



# Draft Strategic Framework – 2010-15

August 19, 2010

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## Introduction

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Alberta Innovates – Health Solutions (AIHS) is an integral part of Alberta Innovates – a strategically aligned and integrated provincial research and innovation system. Under the banner of AIHS, the Board and Management work with other key research and innovation agencies, with publicly funded post-secondary institutions, health care institutions, industry (or private sector) and government to support and further enhance research and innovation in the province and make Alberta more connected and competitive in the global economy.

This document represents key elements of a draft strategic framework developed by the Board of AIHS with stakeholder input. A strategic framework is forward-looking, intending to:

- Represent the collective vision and accountability of the Board of AIHS to achieve its intended future
- Serve as a directional document to Management in establishing and implementing the programs required to achieve the vision
- Provide information to stakeholders on the strategic position, directions and priorities of AIHS, and help to align their interests with those of AIHS and the Government's health research and innovation agenda (as expressed in the Alberta Health Research and Innovation Strategy, AHRIS).

AI-HS' strategic planning has three phases:

- 1) **Strategic Framework development:** as explained above.
- 2) **Strategic Implementation process:** the methods by which AIHS will develop and create new programs to support the Strategic Framework.
- 3) **Program Design:** Once the framework and implementation process are finalized, program design will begin. This will require participation from all AIHS stakeholder groups.

We welcome comments on this draft document. Please send your response to:

[Strategicframework.health@albertainnovates.ca](mailto:Strategicframework.health@albertainnovates.ca)

## Context

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### Background

In 1980, the Government of Alberta established the Alberta Heritage Foundation for Medical Research (AHFMR). Over a period of 30 years, AHFMR achieved its mission of establishing a community of health researchers in Alberta who would contribute world-class research which could improve the health and health care of Albertans. AHFMR undertook new and different ways of creating capacity for health research and was a significant reason why Alberta has, for its relatively small population, an enviable and highly respected health research community.

Alberta Innovates – Health Solutions (AIHS) was established on January 1, 2010, and inherits the legacy of excellence and capacity from AHFMR. It has been created in an environment that is significantly different from the one that existed 30 years ago when AHFMR was developed. Over the last decade in particular, research funding has evolved into a major enterprise provincially, nationally and internationally thus creating fierce competition within, and between, sectors for limited (public) resources and for the best minds to accomplish the work.

Alberta Innovates – Health Solutions initial strategy, presented here, is designed not only to maintain Alberta’s current excellence in research and innovation, but to sustain a leadership position over the next 30 years within a rapidly changing global context.

### Partners and Collaborators

Alberta Innovates- Health Solutions is part of the global health research environment, and works to maintain Alberta’s role and influence in that environment, as well as learning from emerging trends and innovations elsewhere.

Within Alberta, the mandate of Alberta Innovates – Health Solutions is intertwined with the work of many partners and collaborators. This Framework has been developed and will be implemented in close partnership with the concurrent plans and activities of other major public institutions and organizations, and with a recognition of the particular requirements of the health system and the private sector:

- The Government of Alberta, in particular through:
  - Alberta Advanced Education and Technology
  - Alberta Health and Wellness
- Alberta Health Services
- Other Alberta Innovates corporations
- Post-secondary institutions in Alberta
- Private sector (industry) and commercialization organizations

In addition, AIHS partners with other research agencies across Canada and is connected with the global research and innovation sector. It participates in the development of national approaches and understanding regarding health research and innovation. It has established funding partnerships and collaborations with numerous partner agencies inter-provincially and nationally. All these partners and collaborators will continue to be critical in the success and

leadership of AIHS, and in keeping Alberta connected to national and international trends. Therefore this Framework also takes into account the mandate, programs and trends of other members of the National Association of Provincial Health Research Funders (NAPHRO), the Canadian Institutes of Health Research, other federal health research funders, and international agencies with similar mandates.

As well as working with partner organizations, AIHS has consulted widely with researchers and health professionals in the development of this Framework. A series of formal and informal community meetings and consultations engaged over 500 people in discussions about the future of health research and innovation in Alberta.

## Mandate

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Alberta Innovates – Health Solutions draws its mandate and mission from the governing legislation under which it was established. It also draws its direction from the provincial strategies adopted by the relevant government ministries. This Framework is established to outline the ways in which AIHS will implement this overarching mandate and contribute to the success of provincial government strategies.

The Alberta Government has put in place the “Alberta Innovates” Framework. Alberta Innovates Health Solutions is one of the newly formed corporations with a strategic focus. The mandate is the intended purpose of the organization – why it exists. The mandate of Alberta Innovates Health Solutions is drawn directly from the Mandate and Roles Document as developed collaboratively with Alberta Advanced Education & Technology.

## Alberta Research and Innovation Act and Regulation

The Mandate of AIHS reads as follows:

**AIHS will support research and innovation activities to improve the health and well-being of Albertans and create, through innovation, health related social and economic benefits for Albertans. It provides leadership for Alberta’s health research and innovation enterprise by directing, coordinating, reviewing, funding and supporting research and innovation.**

In essence, the Government of Alberta has given AIHS the following **responsibilities**:

*To support, for the economic and social well-being of Albertans, health research and innovation activities aligned to meet Government of Alberta priorities, including, without limitation, activities directed at the development and sustainability of the health sectors, the discovery of new knowledge and the application of that knowledge.*

AIHS is also mandated to create value through:

- Investing in excellence based on the standards for world class health research;
- Focusing investments in areas of priorities that support our strengths and/or provide a unique opportunity (jurisdictional advantage) for Alberta;

- Optimizing the capture of health, societal and economic benefits from investments in health research through innovation;
- Demonstrating accountability and impact of investments in health research through performance management; and
- Enhancing the potential to support and facilitate private sector health research and innovation in the province.

## **The Alberta Research and Innovation Business Framework**

Providing direction to the coordinated efforts of the Alberta Innovates corporations is the Alberta Research and Innovation Business Framework. This Framework outlines the overall vision for the publicly funded research and innovation efforts in Alberta and identifies the following objectives:

- Strengthen and evolve Alberta's Research and Innovation System.
- Derive significant health, social, economic, and environmental benefits for Albertans through focused investment in priority research and innovation areas.
- Expand Alberta's knowledge-based economy through company growth and increased jobs and exports

In collaboration with the Alberta Innovates partners and within the context of its mandate and roles, AIHS will keep a line of sight on these system objectives and focus on priorities and activities that are generally aligned with the Alberta Research and Innovation Business Framework .

## **Alberta's Health Research and Innovation Strategy**

In addition to its core mandate and alignment with the Alberta Research and Innovation Business Framework, AIHS will contribute to the achievement of Alberta's Health Research and Innovation Strategy (AHRIS).

The broader perspective of the AHRIS is to target three major outcomes as the objectives of the government wide strategy: (1) improving health (defined under the heading of Wellness at Every Age), (2) a more innovative health service delivery system and (3) socio-economic benefits resulting from investments in health research and innovation.

Focused on the strategic outcomes related to improvements in health and that of supporting a more innovative health system, the AHRIS will identify a number of areas of priority, from the perspective of the Government of Alberta, for Alberta's health research and innovation activity.

In the context of its own mandate and role, AIHS will therefore develop processes to address and incorporate these priority areas in order to forward the goals of Alberta's Health Research and Innovation Strategy.

## Defining Innovation

There are a variety of interpretations of “innovation”. Many focus on the development of new products and technologies. However, in the field of health, many of the most significant advances have been found not only through new drugs and devices, but also through new services, programs, ways of organizing and delivering care, and changes in the design of communities and social environments, such as schools.

Internationally, there is an increasingly comprehensive view of innovation as much more than technology. For example, the OECD defines innovation as inclusive of product, process, organizational and marketing innovations. Investments in innovation include *knowledge capital*, as well as the traditional investments in economic growth of physical capital and labor.

Therefore, in the case of health, innovation must be seen more broadly, and Alberta Innovates – Health Solutions will reference the following definition, from the US Advisory Committee on Measuring Innovation, for its approach:

Innovation is: *“the design, invention, development and/or implementation of new or altered products, services, processes, systems, organizational structures, or business models for the purpose of creating new value.”*

The common factor in all definitions is that innovation focuses on solutions to challenges and includes both the creation *and* adoption of knowledge.

## Considerations (or what we heard)

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Throughout the wide range of consultations and discussions leading up to this Framework, AIHS heard that it must be cognizant of three imperatives in developing its strategy, by:

1. striking a careful and nuanced balance across competing aspects of the research and innovation endeavor.
2. ensuring that it adds unique value through all it does.
3. recognizing the primacy and value of relationships to success in its mandate.

## Striking a Balance

This Framework takes into account the need, recognized and endorsed by all stakeholders, for a careful balance to be found among competing priorities and objectives, in order to maximize success in the long run. In particular, it seeks to balance investment of limited resources in a way that recognizes the challenges of:

### **Achieving national and international research competitiveness while responding to locally relevant needs.**

An internationally competitive health research community and health research that produces locally relevant and applicable results are both highly valued outcomes, but they are not always aligned. The global market of ideas may be interested in an area that is not relevant to the immediate needs of the local population. Often, the longer timelines of international research

communities are at odds with the immediacy of decision demands in health care delivery. While there is general support for both goals among all constituents, this Framework recognizes that different strategies are needed for the achievement of each.

#### **Maintaining and strengthening areas of excellence while stimulating and developing new areas of need.**

A strong research endeavor requires the continued strength of existing activities, people and productivity but also the expansion of activities in new areas and engagement of new people. While stabilizing and reinforcing existing strengths will be essential to long term success, it will also be necessary to fill gaps in order to meet emerging needs. To create critical mass for competitiveness in a small jurisdiction may require major investment in an area of focus, at the expense of broad-based investments at a lower level.

#### **Ensuring priority impacts while using appropriate and measurable indicators**

It is internationally recognized that measuring the short term and long term benefits of investment in research and innovation is a major challenge. It is very difficult to trace the impacts of research funding through the long, complex trajectory of discovery to application which eventually can lead to improvements in health, health care and social and economic outcomes. Sometimes the timeline to benefit is years, sometimes decades (particularly in the case of basic science discovery). Sometimes the most apparent measures of success are not truly linked to the outcomes of interest (for example the number of new companies created does not match to successful economic enterprise). Driving investments by measurable indicators can lead to unanticipated consequences, therefore developing and using appropriate indicators is essential to the success of the activity

#### **Investing across the discovery to application cycle**

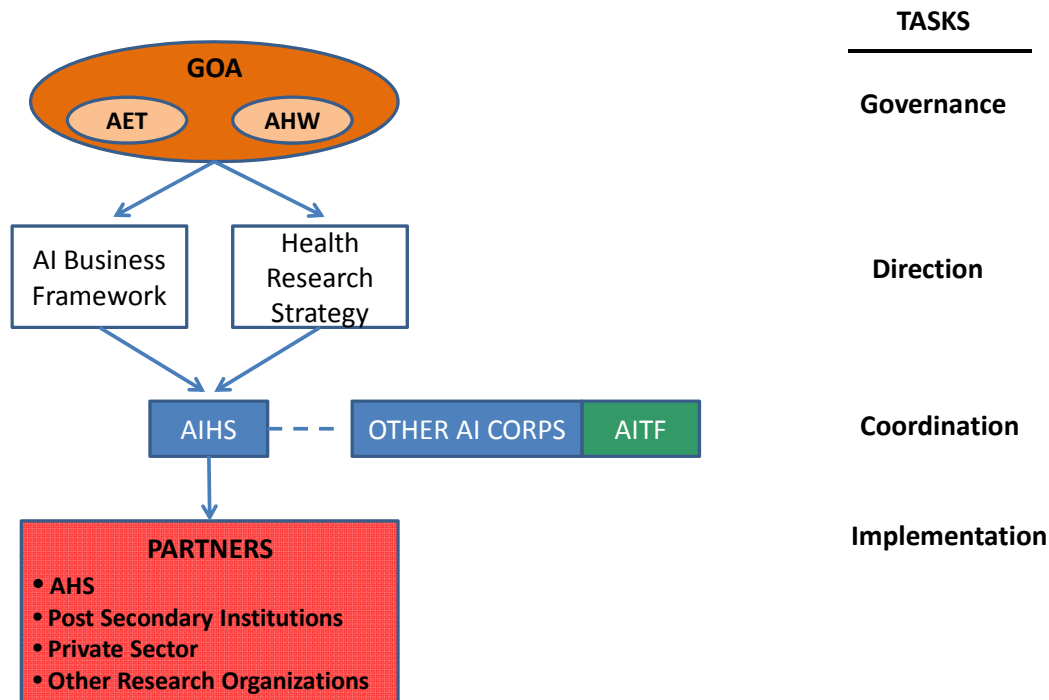
Health research encompasses an enormous range of activities across the biosciences and social sciences, and includes research from the most basic scientific discovery at the molecular level to the application of new ideas in major social programs and policies. With this range of opportunity for support, and needs at every point in the cycle of discovery to application, any health research agency faces tough choices in where and how to invest in order to maximize impacts at every stage.

### **Adding Value**

AIHS does not exist in isolation, but rather as an integral part of the Alberta Research and Innovation (Alberta Innovates) work. It serves as a mechanism to focus priorities and to work with partners in creating value in the research and innovation frame. The graphic below shows the inter-relationships that are key to AIHS's success.

## The Research & Innovation Framework

(from an AIHS perspective)



In particular, stakeholders have urged AIHS to define its role and contribution in light of some key considerations:

### A crowded field

There are many agencies involved in the support, conduct and application of health research and innovation, provincially, nationally and internationally. In addition to coordinating its efforts within the Alberta Innovates framework, AIHS must ensure that its role and contributions are neither duplicative nor better performed by other agencies. This is particularly important in terms of complementing, not duplicating, the types of programming and support provided by federal health research agencies.

### The next leap forward

In 1980, AHFMR took a visionary stance in defining its role and designing its programs. AIHS will continue to position itself with a view to the long term success of Alberta, seeking out the next “great leap” that will keep the province globally competitive and internationally regarded for new ways of working.

### Experience and evidence of effectiveness

There is accumulated evidence, qualitative and quantitative, of the effectiveness of numerous programs intended to catalyze and support research and innovation. Much learning has

occurred within Alberta, and even more can be learned from elsewhere. Many of AHFMR's programs over 30 years piloted forward-looking approaches to the research and innovation cycle, and addressed the need to demonstrate impact on health, health systems and the economy. AIHS will learn from the past and from the experience of others to identify the best use of its resources to lever highest impact.

## Recognizing Relationships

Whether in the area of bioscience or population health, all participants in the health research and innovation endeavor note the critical importance of relationships across boundaries of one kind or another. For young bio-scientists, connections with the global scientific community are essential. For entrepreneurs wishing to take science into commerce, bridging the cultural divide of academia and business is a key to success. For health service decision makers, being able to work closely with applied health researchers from a variety of institutions is critical for evidence-informed management. Yet there remain many barriers to successful and sustained relationships across sectors, geographies, institutions and disciplines. An integrated health research and innovation endeavor requires new, stronger and better relationships.

## The Strategic Framework

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### Vision

The vision is the intended future that will be created as a consequence of the actions of the organization. Fulfilling the mandate and implementing the strategies described below, we expect that in ten years' time, the following will be the research and innovation landscape for health and health research in Alberta:

***AIHS will catalyze new ideas for better health and a vibrant economy.***

*As a result, Alberta will be home to the most integrated health research and innovation enterprise in Canada.*

We will measure our success by demonstrating that Alberta has the highest innovation output per unit of research investment in the country.

### Principles

In the long journey to the intended future, there will be many decisions that will be required. In making these decisions, all those involved in the organization will honor the following principles:

**Relevance** – listening and responding to the needs of Alberta.

**Responsiveness** – acting in a timely manner, ensuring that our processes add value.

**Stakeholder Engagement** – working actively with stakeholders to lever our collective resources to great effect.

**Leadership** – having the courage to take on tough issues, seizing opportunity and aspiring to transformation.

**Independence** – having no vested interest, and being counted on to make objective decisions.

**Creativity** – looking for new and original ways of working, from ourselves and others.

**Excellence in all we do** – maintaining a passion for the highest standards of quality, and fair, balanced decision-making.

**Evaluation and Accountability** – being accountable through open assessment of impact and progress.

## **Strategic Objectives**

Given its Mandate, AIHS will be a priority-driven, proactive, outcomes-focused health research and innovation management organization, with focus on increasing knowledge, contributing to capacity building, improving health and related social outcomes, enhancing efficiency and effectiveness of the health system and providing economic benefits in Alberta. The major focus will be on making quality investments relevant to the research and innovation system needs and priorities.

The intended future is defined in the longer term (10 years and beyond). Intermediary goals will be defined, however in the long run AIHS must serve three intended system level objectives:

### **1. To focus and catalyze excellence in research and innovation**

AIHS will continue to support excellence across the spectrum of health related research and emerging innovation, understanding that short- and long- term impacts are dependent on vibrant, interlinked and high quality activities across the full spectrum.

### **2. To solve issues in the health delivery system and the health-related private sector**

AIHS will be informed by the needs and challenges of the two primary sectors through which health and economic benefits are achieved, by:

1. delivering health services and public health measures to the population, and
2. undertaking and supporting health sector commercial activities.

### **3. To provide performance management oversight for, or within, the health research and innovation enterprise**

AIHS will build on its impact assessment strategies to create through collaboration a performance management approach that will inform all stakeholders of progress towards the goals of Alberta's efforts in health research and innovation.

## **Strategic Position: Integration**

A seamless system that facilitates joint efforts to tackle tough issues, that allows for the free flow of good ideas from one sector to another, that helps people link with others who can provide synergistic expertise – this is the vision of the Alberta Innovates system. This aspiration towards integration responds to the global transformation in communication, sharing and collaboration over the past twenty years, and is also alert to the continuing frustration felt by individuals trying to navigate traditional institutional structures that took root in very different world conditions. All stakeholders recognize the value and potential impact of integration, but also note the many barriers to achieving it. Our current reality lags far behind our best intentions.

Alberta Innovates -- Health Solutions is uniquely positioned to be a force for the integration of Alberta's efforts in health research and innovation. Among the many partners and players in this endeavor, AIHS is able to create and hold important middle ground where otherwise separated groups and entities can come together to achieve results. Between researcher and practitioner, bio-scientist and public health specialist, academic centres and rural communities, AIHS is positioned to connect the threads of many initiatives, people and organizations. However, these threads need strengthening, and through the Board's strategic discussions and stakeholder consultations we conclude that by building on its integrative function there are two major roles in which AIHS can provide the highest and best value:

### **Working at the Interfaces**

It is clear that there are many pockets of excellence in this province. For example, we have excellent researchers working on basic biomedical science, but they may lack skills in commercialization, or the mechanisms to move their finding to the next step in the utilization chain. We have organizations that need innovation, such as Alberta Health Services, but there are gaps in the processes that communicate their operational needs to the people who could help find solutions. Many of these isolated elements exist in the research and innovation landscape, at every level from micro to macro.

We see AIHS playing a great role in connecting across the interfaces between many groups, organizations and sectors. As an integrator, AIHS will identify the places where connections across the interface will increase synergies, through a variety of mechanisms such as:

- Identifying key players and bringing them together to find common solutions.
- Identifying missing capacities and creating programs that strengthen them.
- Identifying missing structures and processes, and assisting to develop them.
- Identifying points of transition, of people, projects and ideas, where there is high risk of loss of capacity.

This role can take on a number of forms: networking or convening people to discuss common issues and reach agreement on moving ahead, providing the support at the interface between people or organizations to create facilitated hand-off from one to the next, creating incentives

and supportive environments for working in collaborative teams across traditionally separated disciplines or sectors or roles. AIHS will build on its strong tradition of neutrality and professionalism to enhance connections across the interfaces.

## **Strategic Enablers**

### **Strategy #1: Create a culture of inquiry**

Research and innovation thrive in environments that value and understand science and its uses. AIHS will enhance the engagement and understanding of Albertans in the areas of scientific discovery and innovative thinking. This will include working with the public, policy-makers and young people to increase scientific literacy and awareness, as well as working with partners to support awareness and capacity among health professionals and business leaders.

### **Strategy #2: Accelerate the discovery and application of knowledge**

While there have been improvements over the past 15 years, it is still the case that new knowledge takes years, if not decades, to be put to good use, and in some cases health care continues to use outdated information. Also, there are barriers to the production of knowledge due to some structural impediments to the research process. AIHS will identify and address barriers to an efficient health research and innovation enterprise and work with partners to establish the mechanisms and processes needed to facilitate knowledge creation. It will also assist in easing the flow of knowledge across institutional, sectoral, geographic and disciplinary boundaries, intending to translate and transform knowledge into productive uses, including the use of evidence-based information by the public to improve health.

### **Strategy #3: Build research and innovation capacity**

Continuing success and competitiveness in the global market place, both of ideas and products, requires steady and ongoing development of a critical mass of the highly qualified personnel who drive the research and innovation endeavor. Therefore, AIHS will lever its investments to create and support a body of researchers and research entities focused on the key issues affecting the province and people of Alberta as well as the rest of the world.

### **Strategy #4: Keep Alberta globally connected and competitive**

Global competitiveness requires global linkage. Alberta is perceived to be distant from many of the world centres for health science, technology and business. In order to support Alberta's global presence and ability to learn from the best, AIHS will increase collaborative and mutually beneficial exchanges between Alberta and the world-wide community on issues of health research and innovation.

### **Strategy #5: Answer questions**

Research, at heart, is a question answering, problem solving activity. Questions emerge from the challenges facing society and individuals, and investigators driven by curiosity explore ideas that connected to those challenges. AIHS will invest in, coordinate and develop responsive opportunities for research and innovation, in order to provide relevant information and useful

tools to support decisions and actions that improve health and prosperity. The information and tools will be useful to policy-makers, to health care administrators, to researchers, to the private sector and to the public.

**Strategy #6: Assess change**

The challenge of measuring the return on society's investment in research and innovation is substantial. However, much progress has been made in identifying system-level outcomes of shared interest to stakeholders, as well as relevant and measurable indicators of progress. AIHS will create a culture of evidence-based decision-making and ensure that everything the organization does is based on evidence of effectiveness.

## Appendix: Summary of Findings from Stakeholder Consultations

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### OVERVIEW:

Six sessions in total were held in May and June, 2010 – one each with researchers in Edmonton and Calgary, one with post-secondary institution administrators, and one each with the private sector, government and health delivery organizations.

### FINDINGS:

- The transition has left many people uncertain about their futures and feeling undervalued. Engagement with researchers to assure them of the value they provide to Alberta is seen as essential.
- There is also recognition that transitioning researchers to salary may reduce the amount of time they spend on research, reducing the total research capacity in the province.
- Transition to a model that calls for knowledge translation requires reworking the credit models at the universities. Currently, researchers do not get tenure credit for this type of work. AIHS could help with this. In a similar vein, researchers will require training in knowledge translation, in teamwork, and in related fields, and again, AIHS could assist here.
- Recruitment to Alberta will be difficult over the next period due to the transition. AIHS can help by stating a clear strategic direction, and communicating it broadly and consistently.
- The AHFMR brand -- this was well recognized in Canada and beyond, and the current situation is creating a sense that something has been lost. Participants recommend that effort be put to re-establishing Alberta's medical research reputation and communicating future direction. In fact, people suggest that AHFMR excited the world with its creative design; AIHS should strive for similar position.
- Communications: creation of the strategic plan and its implementation would benefit from strategic engagement with government, the research community, university and private sector stakeholders.
- AIHS design:
  - In developing its processes, AIHS should pay attention to ensuring that it retains its objective of being nimble, and assists researchers to be nimble in turn.
  - Engage at a global level. Don't fall into a provincial perspective.
  - Capture the lessons from AHFMR, and from CIHR.
- The AIHS Plan:
  - Should take into account the balance between expecting timely results and the need for patient investment.

- Needs to engage with the other Alberta Innovates corporations to create an overall vision and plan. There was talk of a Grand Challenge for Alberta (with ideas of an inter-corporate investment committee and some money put aside by all corporations for this purpose)
- Needs to use AHS as a lever (as a surrogate market for its innovations)
- Should consider synergies across Western Canada.
- Needs to address the fact that it is not easy to do business in Alberta – multiple ethics approval processes, lack of coordinated data sets.
- And it should be willing to take risks, to provide seed money for pilots, and to provide some funding for non-priority areas.

Specifically, with respect to the strategies, people felt that these were transitional process strategies, and that ultimately there needed to be more focused strategies lined up to the goals. Additional comments include:

- The organization should demonstrate consistency across time
- The strategies must line up with the other Alberta Innovates corporations
- Relationship with AHS is key – as a research partner (set priorities together) and a market for innovation
- Establish a clear role for AIHS – funder, knowledge brokering, evaluation or other.
- Describe the future model of research
- Should be more focus on knowledge translation
- Find ways to lever research elsewhere – does not have to be invented here
- Foresighting should underlie all planning
- Foundational data process is but one piece – consider also infrastructure, technologies, biobank

In addition, a number of questions were posed, reflecting the concern about the new model:

- How will the Government of Alberta set priorities?
- How will performance be measured? And what are the targets/performance expectations?
- Will there be any funding exclusions?
- How will the AIHS strategic plan map to the Health Research Strategy?
- Will AIHS have a sense of loyalty to stakeholders beyond the Government of Alberta?

These themes have been incorporated into the draft strategic Framework.