide us with another point of comparison by which we can affirm the assessments made by health care providers or by which we can be alerted to potential problems that may be missed in an objective assessment.

Linkages

When citizens have a strong sense of wellness, we can expect less absenteeism from work or school, less stress, a more productive economy, and less of a burden on the health system. Healthy individuals are more likely to engage in preventive care, to take more responsibility for their own care, and to be active in the community.

The lower percentage of positive responses from those with junior high education or less may have to do with a whole range of factors. Level of education is related to income and

employment status. Unemployed individuals and lower-income individuals may have more health problems due to lack of resources to meet basic needs or reduced access to health care.

Quantifiably worse health is also related to education and employment, as seen in the Adult Literacy and Hours of Work Required at Minimum Wage indicators. Subjectively, self-rated health may also be influenced by feelings of low self-esteem among a group often less valued by society and is thereby linked to the Sense of Community indicator.

Individual & Collective Actions

- Support the development of a more progressive tax system.
- Support government reinvestment in social programs.
- Monitor and improve, if necessary, your own nutrition and exercise habits, and model healthy habits for your children and/or friends.

Support for the most vulnerable



 SUSTAINABILITY TREND

The Facts

In 2002, the welfare income for a disabled person in Alberta was 39 percent of the Low Income Cutoff (LICO). In 1992, this figure was 60 percent.

Definition

Information for this indicator comes from the 2002 Welfare Incomes and the Estimated Poverty Line by Province and Household Type Fact Sheet, April 2003: A Report by the National Council of Welfare (www.ncwcn-bes.net/index.htm). LICO is one of the most commonly used proxies for the poverty line in Canada. For more information on LICO, refer to *Hours Required to Meet Basic Needs at Minimum Wage* on page 32.

Trend

Welfare support for disabled Albertans has declined steadily since 1991, when it peaked at 60 percent of the LICO. Between 1998 and 2002, this support fell by 3 percent relative to the LICO, reaching its lowest point since 1986 when it stood at 44 percent of the LICO. With a 2002 LICO at \$19,256, the \$7,601 available to disabled people represents a deficit of \$11,655.

Relative to other provinces, Alberta fares poorly in supporting its most vulnerable residents, with benefits for persons with disabilities in Ontario, Manitoba, Saskatchewan, and British Columbia totaling 61, 43, 53, and 51 percent of the LICO, respectively. In 2002 Ontario provided the most support to disabled residents of all the provinces, with welfare payments of \$11,763, or 35 percent higher than those in Alberta.

For adults with permanent disabilities that severely impair their ability to earn a livelihood, Alberta's Assured Income for the Severely Handicapped (AISH) program provides financial and medical benefits. Currently, for a single individual, AISH provides a maximum payment of \$850 per

month, resulting in a yearly payment more than \$9,000 below the LICO. In 2002, after a review of its low-income programs, the Alberta government reported that the AISH program would not be receiving additional funding in the near future. As the costs of food, utilities, rent, and other basic necessities rise, the ability of persons receiving AISH to purchase these goods and services is in decline.

Importance

It has been said that the strength of a chain is measured by its weakest link. Because of the social stigma that has long accompanied people with disabilities, they are particularly vulnerable to poverty, isolation, and segregation. A society that cannot help its most vulnerable citizens meet their basic needs and participate fully in community life, especially in times of affluence, is not a strong society.

Linkages

Urban sprawl creates problems in everyday living for disabled citizens. As the city spreads outward, transportation links are fewer and travel distances and times increase. A convenient, accessible public transportation system can be a lifeline for citizens with disabilities, who may not have access to a car or be able to drive. These citizens should be able to move throughout our shopping areas, neighbourhoods, and workplaces with ease. The needs of disabled people should factor into every decision we make about the form of our city. For example, when planning new crosswalks and intersections, we should design them considering those citizens who cannot walk very fast or are in wheelchairs.

Because of their different life situation, citizens with disabilities may not feel that they belong in a community as much as their neighbours. This low sense of community can be particularly strong among disabled

schoolchildren, who may feel that their difference sets them apart from their classmates in insurmountable ways. The educational system can further exclude these children by focusing largely on academic competencies rather than socialization and the discovery of individual skills and knowledge.

Individual & Collective Actions

- Support the raising of government support for disabled persons to at least the Low Income Cutoff and promote indexing AISH for inflation.
- Support including the requirements and concerns of people with disabilities in the planning and implementation of public transportation and public works.
- Support the exploration of a more individualized approach to welfare funding.
- Recognize the benefits of opening your workplace to more diversity.
- Consider supporting or being involved in setting up a business advisory board to help people with disabilities find competitive work in the community.



The Facts

A 2003 Health Canada survey found that youth aged 12 to 19 have the lowest levels of psychological well-being of all Canadians. Compared to other countries, Canada has among the highest levels of youth obesity even though young Canadians are some of the most physically active young people in the world.

Definition

Psychological well-being incorporates the concepts of self esteem, mastery (the sense that one is in control of one's own life), and coherence (the sense that the world is comprehensible and meaningful), as measured in the 2003 Health Canada publication "How Healthy are Canadians?" Comparisons of obesity and physical activity levels among Canadian youth were derived from the 2000 World Health Organization report *Health Behaviour in School-aged Children*.

Trend

Studies in the 1990s found that psychological well-being decreased with age, but today suggest that mental states such as depression, stress, and unhappiness are most common among younger people. In 2003 Canadians aged 18 and 19 were the most likely to report high stress levels (37%). Of all age-sex groups, young women aged 15 to 19 were the most likely to show signs of depression (9%). Of the three components of psychological well-being, young Canadians are most likely to have a low perception of coherence, or the sense that the world is manageable, comprehensible, and meaningful.

While Canadian youth engage in relatively high rates of physical activity, they also are among the most obese in the world. After Greenland and the United States, Canada has the highest rate of youth obesity among girls and boys aged 13 to 15. Obesity rates across Canada have climbed at an alarming rate in recent years. A 2002

article in the International Journal of Obesity states that obesity levels among Canadian youth increased five-fold between 1981 and 1996. Obesity levels are higher in boys than girls, and are correlated with low income. Thirty eight percent of obese children in Canada are inactive, relative to 30% of non-obese children.

With rising concerns about obesity issues among Canada's young people, more research is being dedicated to the study of obesity and obesity prevention. For example, the Calgary Health Region has formed the multi-sectoral Community Prevention of Childhood Obesity committee to head such research. This committee will study the problem of childhood obesity and work to reduce the growing rates through surveillance, directed research, programming, community mobilization, and intervention. Since the data for this indicator are from disparate sources and are national in scope, initiatives such as this will help to build a better understanding of youth wellness at the community level.

Importance

In a sustainable community youth are physically, emotionally, and spiritually healthy. As future leaders and decision-makers, it is vital that youth receive the support they require to become healthy, well-balanced adults.

Linkages

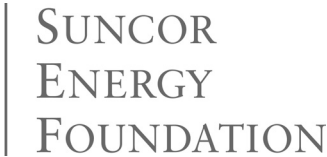
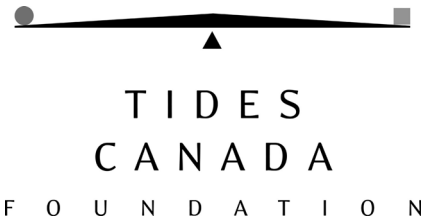
Perhaps the most important factor related to youth wellness is strong relationships with parents and teachers. Certain conditions nurture such relationships, including having a strong sense of community, promoting volunteerism among young people, enabling youth to earn a living wage, ensuring small enough class sizes to foster connections between students and teachers, and enhancing youth-friendly modes of transportation such as public transit.

On the other hand, if youth wellness is not promoted, a range of indicators could be negatively affected. The well-being of Calgary's young people is tied to the city's crime rate, food bank usage, unemployment rate, and self-rated health.

Individual & Collective Actions

- Listen to and include youth in issues that affect them and their community.
- Provide daily exercise or sport opportunities for all school children.
- Promote mentorship programs in community, educational, and work settings.

We would like to extend a special thanks to the organizations who supported the development of this report



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