# **Innovation and Science**

### BUSINESS PLAN 2003-06 -

### ACCOUNTABILITY STATEMENT

The Business Plan for the three years commencing April 1, 2003 was prepared under my direction in accordance with the *Government Accountability Act* and the government's accounting policies. All of the government's policy decisions as of March 19, 2003 with material economic or fiscal implications of which I am aware have been considered in preparing the Business Plan.

The Ministry's priorities outlined in the Business Plan were developed in the context of the government's business and fiscal plans. I am committed to achieving the planned results laid out in this Business Plan.

#### [Original Signed]

Victor Doerksen, *Minister of Innovation and Science* March 21, 2003

### **INVESTING TODAY IN ALBERTA'S FUTURE**

Over the past year, a number of reports have emphasized the need for Alberta to be more innovative in order to be competitive and to enhance quality of life. A common theme that pervades the Premier's Advisory Council on Health, the Future Summit and the Financial Management Commission's reports, and most recently, Alberta's response to the Kyoto Protocol, is the need to strengthen Alberta's capability to develop and apply innovative technologies. Investing in science and technology today is critical to ensuring tomorrow's prosperity and quality of life. This fact is true in Alberta and around the globe.

Alberta's abundant natural resources have helped place the province's economy among the world's strongest. The global, knowledge-intensive economy is evolving, and regions are increasing investments in technology, research and innovation. Alberta must maintain its competitive position by building on its strengths in energy, information and communications technology, and life sciences, and by increasing the rate of technology development and adoption.

### **OUR VISION**

#### Alberta prospers through the application of science and research and the innovative use of technology.

Partnership, strategic investment and facilitation are cornerstones of the Ministry's approach to achieving its vision. The Alberta Science and Research Authority and its research institutes, comprised of industry, government and university representatives, provide strategic advice to the Minister on science and research. Several committees on information and communications technology, also comprised of private and public sector members, advise the Minister on the strategic direction for information and communications technology. The goals and strategies of the Ministry are based on this valuable input from government, industry, and Alberta's research community.

To achieve its business goals, the Alberta Government is committed to being a model user of information and communications technology. As a model user, the government will effectively manage technology investments and use technology to reduce the costs of government operations while providing innovative and improved services to the public.

### THE MINISTRY OF INNOVATION AND SCIENCE

The Ministry of Innovation and Science provides leadership and makes strategic investments to enhance Alberta's position in the knowledge-intensive economy to contribute to the sustainable development of the provincial economy and make the province increasingly competitive in global markets.

The Ministry includes:

- Department of Innovation and Science
- Alberta Science and Research Authority
  - Alberta Agricultural Research Institute
  - Alberta Energy Research Institute
  - Alberta Forestry Research Institute
  - Alberta Research Council Inc.
  - iCORE Inc. (Alberta Informatics Circle of Research Excellence)

The Minister of Innovation and Science is responsible for legislation pertaining to:

- Alberta Heritage Foundation for Medical Research
- Alberta Heritage Foundation for Science and Engineering Research (operating under the trade name "Alberta Ingenuity Fund")

#### Mission

To enhance the contribution of science, research, development and commercialization for the sustainable prosperity and quality of life of all Albertans.

Innovation is the process by which economic value is extracted from knowledge through generating, developing and implementing ideas to produce new or improved products, processes and services.

Alberta is well known for innovation. From technological and financial success in the oil sands to breakthrough diabetes treatments, Albertans have been at the forefront of discoveries that are strengthening the economy and changing lives.

In Alberta's future, innovation will continue to provide a competitive advantage in the global knowledge-intensive economy. Research is the key to developing new ideas and discoveries that can lead to innovation. The ultimate benefit from these ideas and discoveries is obtained when they are translated into new and improved products, processes or services in the marketplace.

Building a critical mass of research excellence also creates an environment which attracts skilled people and investment to our province. This provides a foundation for business growth, job creation, a sustainable economy and a better quality of life for Albertans.

#### **Strategic Priorities**

Move forward the

- Energy Research Strategy,
- Life Sciences Strategy,
- Information and Communciations Technology Strategy, and
- Technology Commercialization Strategy

in support of the Government of Alberta's directions regarding climate change, agriculture, economic development, water, health, and environment.

#### Linkages to Government Business Plan

Ministry efforts under this core business contribute to the achievement of broader Government of Alberta (GOA) business plan goals, particularly goals related to:

- Alberta's economic prosperity (GOA goal 7)
- Building a skilled workforce (GOA goal 2)
- Government's financial stability and accountability (GOA goal 9)

Efforts under this core business also support the achievement of government goals related to the:

- Health of Albertans (GOA goal 1)
- Quality of Alberta's environment (GOA goal 11)

GOAL 1	To enhance the capability and capacity of Alberta's research system that underlines our goals in areas of strategic priority.
Objectives	• A skilled workforce to support research and innovation
	<ul> <li>Internationally recognized research capabilities in areas of strategic priority for long-term growth</li> <li>Albertans recognize the importance of research and innovation</li> </ul>
	• An environment that encourages innovation, collaboration, and networks
Strategies	
	Investing in People
	1: Provide support for the recruitment and retention of key scientific personnel at Alberta universities
	2: Work with the Alberta Heritage Foundation for Medical Research and the Alberta Ingenuity Fund to support the recruitment of key scientific personnel to Alberta
	Investing in Research Infrastructure
	3: Provide strategically targeted support for Alberta public research infrastructure
	Investing in Strategically Aligned Initiatives
	<ol> <li>Make investments that strengthen Alberta's science capability to support energy, ICT and life sciences, including investments in nanotechnology, bio-informatics/bio-medical, genomics/proteomics, and wireless communications technologies</li> </ol>
	Fostering Innovation
	5: Work to leverage research funding from industry and federal sources

- 6: Develop a mechanism to encourage greater investment in Alberta research and innovation from industry and federal government sources
- 7: Increase collaboration and coordination among research performers, funders, and users
- 8: Work with Alberta Learning and public institutions to co-ordinate research-related policies and programs
- 9: Promote science and technology awareness
- 10: Encourage youth to enter careers in science and technology

#### **Key Performance Measures**

1. Government of Alberta (GoA) Expenditures on Research and Development (ERD) as a percent of Total Government of Alberta Expense

\$ millions	1999-00 Actual	2000-01 Actual	2001-02 Estimate	2002-03 Target	2003-04 Target	2004-05 Target	2005-06 Target
Total GoA ERD	\$173.2	\$198.1	\$199.9	\$215	\$230	\$245	\$260
Total GoA Expense	\$17,292	\$19,038	\$20,948	\$19,156	\$19,676	\$20,075	\$20,075
GoA ERD as a % of	1.00%	1.04%	0.95%	1.12%	1.17%	1.22%	1.30%
Total GoA Expense							

Sources: Scientific Activities of the Government of Alberta 2000-2001 and 2001-2002e Survey Results (Statistics Canada), Government of Alberta Annual Reports, and Budget 2002.

2. Alberta's research capability: the success of Alberta's research universities in attracting sponsored research funding (by source)

(\$millions)	1998-99 Baseline	1999-00 Actual	2000-01 Actual	2001-02 Target	2001-02 Estimate	2002-03 Target	2003-04 Target	2004-05 Target	2005-06 Target
Federal	86	119	132	142	190	157	171	186	200
Industry	45	43	60	63	51	70	76	83	90
Non-Profit and Other	31	38	47	47	54	50	53	56	61
Other Government	4	8	12	13	16	16	20	22	24
Sub-Total	166	208	251	265	311	293	320	347	375
Provincial	65	92	119	130	126	135	140	145	150
Total	231	300	370	395	437	428	460	492	525

Source: Research Funding at Alberta Universities 2001-2002 Report, November 2002, Alberta Innovation and Science.

GOAL 2 To s

To support energy research that will contribute to Alberta's sustainable prosperity and quality of life. This goal and the accompanying strategies reflect the initial stages of implementation of a long-term Energy Research Strategy.

#### Objectives

- Internationally recognized research capabilities in energy areas of strategic importance
- Implement the technology component of the Climate Change Action Plan
- An environment that encourages innovation and collaboration in energy research
- Increased collaboration and coordination among energy research performers and energy producers
- · Increased joint investments in energy research by industry, the federal government and Alberta

#### Strategies

#### **Investing in People**

1: Develop a plan to attract world-class energy researchers to Alberta through a strong university and provincial research organization-based program that will attract industry and federal government investment in new technologies in Alberta

#### **Investing in Research Infrastructure**

- 2: Support industry field pilot projects and the development of Centres of Innovation to demonstrate novel clean energy technologies
- 3: Support the development of a fuel cell demonstration facility and other infrastructure for the emerging fuel cell and hydrogen technologies

#### **Investing in Strategically Aligned Initiatives**

- 4: Work with partners to support programs in CO<sub>2</sub> sequestration and water management
- 5: Develop new technologies for oil sands upgrading and value-added petrochemicals
- 6: Support feasibility studies and pilot projects related to clean coal
- 7: Work with partners to develop the technology and field pilots to improve recovery methods of oil, using CO<sub>2</sub>
- 8: Support research into alternative sources for energy such as bioenergy, hydrogen and fuel cells

#### **Fostering Innovation**

- 9: Develop a network linking provincial, national and global research activities in clean energy
- 10: Coordinate and align the clean energy research activities of the universities, and federal and provincial labs

- 11: Maintain close working relationships with and promote industry collaborative work through such associations as the Petroleum Technology Alliance of Canada, the Canadian Clean Power Coalition, the Canadian Oil Sands Network for Research and Development, the Canadian Energy Research Institute, and Climate Change Central
- 12: Work with industry and other government ministries to promote technology advances in energy and help rationalize the energy programs with other providers within Canada and the U.S.
- 13: Develop a collaborative approach to energy research and development funding in Canada

#### **Performance Measure**

1. Leveraged research projects aligned with the goals of the Alberta Energy Research Strategy

(thousands of dollars)	CO <sub>2</sub> and Water Management	Oil Sands Upgrading and Value-Added	Clean Coal	Recovery	Alternative Energy	Total
2001-2002 Actual	j					
Total AERI Investment <sup>1</sup>	\$1,067	\$2,465	\$740	\$2,040	\$540	\$6,852
Number of Projects <sup>2</sup>	20	16	6	24	8	74
2002-2003 Estimate						
Total AERI Investment <sup>1</sup>	\$357	\$1,630	\$220	\$3,923	\$419	\$6,549
Number of Projects <sup>2</sup>	14	10	5	23	5	57
2003-2004 Target						
Total AERI Investment <sup>1</sup>	\$1,831	\$2,064	\$2,759	\$3,873	\$1,413	\$11,940
Number of Projects <sup>2</sup>	8	8	8	20	5	49
2004-2005 Target						
Total AERI Investment <sup>1</sup>	\$2,331	\$2,814	\$2,759	\$4,623	\$2,413	\$14,940
Number of Projects <sup>2</sup>	7	6	8	10	8	39
2005-2006 Target						
Total AERI Investment <sup>1</sup>	\$2,831	\$4,064	\$3,259	\$5,873	\$3,913	\$19,940
Number of Projects <sup>2</sup>	7	6	10	10	12	45

Source: Strategic Research Investments, database, Alberta Innovation and Science

1. For every dollar invested by AERI, \$2 or more will be leveraged from a combination of federal and industry sources. Federal and industry funding is projected to increase from \$20.4 million in 2001-02 to \$45 million in 2005-06.

2. The number of consortia programs is expected to increase from 4 in 2001-02 to 10 in 2005-06. The total number of projects is projected to decline because of a greater emphasis on collaborative programs and larger scale pilot and demonstration projects.

## GOAL 3 To foster excellence in information and communications technology (ICT) research that contributes to Alberta's continued prosperity.

Objectives

- A skilled workforce to support ICT research and innovation
- · Internationally recognized research capabilities in areas of strategic importance
- An environment that encourages innovation, collaboration and networks in ICT research

#### Strategies

#### **Investing in People**

- 1: Recruit and fund the best researchers in ICT segments where Alberta can be a global leader. These segments include broadband networks including wireless, high performance computing, and new computational models to support emerging technologies (genomics, nanotechnology, bioinformatics, etc.)
- 2: Encourage industry to fund Research Chairs at Alberta universities

3: Collaborate with government partners to increase the number of Alberta graduates from ICT-related fields of study

#### **Investing in Research Infrastructure**

4: Invest strategically in infrastructure such as wireless test beds that makes Alberta globally competitive

#### **Fostering Innovation**

- 5: Increase collaboration between public research institutions, industry, academia and the public and private sector in Alberta and those in other jurisdictions in targeted strategic technologies
- 6: Encourage industry to invest in research projects at public research institutions
- 7: Provide support to the ASRA ICT Task Force focused on strategic advice on government investments and infrastructure related to ICT in Alberta

#### **Key Performance Measure**

1. Number of world-class ICT researchers and graduate students attracted to (or retained at) Alberta universities by iCORE Inc.

Year	Total Research Chairs (Major Awards)	Total Graduate Students	
2000-2001 Actual	6	60	
2001-2002 Actual	10	95	
2002-2003 Target	12	110	
2003-2004 Target	15	135	
2004-2005 Target	17	135	
2005-2006 Target	17	135	

Source: iCORE Inc. 2002-2010 Strategic Plan, Table 3 (Flat Funding and Table 4 - Performance Measures).

sciences research and innovation

GOAL 4	<b>To foster excellence in life sciences research that contributes to Alberta's continued prosperity.</b> This goal and the accompanying strategies reflect the initial stages of implementation of a long-term Life Sciences Strategy.
Objectives	• A skilled workforce to support life sciences research
	<ul> <li>Internationally recognized research capabilities in areas of strategic importance</li> </ul>
	• Research that contributes to a more technologically advanced and sustainable agriculture and food sector
	• Research that increases the global competitiveness and sustainability of Alberta's forestry sector
	• Life sciences development that harmonizes with Albertan values and goals
	• An environment that encourages innovation and collaboration networks in life sciences research
Strategies	
-	Investing in People
	1: Develop a human resource plan and resulting programs in partnership with relevant government ministries, AHFMR, the Alberta Ingenuity Fund, research organizations and the life sciences industry to attract and retain highly-skilled researchers and meet the human resource needs of the agriculture and forestry research and technology development systems
	Investing in Research Infrastructure
	2: Participate with government ministries to develop a long-term infrastructure plan to support life

3: In cooperation with partners, make strategic investments to enhance Alberta's agricultural and forestry life sciences research capability

#### **Investing in Strategically Aligned Initiatives**

- 4: Align and co-ordinate research and innovation activity and funding within each of the four areas: agriculture, forestry, environment, and health
- 5: Develop and implement a communications plan to increase international awareness of Alberta's strengths in the life sciences
- 6: Work with partners to increase investments in high-quality agricultural research and technology development through strategic research networks in the priority areas of agri-health and value-added food, bio-products, and sustainable production (which identifies new areas of research and investment leading to key outcomes essential to achieve industry goals)
- 7: Commence investments in high-quality forestry research and technology development through programs aligned with AFRI's strategic directions including sustainable forest management, new products and processes, and enhancing the value-chain

#### **Fostering Innovation**

- 8: Continue to work with other government ministries, industry and the universities to refine and implement the Life Sciences Strategy
- 9: Increase the magnitude and scope of life sciences education and engagement initiatives involving the public, government and industry
- 10: Work with other organizations funding research in agricultural related life sciences areas to increase the contribution of agriculture to Alberta and the life science's economy
- 11: The AFRI will continue to work with industry and other research partners to build a long-term strategic plan that aligns with ASRA's Life Sciences Strategy

#### **Performance Measure**

Performance measures will be developed as the Life Sciences Strategy is finalized and implemented.

GOAL 5To foster the growth of knowledge-based industries and establish Alberta as a preferred<br/>location for the commercialization of technologies.

#### Objectives

- Increased commercialization of energy, ICT, and life sciences research in Alberta
- Growth of energy, ICT and life sciences sectors in Alberta
- Commercialize opportunities resulting from ASRA's investment in energy research at the universities

#### Strategies

#### Investing in People

- 1: Facilitate appropriate management assistance and mentoring for startup and small ICT and life sciences businesses, in collaboration with Alberta Economic Development, Alberta municipalities and other Alberta technology commercialization partners
- 2: Work with partners to encourage expatriates and skilled workers to relocate to Alberta
- 3: Work collaboratively with partners to develop a plan to enhance entrepreneurial skills in Alberta

#### **Investing in Infrastructure**

4: In collaboration with government departments, industry and publicly funded research institutions, identify and market business opportunities and promote the *Alberta Advantage* in priority areas

- 5: Provide facilities, equipment, test beds and expertise to help Alberta industry develop and commercialize new products, processes and services
- 6: Assist ASRA and its wholly-owned subsidiary, ARC, to facilitate adoption of energy-related intellectual property generated by projects funded by ASRA
- 7: Attract and leverage industry research and development investment through TR*Labs*, industry, post-secondary institutions and ASRA initiatives

#### **Investing in Strategically Aligned Projects**

- 8: Attract industrial partners and investment to Alberta and establish initiatives which encourage the creation of early stage seed/venture capital pools and knowledge transfer
- 9: Bring forward projects jointly sponsored by Alberta research institutes and the private sector for provincial and federal consideration and support

#### **Fostering Innovation**

- 10: Facilitate business partnerships and networks between Alberta industry, researchers and government to develop emerging technologies, bring them to market and link to others across Canada and the world
- 11: Work with ASRA to implement priority initiatives within Alberta's Technology Commercialization Strategy
- 12: Gather and provide competitive intelligence and information that helps industry make technology development decisions, conduct environmental scans of Alberta's competitiveness in order to assist in defining appropriate policy recommendations and marketing actions to stimulate ICT industry growth

#### **Key Performance Measures**

1. Employment in ICT sector in Alberta

	1999	2000	2001	2002	2002	2003	2004	2005	2006
	Baseline	Actual	Actual	Target	Estimate	Target	Target	Target	Target
Number of employees	50,300	53,700	56,000	59,360	58,000	62,921	66,696	70,000	74,000

Source: Alberta Business Outlook 2002-2003. Due to a global recession in the telecommunications industry, targets have been revised.

#### 2. Employment in the life sciences sector in Alberta

	2001* Baseline Estimate	2002 Actual	2003 Target	2004 Target	2005 Target	2006 Target
Number of employees	54,200	56,600	To be	To be	To be	To be
			determined	determined	determined	determined

Source: Statistics Canada, Labour Force Survey.

\* Estimate has been revised using data from Statistics Canada.

#### Mission

To provide strategic leadership and direction in the innovative and cost-effective use of information and communications technology (ICT) to improve the efficiency of government program delivery.

ICT is an essential tool for delivering government programs and services to Albertans and in the daily administration of government operations. The Alberta government makes significant investments in ICT systems to maintain and improve the delivery of its services and the cost-effectiveness of its day-to-day operations.

Albertans are increasingly expecting that programs and services will be available on-line, any time, anywhere in Alberta. Meeting these expectations cost-effectively requires a high degree of collaboration between government ministries as well as the seamless sharing of information between ministries, while ensuring that Albertans' concerns for privacy and security are respected.

The Ministry of Innovation and Science is responding to these needs in two ways.

First, through Alberta SuperNet, affordable, high-speed broadband access to all universities, schools, libraries, hospitals, and provincial government buildings in Alberta will be provided within the next three years. This network will be the foundation for electronic delivery of government programs and services to Albertans in 422 communities throughout the province. Alberta SuperNet will also facilitate the provision of high-speed Internet access to businesses and Albertans in these 422 communities through independent Internet service providers accessing services from the Alberta SuperNet infrastructure.

Second, Innovation and Science also continues to provide corporate leadership and to work closely with all government ministries to ensure that investments in technology are aligned to cost-effectively enhance the delivery of services to Albertans.

#### **Strategic Priorities**

- The completion of the Alberta SuperNet build
- Establish and implement an ICT Services model through private sector partnerships to provide upfront capital investment and to achieve efficiencies and cost reductions, through the implementation of a consolidated infrastructure and coordinated application support

#### Linkages to Government Business Plan

Ministry efforts under this core business contribute to the achievement of broader Government of Alberta (GOA) business plan goals, particularly goals related to:

- Alberta's economic prosperity (GOA goal 7)
- Government's financial stability and accountability (GOA goal 9)

GOAL 6	To strengthen the Alberta Advantage by maximizing the opportunities presented by a province- wide high-speed ICT capability through Alberta SuperNet.
Objectives	<ul> <li>High-speed Internet services available to 422 communities</li> <li>Enhanced and more efficient delivery of services through Alberta SuperNet</li> <li>New business opportunities in Alberta</li> </ul>
Strategies	Turner stirler in The first starting
	Investing in Infrastructure         1: Complete the construction of Alberta SuperNet in 2004
	<ul> <li>Fostering Innovation</li> <li>2: Identify opportunities for enhanced programs/service delivery utilizing Alberta SuperNet, through collaboration with other ministries, and particularly: <ul> <li>E-learning with Alberta Learning</li> <li>E-health services with Alberta Health and Wellness</li> <li>E-government services through Service Alberta delivery with Alberta Government Services</li> <li>E-justice with Alberta Justice</li> <li>Providing connections for libraries with Alberta Community Development</li> </ul> </li> <li>Investing in Strategically Aligned Initiatives</li> <li>3: Foster a competitive environment for commercial vendors accessing Alberta SuperNet at competitive prices across the province</li> <li>4: Work closely with Alberta Economic Development to maximize opportunities arising for existing and new Alberta businesses, enabling them to participate and compete on the national and</li> </ul>
Key Performance N	international stage
	<ol> <li>Availability of Alberta SuperNet to 422 communities and approximately 4700 stakeholders during the three-year construction period</li> <li>1 a). Number of Communities Connected (% of total communities to be connected):</li> </ol>

	2001-02	2002-03	2002-03	2003-04	2004-05
	Baseline	Target	Estimate**	Target	Target
Percentage of communities	0 (0%)	133 (31%)	6 (1.4%)	356 (84%)	422 (100%)

Stakeholders Connected\* (including schools, hospitals, libraries and provincial 1 b). government buildings):

(sites connected)	2001-02 Baseline	2002-03 Target	2002-03 Estimate**	2003-04 Target	2004-05 Target
Schools	0	172	25	1270	2347 (100%)
Hospitals	0	76	6	287	504 (100%)
Libraries	0	22	3	235	305 (100%)
GOA buildings	0	259	11	730	1235 (100%)

Source: Alberta Innovation and Science. All targets are cumulative. \* Number of stakeholders is preliminary and may be adjusted during the construction of the SuperNet Network. A school, hospital, library, or Government of Alberta building is considered to be connected within the fiscal year when it is hooked up to, and functioning on, the SuperNet infrastructure.

\*\* The number of communities and stakeholders connected for 2002-2003 is substantially lower than targeted. While progress on the originally announced rollout schedule is behind, the project is still estimated to be completed in mid-2004, as planned. Purchases of existing fibre optic cable from provincial suppliers are being finalized and will be incorporated into the design and build of the network, allowing significant progress in a short period of time.

2. The number of government programs/services available electronically for Albertans that will be delivered over the Alberta SuperNet infrastructure

	2001-02 Baseline	2002-03 Target	2002-03 Estimate	2003-04 Target	2004-05 Target	2005-06 Target	
Number of programs/services	8	23	24	38	53	68	

Sources: www.servicealberta.ca and Alberta Innovation and Science

# GOAL 7The Government of Alberta will be recognized internationally for transforming the delivery of<br/>government programs and services through the innovative use of ICT.

#### Objectives

- A clear strategic direction for the use of ICT
- Common, corporate ICT infrastructure
- · Increased government services available direct to citizens online
- · Cost efficiencies will allow government to reinvest savings into higher priority ICT initiatives
- Shared, common information

#### Strategies

- 1: Develop a comprehensive strategic direction for the use of ICT to deliver public sector information and services
- 2: Provide strategic advice on ICT investment priorities
- 3: Provide strategic direction on technology
- 4: Enter into a strategic partnership with a service manager to coordinate ICT delivery across government
- 5: Simplify the current ICT environment through a systematic reduction of server, network and application environments
- 6: Develop a consolidated web environment to deliver web services and applications
- 7: Leverage SuperNet connectivity to deliver government resources
- 8: Provide managers access to relevant information through the increased use of IMAGIS
- 9: Work with Ministries and Service Alberta to apply technology in order to change business processes within the Government of Alberta
- 10: Adopt and implement industry based business and technical standards across government
- 11: Maximize efficiencies by consolidating support and licensing agreements
- 12: Work with Government Services to implement a corporate information management framework
- 13: Develop and implement an information-sharing model that allows common data to be stored centrally and accessed by Ministries as needed

#### **Key Performance Measures**

1. Implementation of corporate standards

Standard	2001-02 Baseline	2002-03 Estimate	2003-04 Target	2004-05 Target	2005-06 Target
Office 2000/Windows 2000	36%	80%	100%	100%	100%
Government Web Development					
Webpage format for data sharing (XML)	To be established	20%	100%	100%	100%
Enterprise Architecture					
Adoption of Domain Architectures	To be established	25%	50%	80%	80%
Compliance process and assessment	To be established	30%	50%	80%	80%
Authentication	To be established	<1%	50%	100%	100%

Source: Office of the Chief Information Officer

#### 2. ICT Infrastructure Consolidation - Implementation of corporate infrastructure services

Infrastructure Services	2002-03 (Estimates)*	2003-04 Target Amount Remaining	2004-05 Target Amount Remaining	2005-06 Target Amount Remaining
Directories	50	35	25	1
E-Mail Systems	15	1	1	1
Number of Servers	1300	1235	1105	650
Desktop Configurations	Most of the 24,500+	1000	500	100
	Government desktops have			
	different configurations			
Server Configurations	400	300	150	50
Server Locations	350	300	150	10

Source: Office of the Chief Information Officer

\* These estimates are based on information collected in 2000/01. Baseline estimates for infrastructure services are under development. Targets will be adjusted when baselines have been established.

### **CORPORATE ACTIVITIES**

The following corporate divisions within the Ministry of Innovation and Science ensure resources are used effectively and efficiently to support ministry goals and strategies:

- Ministry Chief Information Officer
- Communications
- Finance Division

### Key Corporate Activities for 2003-2004

• *Tracking Employee Satisfaction / Understanding of Contribution:* Innovation and Science will continue to track employee satisfaction and understanding of their contribution to the Ministry Business Plan. Targets have been established for several measures as indicated in the following table:

	2000-01 Actual	2001-02 Actual	2002-03 Actual	2003-06 Target
Employees who know and understand how their work contributes to the achievement of their department business plan	77%	87%	78%	100%
Percentage of employees who are very/somewhat satisfied with their employment at Innovation and Science/Government of Alberta	88%	88%	83%	95%
Percentage of employees who agree that Innovation and Science provides the support they need to acquire or develop knowledge and skills in their current job	86%	79%	73%	85%
Percentage of employees indicating that their organization provides expected outcomes for their work	68%	62%	61%	85%
Percentage of employees indicating that their organization helps them know and understand how well they are performing	69%	54%	58%	85%

Source: Government of Alberta Core Human Resource Measures 2001, Survey of Innovation and Science Employees

• **Business Resumption Planning:** Innovation and Science is working with Emergency Management Alberta of Alberta Municipal Affairs to develop a comprehensive business resumption plan for the Ministry. Specific actions to ensure early completion of a formal business resumption plan for 2003-04 include: designing and writing the business resumption plan and maintenance protocols as well as implementing a validation process.

### **CROSS-MINISTRY INITIATIVES**

#### **Priority Policy Initiatives:**

Ministry activities support the achievement of the goals of the cross-ministry Economic Development Strategy.

#### Key Administrative Initiatives:

The Ministry is co-champion for the following Key Administrative Initiatives:

- Corporate Information Management / Information Technology Strategy
- Service Alberta

- Human Resource Services
- Policy Development and Coordination

### EXPENSE BY CORE BUSINESS

(thousands of dollars)

	Comparable 2001-02 Actual	Comparable 2002-03 Budget	Comparable 2002-03 Forecast	2003-04 Estimates	2004-05 Target	2005-06 Target
EXPENSE						
Core Business						
Research and Development	136,792	150,409	142,209	161,991	171,554	184,772
Corporate Information and Communications Technology	44,387	48,927	50,600	49,080	64,551	72,306
Ministry Support Services	6,881	7,170	7,170	7,614	7,614	7,614
MINISTRY EXPENSE	188,060	206,506	199,979	218,685	243,719	264,692

### CAPITAL INVESTMENT BY CORE BUSINESS

(thousands of dollars)

	Comparable 2001-02 Actual	Comparable 2002-03 Budget	Comparable 2002-03 Forecast	2003-04 Estimates	2004-05 Target	2005-06 Target
CAPITAL INVESTMENT						
Core Business						
Research and Development	2,188	4,296	4,296	3,414	3,346	3,387
Corporate Information and Communications Technology	43,807	123,699	91,199	62,200	14,000	4,000
Ministry Support Services	102	-	-	-	-	-
MINISTRY CAPITAL INVESTMENT	46,097	127,995	95,495	65,614	17,346	7,387

### **MINISTRY STATEMENT OF OPERATIONS**

(thousands of dollars)

	Comparable 2001-02 Actual	Comparable 2002-03 Budget	Comparable 2002-03 Forecast	2003-04 Estimates	2004-05 Target	2005-06 Target
REVENUE						
Internal Government Transfers	90,838	185,144	152,644	127,497	76,797	66,797
Transfers from Government of Canada	2,386	2,000	2,000	-	-	-
Investment Income	752	840	840	840	840	840
Other Revenue	50,144	57,515	51,494	65,790	72,889	84,127
MINISTRY REVENUE	144,120	245,499	206,978	194,127	150,526	151,764
EXPENSE						
Program						
Alberta Science and Research Authority:						
Energy (includes Climate Change Action Plan)						
Alberta Energy Research Institute	8,963	6,940	6,940	11,940	14,940	19,940
Alberta Research Council Inc.	10,116	10,895	10,895	11,126	11,126	11,126
Life Sciences						
Alberta Agricultural Research Institute	9,732	8,875	8,875	8,875	8,875	8,875
Alberta Forestry Research Institute	2,012	2,260	2,260	2,060	2,060	2,060
Alberta Research Council Inc.	7,896	8,504	8,504	8,683	8,683	8,683
Information and Communications Technology						
iCORE Inc. (Informatics Circle of Research Excellence)	5,845	10,000	10,000	10,000	10,000	10,000
Technology Commercialization Initiatives	910	1,500	1,500	1,500	1,500	1,500
Alberta Research Council Inc.	1,481	1,595	1,595	1,628	1,628	1,628
Investing in Research Capacity						
Alberta Science and Research Investment Program	38,818	39,222	39,222	39,222	37,222	33,222
Technology Business Development and Commercialization						
Technology Commercialization Initiatives	1,367	2,175	2,175	2,175	2,175	2,175
Alberta Research Council Inc.	5,182	5,581	5,581	5,698	5,698	5,698
Alberta Research Council Inc Contract Research	39,493	47,406	39,206	53,467	62,030	74,248
Operations and Policy Implementation	4,975	5,456	5,456	5,617	5,617	5,617
Corporate Information and Communications Technology	41,953	44,927	46,600	47,080	45,551	45,306
Alberta SuperNet	2,054	4,000	4,000	2,000	19,000	27,000
Ministry Support Services	6,881	7,170	7,170	7,614	7,614	7,614
Valuation Adjustments and Other Provisions	382	-	-	-	-	-
MINISTRY EXPENSE	188,060	206,506	199,979	218,685	243,719	264,692
Gain (Loss) on Disposal of Capital Assets	(414)	-	-	-	-	-
NET OPERATING RESULT	(44,354)	38,993	6,999	(24,558)	(93,193)	(112,928)

### CONSOLIDATED NET OPERATING RESULT

(thousands of dollars)

	Comparable 2001-02 Actual	Comparable 2002-03 Budget	Comparable 2002-03 Forecast	2003-04 Estimates	2004-05 Target	2005-06 Target
Ministry Revenue	144,120	245,499	206,978	194,127	150,526	151,764
Inter-ministry consolidation adjustments	(102,172)	(202,336)	(168,336)	(145,931)	(96,056)	(87,976)
Consolidated Revenue	41,948	43,163	38,642	48,196	54,470	63,788
Ministry Program Expense	188,060	206,506	199,979	218,685	243,719	264,692
Inter-ministry consolidation adjustments	(11,334)	(17,192)	(15,692)	(18,434)	(19,259)	(21,179)
Consolidated Program Expense	176,726	189,314	184,287	200,251	224,460	243,513
Gain (Loss) on Disposal of Capital Assets	(414)	-	-	-	-	-
CONSOLIDATED NET OPERATING RESULT	(135,192)	(146,151)	(145,645)	(152,055)	(169,990)	(179,725)

### CAPITAL INVESTMENT BY PROGRAM

(thousands of dollars)

	Comparable 2001-02 Actual	Comparable 2002-03 Budget	Comparable 2002-03 Forecast	2003-04 Estimates	2004-05 Target	2005-06 Target
Program						
1 Alberta Research Council Inc.	2,188	4,296	4,296	3,414	3,346	3,387
2 Alberta SuperNet	38,994	117,800	85,300	58,700	10,000	-
3 Corporate Information and Communications Technology	4,813	5,899	5,899	3,500	4,000	4,000
4 Ministry Support Services	102	-	-	-	-	-
MINISTRY CAPITAL INVESTMENT	46,097	127,995	95,495	65,614	17,346	7,387