



Legislative Assembly of Alberta

The 30th Legislature  
Fourth Session

Standing Committee  
on  
Alberta's Economic Future

Ministry of Technology and Innovation  
Consideration of Main Estimates

Wednesday, March 8, 2023  
8 a.m.

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**Legislative Assembly of Alberta  
The 30th Legislature  
Fourth Session**

**Standing Committee on Alberta's Economic Future**

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Goehring, Nicole, Edmonton-Castle Downs (NDP), Deputy Chair  
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\* substitution for Nicole Goehring

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## **Standing Committee on Alberta's Economic Future**

### **Participants**

Ministry of Technology and Innovation  
Hon. Nate Glubish, Minister

Alberta Enterprise Corporation  
Kristina Williams, President and Chief Executive Officer



8 a.m.

Wednesday, March 8, 2023

[Mr. van Dijken in the chair]

**Ministry of Technology and Innovation  
Consideration of Main Estimates**

**The Chair:** Good morning, everyone. I'd like to call the meeting to order and welcome everyone in attendance. The committee has under consideration the estimates of the Ministry of Technology and Innovation for the fiscal year ending March 31, 2024.

I'd ask that we go around the table and have members introduce themselves for the record. Minister, please introduce the officials that are joining you at the table. My name is Glenn van Dijken. I'm the MLA for Athabasca-Barrhead-Westlock and chair of this committee. We'll begin, starting at my right.

**Mr. Carson:** Thank you very much. Good morning. Jon Carson, MLA for Edmonton-West Henday.

**Mr. Rowswell:** Garth Rowswell, MLA, Vermilion-Lloydminster-Wainwright.

**Mrs. Allard:** Good morning. Tracy Allard, MLA for Grande Prairie.

**Mr. McIver:** Good morning. Ric McIver, MLA for Calgary-Hays.

**Ms Rosin:** Good morning. Miranda Rosin, MLA for beautiful Banff-Kananaskis.

**Mr. Walker:** Good morning. Jordan Walker, MLA, Sherwood Park.

**Mr. Glubish:** Good morning. Nate Glubish, MLA for Strathcona-Sherwood Park, Minister of Tech and Innovation. To my left I have my senior financial officer, Richard Isaak. To my right I have my deputy minister, David James, and to his right I have my assistant deputy minister of data, privacy, and innovation, Maureen Towle.

**Mr. Bilous:** Good morning, and happy International Women's Day. My name is Deron Bilous. I'm the MLA for Edmonton-Beverly-Clareview.

**Mr. Barnes:** Good morning. Drew Barnes, MLA, Cypress-Medicine Hat.

**The Chair:** Now we'll go to members participating remotely. MLA Stephan, would you introduce yourself for the record, please?

**Mr. Stephan:** MLA Jason Stephan, Red Deer-South.

**The Chair:** Thank you.

I'd like to note the following substitutions for the record: Member Carson as deputy chair for Nicole Goehring and Ms Rosin for hon. Ms Armstrong-Homeniuk.

A few housekeeping items to address before we turn to the business at hand. Please note that the microphones are operated by *Hansard* staff. Committee proceedings are live streamed on the Internet and broadcast on Alberta Assembly TV. The audio- and videostream and transcripts of the meetings can be accessed via the Legislative Assembly website. Members participating remotely are encouraged to turn your camera on while speaking and mute your microphone when not speaking. Remote participants who wish to be placed on the speakers list are asked to e-mail or message the committee clerk, and members in the room should signal to the

chair. Please set your cellphones and other devices to silent for the duration of the meeting.

Hon. members, the standing orders set out the process for consideration of the main estimates. A total of two hours has been scheduled for consideration of the estimates for the Ministry of Technology and Innovation. Standing Order 59.01(7) establishes the speaking rotation and speaking times. In brief, the minister or member of Executive Council acting on the minister's behalf will have 10 minutes to address the committee. At the conclusion of the minister's comments a 50-minute speaking block for the Official Opposition begins, followed by a 20-minute speaking block for independent members and then a 20-minute speaking block for the government caucus. Individuals may only speak for up to 10 minutes at a time, but speaking times may be combined between the member and the minister. After this, speaking times will follow in the same rotation of the Official Opposition, independent members, and the government caucus.

The member and the minister may each speak once for a maximum of five minutes, or these times may be combined, making it a 10-minute block. If members have any questions regarding speaking times or the rotation, please send an e-mail or message the committee clerk about the process.

Ministry officials may be present and, at the direction of the minister, may address the committee. Ministry officials seated in the gallery, if called upon, have access to a microphone in the gallery area and are asked to please introduce themselves for the record prior to commenting.

Pages are available to deliver notes or other materials between the gallery and the table. Attendees in the gallery may not approach the table. Space permitting, opposition caucus staff may sit at the table to assist their members; however, members have priority to sit at the table at all times.

If debate is exhausted prior to two hours, the ministry's estimates are deemed to have been considered for the time allotted in the schedule, and the committee will adjourn.

Points of order will be dealt with as they arise, and individual speaking times will be paused. However, the speaking block time and the overall two-hour meeting clock will continue to run.

Any written material provided in response to questions raised during the main estimates should be tabled by the minister in the Assembly for the benefit of all members.

The vote on the estimates and any amendments will occur in Committee of Supply on March 16, 2023. Amendments must be in writing and approved by Parliamentary Counsel prior to the meeting at which they are to be moved. The original amendment is to be deposited with the committee clerk with 20 hard copies. An electronic version of the signed original should be provided to the committee clerk for distribution to committee members.

Finally, the committee should have the opportunity to hear both questions and answers without interruption during estimates debate. Debate flows through the chair at all times, including instances when speaking time is shared between a member and the minister.

I would now invite the Minister of Technology and Innovation to begin with your opening remarks. Minister, you have 10 minutes.

**Mr. Glubish:** Thank you, Chair. I'm pleased today to speak to Technology and Innovation's 2023 budget by presenting our estimates for the upcoming fiscal year. As I mentioned, I'm joined today by my deputy, David James; my assistant deputy Maureen Towle; and my senior financial officer, Richard Isaak.

Technology and Innovation is a really strategic department of government designed to support modernization of service delivery while fostering a strong and diverse technology and innovation ecosystem. We have a foundational and strategic role of working

with other ministries to modernize government service delivery and to accelerate the adoption of technology and innovation with the aim of delivering better, faster, and smarter services to Albertans in a safe and secure manner. We are implementing several strategies, including the Alberta technology and innovation strategy and the Alberta broadband strategy, which are key priorities to help strengthen the provincial economy. We develop and maintain the applications and tools that help every other part of government deliver high-quality, secure services to Albertans. We also protect the Alberta government network from cyber threats, including digital fraudulent activities, a task that grows more complicated and essential every year.

Budget 2023 is securing Alberta's future by growing the economy, strengthening health care, creating more jobs, and focusing on public safety to support Albertans. The economy has momentum, and Alberta's government is focused on even more job creation and diversification as we continue to be the economic engine of Canada. We are attracting more investment than ever before and providing supports to help businesses and entrepreneurs thrive, and the Department of Technology and Innovation plays an integral role in keeping this momentum going.

Technology and Innovation's consolidated expense for budget 2023 is \$1.01 billion, representing an increase of \$122.7 million, or 13.8 per cent, from the last budget year. This investment supports our role of modernizing government, driving innovation, and fostering efficient delivery of programs and services. Budget 2023 invests \$272.3 million into the data privacy and innovation division, which is responsible for advancing the strategies and policies related to the delivery of data content management technology and innovation as well as privacy-related programs. Part of this funding, \$7.5 million, will be used to hire specialized staff to support technical infrastructure related to the data strategy, a key priority that will help improve public services, create jobs, and attract new companies and investment to Alberta. This division also supports the innovation economy through several grant and accelerator programs, including those delivered through Alberta Innovates and Alberta Enterprise Corporation, two organizations that make incredible contributions to the provincial innovation ecosystem every year.

In many ways Technology and Innovation's budget allocations will help establish a stronger future for the province. For example, one of our top priorities is to implement the digital strategy, which will introduce streamlined approaches to digital service design that will improve the way government delivers essential services to Albertans. Budget 2023 is investing \$40 million in modernizing government digital systems that will provide better, faster, smarter services to Albertans, saving them time and money. Limping along legacy systems put government and Alberta data at risk, and this budget directly supports everything this government will do, from deploying appropriate digital technology that will reduce bottlenecks in accessing government services to creating a digital-first culture of innovation, collaboration, and excellence that will attract the right talent to the civil service. Overall, the digital accelerator program is a \$120 million capital investment over three years, and it will be essential as Alberta's government works to modernize service delivery so we can meet the evolving needs of Albertans.

Albertans are at the centre of everything we do, and future services will be built with end users in mind. Albertans struggling to make ends meet will save time and money by accessing a range of online services when, where, and how they choose, potentially eliminating the need to travel or take time off work to visit a government office, and government will save time and money through automation, better data management and usage, modern service design, and streamlined service delivery options. The digital

accelerator program will advance the transformation of services in multiple areas across government using digital approaches and technologies. The digital accelerator will also support economic diversification by creating more opportunities for recent graduates, start-ups, and growing businesses to work with government.

#### 8:10

This January my department engaged with key stakeholders and collected more than 1,300 survey responses from Albertans to understand what they want and expect from government services. We gathered some critical insights from that survey. For example, we heard that Albertans enjoy the convenience of online services but may experience change fatigue or technical barriers; we heard that not all services will benefit from digitization; and, as we expected, we heard that data security is central to maintaining trust in our services.

The tactics of execution based on the feedback from the survey are already in motion. Its principles were successfully tested during development of several recently introduced services, including court modernization with Alberta Justice, the find housing application through Seniors, Community and Social Services, and the Aboriginal consultation office with Indigenous Relations. We also see this with the affordability program and the payment portal, which is a user-friendly, fast, and easy tool to process inflation relief payouts. The results are easy-to-use services that focus on the user's needs.

Looking forward, the concepts outlined in the digital strategy will be applied when developing future services, including the health spending account, which is allocated \$20 million through Budget 2023 for development. This mandate item for both Technology and Innovation and Alberta Health will give Albertans additional funding to help pay for goods and services not covered by the Alberta Health Care Insurance Act.

My department is working on the government of Alberta data strategy, an initiative closely tied to the digital strategy and the digital accelerator program. Technology evolves quickly, and Alberta's government recognizes the need to align our privacy framework with the realities of today's rapidly evolving digital world. The data strategy will set the foundation to optimize the way government collects, manages, and uses data to support decision-making, drive innovation, and support economic growth and, at its core, ensuring that it is a privacy-by-design framework. The digital and data strategies work together to set up our province for a successful future by creating a stable and sustainable foundation for modernizing service delivery.

As we introduce more online service options, a strong high-speed Internet connection becomes even more essential. That is why, as a part of our \$390 million commitment over four years, Budget 2023 allocates a total of \$229 million into continued implementation of the Alberta broadband strategy. We have announced more than \$70 million in funding to date for more than 50 communities. This fiscal year we will continue to work with the government of Canada to award universal broadband funding to even more communities. We will also begin allocating funds through the Alberta broadband fund, our \$36 million made-in-Alberta solution, to address remaining connectivity gaps as we work to connect every household and community to high-speed Internet by 2027.

Better connectivity gives Albertans, businesses, and communities the tools they need to contribute to and benefit from our economic diversification efforts, including from the growing technology sector. Alberta is experiencing a technology-sector boom, and my department is eager to see that continue. For the last three fiscal years our province has attracted record-breaking capital investment, a clear indication that the Alberta technology and innovation strategy,

or ATIS for short, is working. More companies are choosing to invest in Alberta, and more innovators are choosing to build new businesses here.

The government is making more investments as well. For example, we are committed to supporting and enabling innovative technologies such as artificial intelligence, quantum science, and other technology sectors where Alberta has a global competitive advantage. One of our key initiatives is the development of an intellectual property commercialization framework, a joint project with Advanced Education to enable and support postsecondary institutions, innovators, and entrepreneurs to commercialize their intellectual property into marketable products and services.

In 2023-24 government will continue its work under the Alberta technology and innovation strategy announced in 2022, which seeks to create 20,000 new jobs and see Alberta's technology sector generate \$5 billion in annual revenue by 2030. Government will continue its funding commitments in 2023-24 with approximately \$25 million to support artificial intelligence and quantum science as well as expand the major innovation fund and the innovation catalyst grant programs that support innovation and entrepreneurship for postsecondaries.

Furthermore, the research capacity program and strategic research initiatives program supporting postsecondary research will each receive \$5 million through Budget 2023. These are smart investments into the future of Alberta innovation. Both programs have a track record of attracting nearly \$3 of federal and other funding for every public dollar invested.

My department also works closely with Alberta Innovates and the Alberta Enterprise Corporation to ensure innovators can access the resources they need. Both organizations have an enormous positive impact on the provincial innovation sector. For example, every dollar invested into Alberta Innovates results in \$6.58 in revenue growth for small and medium enterprises, and every dollar invested by the Alberta Enterprise Corporation results in more than \$5 invested back into Alberta companies.

Long story short, Mr. Chair, there's an enormous amount of excitement in the technology sector in Alberta and a lot of exciting things that we are working on in my department to both support government service delivery and to deliver better services to Albertans but also to attract more investment, to drive more innovation being developed in this province.

Really looking forward to the discussion today to discuss our budget. Thank you for your attention, and I will now take questions.

**The Chair:** Thank you, Minister.

For the next 50 minutes members of the Official Opposition and the minister may speak. Hon. members, you will be able to see the timer for the speaking block both in the committee room and on Microsoft Teams. Members, would you like to combine your time with the minister's time?

**Mr. Bilous:** I would love to, and I'm hoping that the minister will go back and forth for a block.

**Mr. Glubish:** Mr. Chair, I would prefer to stick with block time.

**Mr. Bilous:** Thank you, Mr. Chair. That's quite unfortunate. I think, you know, I've been at this – I've done about 14 estimates now in the past 11 years, and I can say that the conversation is much more robust, in my opinion, when we can go back and forth. Now, I will say, as I say at the start of every estimates, that my intention is not to land a punch or look for an aha or a gotcha moment. Really, estimates is a time for us to hear from you and your team, Minister, on what you plan to spend, the outcomes that you're trying to drive.

My questions, as the committee will see, are not hyperpartisan; this is not question period.

I'll just start off by thanking you, Minister, and your team that are here. I want to thank the civil service for all the work that they do to help government deliver on its outcomes. You've got, you know, a ministry that – I think back to 2015-19, when I was minister of economic development and trade, and people talk about how we were the ministry of good news. I think that extends to your ministry of all the initiatives that you're able to do in Technology and Innovation.

With that, we'll jump in. I want to start on your business plan. It's outcome 3 of the budget document. Actually, I'm going to be referencing a couple different ones. In the budget document, page 209, line 2.2, on the innovation system integration: this piece is accountable for the Alberta tech and innovation strategy. At the same time it's also in the strategic plan: priority 1, objective 2, attracting investment and growing the economy. The dollar amount is the \$22.5 million. That's the price tag attached with the tech and innovation strategy. I'm looking for a breakdown. Is the \$22.5 million part of the \$59 million that's on line 2.2 of page 209 of the budget document? Are any of those funds allocated for the regional innovation networks? If you can be specific on what programs are being delivered in that line item.

As committee members will know, I'm always interested in the metrics that are being used to track program success. How is it being evaluated? How do we know we're getting value for dollar? That's the first piece with that technology and innovation strategy, which is referenced in a number of different spots between the strategic plan, the business plans. The \$22.5 million: because it's referenced in a number of places, I'm sure that bucket of money is going to be spent very, very quickly.

In the Alberta tech and innovation strategy document one of the outcomes is to establish a public-sector artificial intelligence lab with the government of Alberta as an anchor tenant to develop talent to produce AI solutions for government to enable individuals to create commercialization opportunities. If I understand this correctly, this would be the announcement that came a few weeks ago, partnering with AMII. If it's not, then I'd appreciate clarification. You know, that was a \$30 million dollar commitment, but I wasn't clear on how much was the GOA's portion of that. How much came from the U of A, and how much came from the feds on that announcement? With that public-sector AI lab, if you can be specific into which budget line item that is coming from.

**8:20**

Again, I'm referencing the AMII new research chairs. I had a good conversation with Cam Linke, who, of course, is the CEO of AMII, who was very excited that AMII is able to expand their chairs beyond just the direct tech space to bring in life sciences, ag, all the other sectors that are using technology, which I think is very exciting. I stand behind that initiative and just curious to know: what was the government of Alberta's portion in that?

Continuing on in the business plan, I'm on outcome 3. We'll talk a little bit about Alberta Innovates. I do want to give a shout-out to Laura Kilcrease and her team that do incredible work province-wide to support our innovation ecosystem. My questions are just to get a better breakdown of the \$180 million on line 2.3 of the main estimates. I know, now probably six years ago, Alberta Innovates went through and did a complete review of all of the programs that they were delivering to ensure that they are still serving their purpose and meeting the outcomes for Albertans. So I'm curious – and I didn't get the answer from your predecessor for the last three years – as far as: has that work wrapped up? I'd love to hear which programs maybe were deemed closed because they had served their

purpose. What are some of the new initiatives that Alberta Innovates is doing?

I'd also like to hear – I've heard feedback from, you know, people within the ecosystem that Alberta Innovates, the work they're doing, is absolutely fantastic, but sometimes there's the challenge of extraneous red tape, or it's been challenging for some companies to be able to access dollars from Alberta Innovates. I've heard companies say, especially for the smaller microvouchers or microgrants that are \$10,000, \$20,000, you know, for a start-up, that they don't have the staff on board to be able to go through lengthy application processes. So, really, the questions are around: what initiatives has Alberta Innovates undertaken to expedite that to make it easier to get their grants out the door? Obviously, we want to make sure that the money is going where it needs to get to, but how do we expedite that?

I'm curious to know how many FTEs Alberta Innovates currently has. Then in addition to the FTEs within Alberta Innovates, I think they do contract out some positions, if the minister can outline what those are. Again, I would love to know how much of the budget is for programming or program support. Obviously, there's an administrative cost that Alberta Innovates has to absorb to be able to deliver the programs, to have boots on the ground in the communities. But curious to know: out of the \$180 million, you know, what's the portion or ratio of dollars that flow through to companies versus dollars that are used by the entity itself?

Again, initiatives that Alberta Innovates is doing to reduce red tape. I know, Minister, in the consolidated total it's about \$253 million. If you have a bit of a breakdown on – and I appreciate that that's likely dollars leveraged from the private sector, from the federal government as well, which is great to see. I know that Laura is big on leveraging dollars wherever she can get them from. I know that Ms Williams is here from Alberta Enterprise Corporation, who does the same, and we'll get to AEC today, a little bit later this morning. But if you can do a bit of a breakdown.

I am curious, Minister, if you can also comment – there's a bit of a jump in capital investment for Alberta Innovates in this year's budget. I'm just curious if they've acquired new buildings or if they're refurbishing some of their existing ones. If you can speak on that, that would be great.

In your ministry business plan outcome 3.3, which is page 131, provides innovation and commercialization programming, through Alberta Innovates, I'm just curious why there are no performance metrics for this outcome. I will have other questions when we go through the key objectives, which I appreciate that you've laid out, with numerous objectives for each of the outcomes. The question that I have – and it's in part directed at the department – on the performance metrics: there are only one or two per outcome, and many of those are not tied to the key objectives.

Of course, Peter Drucker famously said, you know, you can't manage what you don't measure; you can't improve what you don't measure. I look at these performance metrics as a critical tool to provide feedback for you, Minister, for government to be able to go to Albertans and say: here's how we are delivering.

That's where some of the performance metrics – like, 3(a) is sponsored research revenue attracted by Alberta's academic and research universities. I mean, that's great. I'd love to hear, Minister, if there's a role that you have working with postsecondaries to be able to change the formula. At the moment if PSEs go out and raise a bunch of capital, it actually means government funds them less, so it's net zero, net neutral, which is a disincentive for universities to go out and do a bunch of capital raising.

On the second, 3(b), which I'll talk on in my next block, about Alberta Enterprise Corporation, I appreciate that metric because it's very tangible and specific as far as invested dollars.

**The Chair:** Thank you, hon. Member Bilous.

Minister, you have up to 10 minutes to respond.

**Mr. Glubish:** Thank you for those questions. I'll do my best to try and make sure we cover all of those here in this block of time. I'll start maybe with some of the comments on the Alberta technology and innovation strategy related to outcome 3 in the business plan.

There are a number of programs that have been expanded through the Alberta technology and innovation strategy, and that includes the research capacity program, which helps to create globally competitive research facilities critical to attracting and retaining talent and funding. There's also the major innovation fund, which is designed to advance postsecondary innovations and technologies that are market driven and also that have strong commercialization potential.

I think in all of the work that we're doing, we're always thinking about the end goal of: how are we able to make sure that the research and the innovation work that's being done leads to some kind of a commercialization outcome? At the end of the day that is what is going to end up creating jobs, creating companies, attracting investment, and building and growing and diversifying our economy. That's why the major innovation fund plays an important role. Then there's also the innovation catalyst grant, which provides commercialization, training, and support for new entrepreneurs of innovative technology companies. I'm just going to lean over to my team here to see if we might have any specific numbers for each of those three components: the research capacity program, major innovation fund, and innovation catalyst grant. I'll keep maybe going through some answers to your questions while they look for that.

At a high level, to support the implementation of ATIS, Budget '22-23 provided an additional investment of \$73 million over the next three years through the Alberta at work initiative, which included \$43 million into the AI and quantum science space and \$30 million to expand the major innovation fund and innovation catalyst grant. Given that that was a three-year investment, that's carrying forward into the current budget period and continues to move forward.

Now, in terms of the \$22.5 million number that the member was referencing, I've got a breakdown here. For the '23-24 period the major innovation fund is \$5.2 million, the innovation catalyst grant is \$2.3 million, the quantum funding is \$5 million. Then into artificial intelligence in the same period we have a \$10 million scale-up and growth accelerator, \$2 million, and that should total 24 and a half million dollars. So I hope that that helps to provide some context on the member's question.

In terms of which line item in the estimates that is attributable to, that is line 2.2. The estimate for '23-24 is the \$59 million, which is what the member referenced. Yes. You are correct in that.

8:30

Specific to regional innovation networks, that, for clarity, is included in Alberta Innovates' budget, which is a separate line item. I know the member had highlighted in some other comments, but it's relevant here, too, which is the importance of, you know: what are we measuring? What are we tracking? How do we know if things are working well? The regional innovation network right now: more than 1,000 regional innovation clients have been served through this program to date, which is a big number, and I think we'll keep an eye on that to see how it continues to go, but pleased to date with some of that progress.

I absolutely agree with the member that we should be looking to ensure that Albertans are getting good value for the dollars invested here. That is why I look forward to working closely with the different



program operators and partners, whether that be AEC or Alberta Innovates or whether that be the different partners like AMII and others who receive dollars either directly or indirectly through my department, to make sure that we have a strong understanding of all of the different programs that we're offering and the key performance metrics that they are tracking and making sure that we're monitoring that and making sure that we're asking the right questions so that we can determine whether or not Albertans are getting a good return on investment. I think there have been a lot of things we've talked about today already that have shown some good value and some good return on investment.

I want to assure the member and all those watching at home that this is a big priority for me to get in, you know, put my former venture capital investor hat on and make sure that we're asking those tough questions and holding people accountable to delivering results and celebrating the successes as they unfold but then learning from anything that maybe isn't delivering quite the results we want and working together with our partners to drive towards continuous improvement.

In terms of the AI lab I believe that is, in fact, as the member mentioned, a collaboration or in partnership with the Alberta Machine Intelligence Institute. That, again, is through the Alberta Innovates funding, so we – oh, I'll pause for a sec. This, as the member pointed out, is a collaboration with the Alberta Machine Intelligence Institute. It is through Alberta Innovates, so, you know, the line item from my budget is the line item attributing funding to Alberta Innovates, and then the \$30 million towards AMII is coming from Alberta Innovates directly. I know the member has had many dealings from his previous time as a minister with the folks from AMII, so I know he's very familiar with what they do and why it's important to the future of Alberta.

I do want to just highlight, in case there is anyone who might have heard about the GovLab.ai initiative – I don't want the two to get confused – the AI lab piece through Alberta Innovates with AMII is separate from GovLab.ai. This is a \$3.6 million per year commitment from my budget. It is a partnership with AltaML, another household name in the AI and machine learning community here in Alberta, a great local Alberta success story. The thought process was that we need to find ways – I've been saying all along that we need to find more ways to apply technology and innovation in everything we do in government to deliver better services, and, you know, AI is a really critical innovation and a great tool to help us do that.

We didn't have a lot of in-house expertise in government to do those kinds of things, so we said: wouldn't it be great if we created a collaboration environment where we had some of the best and the brightest executive leadership from a partner like AltaML coming together with our civil service, who is working actively to solve problems in government every day, and bring them together with funding from the Alberta government, funding from AltaML, to then just work together to tackle problems with AI? That's exactly what they're doing. I'm looking forward to reporting back with some progress on that in future periods, but I think there's some great promise there.

In terms of Alberta Innovates and new initiatives, which is something the member mentioned, tying into outcome 3, I know one of the newer initiatives ties to accelerator programs. I think it was about a \$35 million investment between Alberta Innovates and other sources going into standing up a number of different accelerator programs. Those are in the relatively early stages, so we'll be monitoring things like how many companies they have helped, how many of those mature into scale-ups as opposed to just starting, looking at investment attracted into those organizations, et

cetera. Those will be things we absolutely will be monitoring to see how those programs are functioning.

I'm just going to check to see if my officials have found the FTEs. Alberta Innovates has 589 staff in 11 locations. Maybe I'll just point out – do you have the contractor piece? Okay. Salaries at Alberta Innovates is \$68 million, and then grants – that's the dollars going out to actually directly supporting companies – is \$140 million. I'll maybe just highlight – maybe we can come back to this in a future block with just a quick answer if there is any information we might have on contracted-out positions.

I think that covers most of those questions on the Alberta Innovates side.

In terms of leveraging from other sources, I think the member raised a good point. This is something I think Alberta Innovates has done well. You know, they've brought in some funding from Emissions Reduction Alberta, which is in part funded by the technology innovation and emissions reduction program from Environment.

I'm sure we'll get back to . . .

**The Chair:** Thank you, Minister.

MLA Bilous, you have another 10-minute block.

**Mr. Bilous:** Thank you, Mr. Chair, and thank you, Minister, for your answers. I appreciate, you know, hearing the 589 staff. I'm interpreting, because he didn't say "FTEs," that that's 589 bodies. The \$68 million of in-house for admin costs versus the \$140 million that go out in grants: I don't have an issue with that. I know some people listening may think that that number seems high, almost \$70 million compared to only twice as much going out in grants, but I also recognize that Alberta Innovates provides a lot of mentorship and training. That's absolutely critical, especially for start-ups, to be able to succeed. It's not the same as another entity having a higher admin dollar amount.

Minister, regarding the GovLab.ai, listen, I applaud you and the government for creating that initiative. I know Cory Janssen well. I know AltaML. They're constantly growing. They are an incredible success story for Alberta, and I think that they're serving – that initiative is serving a niche. I know, Minister, you referenced \$3.5 million. I believe that's out of this current budget. I'm not sure if you can just comment if the GOA has committed to a three-year funding model and this is \$3.5 million for this year or if it is just year by year.

As far as the accelerator programs, you took the words out of my mouth as far as, you know, providing some background on that. I know that the accelerators were announced either last year or the year before. I don't know if you can comment on: have any of the cohorts moved through yet? Do we have any of that data? Again, I'm very interested to know how many companies are going through the different – and there are several accelerators that Alberta Innovates has stood up province-wide. So how many companies are going through?

Then, not just that, but you even mentioned it, Minister. I mean, you know, the real numbers are around: how much follow-on investment are those companies getting? What's the track record of those companies to scale once they go through the accelerator? Obviously, we want to see successes. Also, recognizing in the start-up space that there are a lot of companies that are going to fail, but in the ecosystem we want them to fail fast if they're going to fail. You'll have serial entrepreneurs start up another company and, hopefully, turn that into a unicorn and more success stories for the province.

The \$30 million to AMII: that's great news. You said, Minister, that that flows through Alberta Innovates. Curious if they have

signed an agreement or if they've done a multiyear commitment within those agreements.

I will talk a little bit about – let's jump over to Alberta Enterprise Corporation. I know Ms Williams was disappointed that I had no questions for them previously. You know, happy to hear a little bit about AEC and, again, Minister, with your approval would love to hear from Ms Williams directly.

8:40

Minister, under your government in the first year you recapitalized AEC by \$175 million. I know that last year and this year there haven't been any new commitments. There was a commitment in one of your documents from three years ago that committed I believe it was an additional \$175 million over several years. Now, from what I can see, those additional dollars have not gone to AEC. Their line item, I think, is around \$3.8 million, which is for, I would imagine, the administration of the funds. So I'd love for Ms Williams – I know she briefly spoke about the funding announcement recently. Congratulations; that's great news. But I would love to hear more of the details on how many Alberta companies are being invested in. Again, the fund-to-fund model that AEC has attracts venture capital globally, which is great, but of course we want to see not only the venture capital come to Alberta but stay in Alberta and get invested into Alberta companies. So if I can hear some details on that.

And again, you know, to Ms Williams: of the \$175 million from three years ago, how much of that capital has been deployed? For people who don't know how this works, I mean, the government announces that commitment, but it takes years for Alberta Enterprise Corporation to go out and get venture capital partners to leverage the fund, create the fund, and then start to look at companies to invest in. So, you know, it's my understanding that a lot of the successes that we're seeing in the ven cap were dollars that were actually committed from five, six years ago because they take years to move through. If we can hear a little bit about that, that would be wonderful.

And maybe Ms Williams can comment just on, again: what's the timeline of those dollars once they're committed in a budget until they get to work in a fund and then invested into companies? I'm curious to know how many – are there any funds that are earmarked for specific sectors? And out of those, again, if we can get a breakdown on Alberta companies, that would be fantastic.

We'll jump over to broadband, Minister. Strategic plan, priority 1, objective 3, page 10, improving broadband services across the province. You know, I know that the ministry plan explains that the ministry is going to invest \$229 million, as you had mentioned, Minister. Are we on track to provide universal connectivity by '26-27? I believe that was a previous commitment that might have been made by yourself, Minister; this is obviously one area that came over with you from Service Alberta. Do you have performance metrics to show that we're on track?

I know you mentioned the dollar amounts that have gone into communities. Can you expand on, you know, what infrastructure, rather, has gone into play, and what are the different types of actual services that we're using? Again, depending on the community, rural, remote communities, we're obviously not going to pay companies to lay cable to get all the way to them; that would cost billions of dollars. So if you can comment, through you, Mr. Chair, on the strategy province-wide and break it down into different regions.

I'd also love to hear – I've been having conversations with our telecom companies. Part of the issue is spectrum and the fact that – and I appreciate that's the federal government, but there are companies that are sitting on spectrum for many, many years, and

they are actually inhibiting companies who want to bid on the dollars that you've allocated to be able to bring broadband connectivity province-wide. So if you can share with us your plan. How are you working with the federal government to get them to move on this? I think we can all agree that universal broadband is absolutely critical not only for the economy but for businesses. Again, you look at how many businesses operate online, but also, when we think about rural, remote communities having access to postsecondary, access to health care, you know, connectivity is absolutely critical.

You know, the feds announced there's \$70 million to 50 communities. There are, I believe, according to your numbers, Minister, about 200,000 households without access to reliable Internet. Again, if you can touch on how you intend to get access to those 190,000 households by 2027, if you can provide details around the 50 projects that were announced, when they'll be completed, if you have a number, Minister, on how many households you're anticipating will be connected by the end of this year, that'd be wonderful.

Something that jumped out at me, Minister, was on page 209 of the government estimates, line 3, on capital grants. It shows a forecast from last year's budget, but last year's budget allocated \$150 million for broadband, yet only \$21 million went out the door, and that was spent. I'm curious why it's taking so long to get the dollars out the door. If this was a matter of planning and going to tender, okay; I appreciate that. But then why was there \$150 million budgeted if only \$21 million went out? Any kind of clarification that you can provide on that: that would be great. Again, a breakdown of that \$21 million.

A couple of quick questions around FOIP. It comes up in the business plan on page 127 as well as in Service Alberta, so it's showing in two different ministries, which I think is interesting. The FOIP Act is administered by yourself, but the part 1 continues to be administered by Service Alberta. I'm curious why the government made the decision to split this into two separate ministries. Are we not creating inefficiencies and artificial barriers by having it live in two different ministries? And I'm curious why the ministry has left out any performance metrics regarding the timelines and quality of the FOIP process, which, of course, is very important to Albertans.

**The Chair:** Thank you, MLA Bilous.

Minister, you have up to 10 minutes to respond.

**Mr. Glubish:** Thank you. Some great questions in there, so I'll do my best. Maybe quickly, just working backwards, on the FOIP question, the rationale here: given the technology and innovation aspect of our ministry, privacy of data is core to what we do, and protecting Albertans' privacy is core to what we do. That is the function that we retain inside our ministry. Actually, my assistant deputy minister Maureen Towle, who is here with us today, leads that work. She led that part when it was inside Service Alberta before, so there is still continuity in terms of the team and the leadership and the strategic direction.

My understanding – and I'll just turn to my officials here to make sure I've got this right. In terms of the access and the actual delivery of access requests, that is still through Service Alberta. Essentially, think of it this way. We're splitting the privacy policy element related to FOIP. That is staying in-house with us because we have the broader responsibility of protecting Albertans' information: cybersecurity, data protection, all of that kind of stuff. But in terms of the service delivery aspect of FOIP, in terms of responding to requests, that is still under Service Alberta and will continue to be there. While I understand the member's question about, "Does this perhaps create more complexity than is needed?" I believe it's

actually simpler than it maybe sounded at first glance because it was a very clean separation of duties related to FOIP. I hope that is helpful on that front.

In terms of broadband, on the comment about the \$150 million – I believe that was on line 3 of page 209. I think it's what the member referenced, the \$150 million allocated versus \$20 million with \$9 million out the door. One of the things we said all along is that the most important thing we had to do with the broadband strategy and the broadband funding was to send a signal to the market that we were committed financially to these investments. That is why we said, "\$390 million over four years; you can count on this; you can take it to the bank," so that those counterparts, who would actually be the ones applying for supports to go and actually build up this infrastructure, could say: I know it's going to be there, and I can actually invest some time and energy into developing a plan, doing the engineering, and applying, et cetera.

Now, we knew that it would be lumpy because with supply chain issues, access to materials, the engineering work itself, getting permitting from municipalities, et cetera, there are a lot of moving pieces that we don't control, and it shouldn't be our job as a government to go and intervene and meddle in that. We knew that there may from time to time be something that was allocated for a certain year that would carry forward into a future year, and that's okay. The key thing is that municipalities in rural Alberta know, that the telcos who want to expand their connectivity infrastructure in rural Alberta know that the Alberta government is committed to \$390 million over four years. If it takes a little longer than four years to actually see those projects through to fruition, those dollars will be there.

**8:50**

In terms of whether or not we are on track, it's a little early to really give a definitive answer on that. But what I will try to do to answer this question for the member, because it's a good question, is to give him a sense of: how are we evaluating this performance? As we all know, in Alberta we have a construction season that is not 12 months of the year. This spring and summer will be the first real construction season where dollars that have been allocated in the first tranche of projects will actually get to shovels in the ground. I think what we really need to do is to get through this construction season and see how much progress we make by the end of that season, and then that will put us in a better position to be able to answer that question on a go-forward basis as we continue through the follow-on years of this funding commitment and the broadband strategy. But, absolutely, we will be monitoring that, working with each and every one of our partners who have received funding commitments from us to ensure that they are delivering as promised.

One of the things that I think is important to note is that part of the process is that we make the funding commitment at a macro level; then we make commitments on a project basis. Then that needs to proceed to actually a legal agreement, a contribution agreement between the government of Canada, the government of Alberta, and the recipient who will be building that infrastructure. Each of those steps takes time, so a lot of those companies that will be beginning construction this summer: we're just finalizing those contribution agreements right now.

What I can say is that one of the biggest bottlenecks in this right now has been working with the federal government. We are very eager to announce another block of projects. We would call it tranche 2 of our joint funding commitments, and I'm really excited about this one. It's a very significant chunk of the funding, but the feds are just not quite yet ready to sign off on that. We're pushing them really hard every day. I just texted, you know, my counterpart,

Minister Hutchings, just last night to try and see if we can move that needle a little farther and faster. So we'll continue to work with our partners in the federal government to try and unlock those dollars as quickly as possible and to send signals to the recipients that we're moving forward and green-lighting some of those projects quickly here. But I do believe this summer is going to be an exciting summer for connectivity in Alberta.

I agree with the member on the comments about needing to have multiple different modalities. As the member probably knows from the broadband strategy document we released last year, we explicitly say in there that we know there will be a place for fibre; there will be a place for wireless; there will be a place for low-Earth-orbit satellite. Some of those advances in technology on the low-Earth-orbit satellite are exciting, and we're watching that very closely with interest. Different parts of the province will be served best by different applications of those technologies.

Working backwards to – actually, just a quick answer. In terms of the role with postsecondaries and their budgets I don't remember the specifics of what the member had mentioned, but it had to do with if they raised money from other sources and then had some complications. All I can say is that that's not a part of Tech and Innovation's budget. That would be a good question maybe for the Minister of Advanced Education. I didn't want to leave that unaddressed.

In terms of AEC I absolutely agree that AEC is a crown jewel in the work that is being done in building our tech ecosystem. I will turn it over to Ms Williams here shortly to maybe address some of the comments that the member raised. I just want to point out – so there was the \$175 million recapitalization, as you mentioned, which is in Budget 2020, and that is intended to be over three years. I think maybe there might have just been a misunderstanding about that. It was always an over-three-year commitment. There weren't two batches of \$175 million. I think we need to get through that \$175 million, see how it performs, and then we can revisit whether or not an additional recap makes sense.

In terms of the administration costs the member is right; that's \$3.8 million. That's to just cover the day-to-day operations of sourcing prospective funds to partner with, doing their due diligence, and then managing the relationship with those funds and overseeing the operation and performance going forward and also maintaining and managing the Start Alberta portal, which I think is a really important tool for investors and innovators alike. That's why I was pleased that our budget includes a \$600,000 increase in the operating budget for AEC. You know, they've increased their assets under management, they have increased the complexity of the work that they're doing, and as such I think this is an important commitment.

In terms of the overall track record, I mean, it speaks for itself; \$5 invested into Alberta companies for every dollar that AEC deploys. That's a great multiplier effect. Seeing that, I believe – and Ms Williams can correct me if I'm wrong – that their investments into venture funds have had their hands in at least a third of the deals being done in Alberta, which is really exciting. I think that's a big part of why we saw \$729 million of venture investment last year, a 30 per cent increase year over year at a time when the Canadian venture investments had declined by 20 per cent. We've also seen a significant increase in the number of deals and the size of each deal while the Canadian metrics on those fronts have been on the decline. Sorry; I had that backwards. I'll correct myself. It was a 20 per cent increase year over year in values while the Canadian market was on the decline by 30 per cent. I'm just correcting that. But with that in mind, I think I'll maybe turn it over to Ms Williams. Actually, you know what? We have 30 seconds left. I will come back to Ms Williams after so she has a little bit more time.

I'll touch on briefly on GovLab.ai. Yes, it is a multiyear commitment. It was a total five-year commitment overall, so the current period and then – there was a commitment last year, and then there's the current period, and then there are three more. Hopefully, that gives the member a good sense that this is a long-term commitment of ours, because we see a lot of value in that.

I think that takes us pretty close to 10 minutes, so if the member is comfortable, I'll maybe start the next segment with Ms Williams.

**The Chair:** Okay. Thank you, Minister.

Member Bilous, you may proceed. There are just under 10 minutes left. Use it as you will.

**Mr. Bilous:** Great. Thank you very much. Oh, so I think what's going to happen is that I'll use my 10 minutes, and then it jumps to the independent member, so the minister and his team won't be able to respond for a while. Okay. All right.

Well, hopefully, Minister and your team, we'll be able to come back to this. I appreciate your responses. I am interested in hearing from Ms Williams, so thank you for giving her the opportunity to talk a bit about what she is doing, and I'd also like to hear from her on the forward looking, so, again, of that initial \$175 million, if she can comment on how much has been allocated already. Again, I get that it takes time for the money to go from a commitment from government to an actual allocation to a fund and then an investment into an Alberta company, but if Ms Williams can comment to help Albertans understand the process of what her team does.

Just to comment on the broadband, I mean, I appreciate everything you've said, Minister. It sounds like we're moving a little slower for valid reasons. I'm not criticizing you on that, but I think it might be challenging for us to hit the target of '26-27. I mean, I appreciate that this year there should be quite a bit of construction, but it sounds like we're a little bit behind. Of the dollars, if you could comment on how much the feds have committed of their buckets, of their federal bucket. How much did Alberta secure? I remember years ago that Alberta was further ahead than most other provinces when it comes to the number of people that have access to broadband, which is wonderful news for our province. However, it actually worked against us federally because the feds prioritized other jurisdictions that didn't have as much percentage of the population connected. So I'm hoping that they will make sure that Alberta gets its fair share.

I'd like to talk a little bit about intellectual property. I know you mentioned that, Minister. I think IP is absolutely critical. I know that there is still a challenge with our postsecondaries. There are different IP agreements that exist at the different postsecondaries. I remember five years ago the University of Calgary championing that they're much further ahead than the other postsecondaries in Alberta, and that might have been the case. However, the challenge is still that I don't think Alberta, when we look at the incredible research that's going on in our institutions – that we are commercializing at a level that we should be if we look at, you know, on a competitive basis elsewhere.

I know it's a complicated matter. I'm not trying to make it sound like, Minister, you or your team or another minister can wave a wand and they'll fix the problem. I'm just curious to hear, you know, what work you're doing crossministry. Again, the challenge with government is that it's so big, it's so siloed. But if we want to get Alberta to a place where our IP is actually a facilitator of commercializing research, then we need to work with the ministry of postsecondary and other ministries to get that over the finish line.

I know that you had talked about the framework. I'm just curious how much dollarwise is being invested, but what's the progress like, and what are you anticipating to get us there?

9:00

Another issue that I'm sure you're very live to, Minister, is the fact that we've got a real challenge right now in Alberta with our tech companies being able to use the term "software engineer." You know, I have sat down with the industry. I know that APEGA currently has a monopoly on the use of the term "software engineer." They have not reached an agreement with companies like Jobber. In fact, they actually took Jobber to court over this, which I think could have a chilling effect on our tech ecosystem. So I'm just curious. If you've had conversations with them, where are we at on this? Can we get to a resolution?

Again, for Albertans who may not be aware, here in the province of Alberta only professional engineers can use the term "engineer." This puts Alberta at a disadvantage when companies are looking for talent, that we cannot advertise using the term "software engineer," which, of course, is the term that is used globally. I appreciate that organizations like APEGA want the industry to use a different term. However, we're going to miss out on recruitment strategies.

With that, Minister, I'd also like a bit of an update, if you could, on the additional spaces. Again, I appreciate it's postsecondary. In our term in government we announced 4,000 new tech spaces, recognizing we need to grow the talent pipeline if we want to have the talent here in Alberta to be able to support the growth of our companies. It was disappointing to see that the government in 2019 cancelled that program for the very fact that had that not been cancelled, there would be graduates from those 4,000 spaces that were committed back in 2018.

Now, I appreciate the fact that this government did announce and commit to 7,000 spaces. I know that that lives in postsecondary, but I'm hoping, Minister, because this is also your file, the grads, that you're able to comment on where we're at in that initiative. How many seats are being used?

How much time do I have? Three and a half minutes. Let's see. I might actually, if I can, Chair, share some of my time with the minister so that the minister can respond to some of these questions so we don't have to wait 45 minutes to hear back.

I'm also curious, just lastly. When we talk about workers in Alberta, you know, yes, we have some good-news stories. We also have taken a few hits, of course: Google DeepMind leaving Edmonton, closing up their shop. I recognize that globally companies are consolidating, but when I look at DeepMind, Edmonton was the first jurisdiction outside of the U.K. DeepMind has labs in Toronto and in Montreal. Those labs did not close; the Edmonton one did, which is disappointing. I appreciate that, you know, our ecosystem is not dependent on one single company, but we could lose some of the talent that could move to one of the other ones.

I'm just curious. Does the budget – I mean, are we looking at recruitment or retention and how to support that? You know, are there specific initiatives, Minister, that you are doing to ensure that companies are not leaving Alberta and are growing here? Again, I appreciate you don't decide whether a company stays in Alberta or shuts its doors, but if you can just speak to what you're doing to try to keep them here.

With that, I will turn it to the minister, if I can, Mr. Chair, to respond in my one and a half.

**The Chair:** Yes, you may.

Minister, you have about a minute and a half to respond.

**Mr. Glubish:** Okay. Great. So just on the Google DeepMind story, of course, it was disappointing to see a story like that. However, I will point out that I believe there's a silver lining here because, as the member already pointed out, there is an enormous need for talent. The fact is that every single one of those bright folks that were working at DeepMind: if they want to stay in Alberta, they absolutely can. There will be a place for them at many, many different exciting tech companies that are doing very exciting things in the AI and machine learning space. I think most of the tech community in Alberta is salivating over those folks, so I think what we will likely see is a number of them still being here.

The fact is Alberta's tech sector is on fire. There's enormous opportunity here. The fact is Google made a decision. They had a larger footprint in other parts of the country. Google DeepMind was the smallest operation they had in Canada, so they chose to consolidate it somewhere else. It's unfortunate, but I believe that Alberta companies will benefit from it.

In terms of the postsecondary side I agree with the fact that we need more talent. That's why the Minister of Advanced Education is committed to creating 7,000 new spaces, which, now that they've actually carried that out, they've been able to see that the funding they committed will actually create 10,000 spaces. They're overperforming by a wide margin.

Then another way we're going to meet that talent gap is through some immigration policy that one of my other colleagues, of course, is working on. She even spoke to that yesterday in question period about having secured a significant increase in the number of Alberta immigration nominee spaces that we will have going forward. I think that's going to be a game changer.

There were a couple of other good questions. I've noted them in my notes, and I will make sure to make an effort to get back to those in our next block.

**The Chair:** Okay. Thank you, Minister.

That concludes the first portion of questions for the Official Opposition. We will now move to independent members for 20 minutes of questions.

MLA Barnes, would you like to combine your time with the minister's?

**Mr. Barnes:** Could we go back and forth, Minister?

**Mr. Glubish:** I think just out of consistency I'll stick with block time.

**The Chair:** Okay. We will continue with block time, and you have up to 10 minutes.

**Mr. Barnes:** Okay. Thank you, Mr. Chair, and thank you to the minister and your staff for all the work you do for Cypress-Medicine Hat and Alberta. It's appreciated. Thank you. I have seven questions, so I will outline them in my 10 minutes.

First of all, on page 129 in your business plan, supporting key objectives, I too want to talk about the \$390 million of broadband investments. Okay. I heard the earlier answer about why it was slow to get out, and I appreciate that the upfront commitment and the message of a \$390 million commitment was important. But I am wondering a couple of things. First of all, Minister, how does this level of broadband investments compare to what other jurisdictions that we compete with and that provide services to their businesses and their residents are doing? I'm wondering: does your ministry have a focus or a plan on partnering with the private sector in those areas, especially when it comes to adding fibre? I know one of the bottlenecks in Medicine Hat, from time to time, is that some of our areas don't have the necessity for fibre and broadband. What do we

do with our older areas, and what do we do with our brand new development areas? Does your ministry have a plan to really leverage this for the benefit of Albertans?

Then in conjunction with that, on your business plan, on your mandate and structure, I'm reading: "In addition, the ministry will explore options to address [cellular] phone coverage across Alberta's major highways." "Explore options:" I'd appreciate some clarification on that. I'm wondering what percentage of rural Albertans in particular still don't have good connectivity, good cellular phone access. I think of highway 41, from basically Elkwater south to the American border, which can be a huge trade route at times in the Wild Horse border crossing. It's virtually impossible to use your cellphone in that area. What a safety hazard that is. What a liability that is for growing our commerce in that area. "Explore options": please, let's not forget that Albertans and Canadians pay probably the highest cellular phone fees in the entire world. I would hope any exploration of that would encourage some competitiveness and some fair pricing for Albertans. Thank you for that.

Question 2. One of the concerns, of course, that we're hearing a lot about now is the digital ID and people concerned about maintaining their individual privacy and their safety. You've mentioned that you have \$7.5 million allocated to the implementation of the data strategy. Then I would sure appreciate some clarification on that because what's here doesn't say very much. How do you guarantee? How are you going to ensure that you're going to keep data private for all Albertans, and what are the costs associated with that? What's the goal? What's the plan for your data strategy?

**9:10**

Okay. Question 3. On page 130 of the business plan you state, "In 2022-23, 7.8 million malware infections were prevented by cybersecurity controls." How many malware infection were not prevented? My goodness, it's a pretty scary world right now when you hear about blackmail and companies and governments paying huge amounts of money to protect data and private information that's been hijacked. Has the Alberta government been subject to that? What is your department doing to make sure that we are protected? It's obviously a scary thing and a big job, so I'd like to hear something about that.

Question 4. On page 131 of your business plan, outcome 3, under your key objective 3.1 it mentions ensuring "that Alberta is the destination of choice for innovators, entrepreneurs and investors." Then you have a performance measure: "Cumulative value of Alberta Enterprise Corporation attracted venture capital funds (and . . . syndicate partners) invested in Alberta businesses."

Representing all new business investment of Alberta: does that represent all new investment or just what's highly focused on technology and innovation? Are you satisfied with that number, and how does it compare to other jurisdictions? Do you have any numbers, Mr. Minister, on how much we're spending to bring in the new investment and what total amount of money was brought in by the new investment? I recall you mentioning a few minutes ago that for every dollar invested, you thought you had a \$5 return. Is that broad across all the work that you're doing, or have there been some successes and some failures?

I'm also wondering if you know how many new investment deals were made by the international community or out-of-province companies. Alberta's got this network of international and national offices, you know, here and there, and I'll be frank. In the 11 years that I've been here, I haven't heard a whole bunch about how effective these agencies are. I wonder: have you been able to lever these offices around the world and across Canada, especially when

it comes to technology and new investments that are on the cutting edge?

I'm a little bit concerned about the 13.8 per cent increase in your budget. That is way past population growth for Alberta. You know, the cabinet is big. There are a lot of new ministries, and I know that some of the other ministries are kind of interconnected with Technology and Innovation. Like, I'm wondering about Jobs, Economy and Northern Development. Are some of the things that were your responsibility last budget now under Jobs, Economy and Northern Development or other ministries? For an example, I'm looking for Invest Alberta. I see that last year \$25 million dollars were spent, and now it's not here at all. Was that not effective? Is that somewhere else? Is that in a different number? Is that in a different ministry?

You know, and again, a 13.8 per cent increase in your budget at a time that government spending is very, very inflationary, at the time that the average Alberta family is having huge trouble at the grocery store and with purchasing things: I think it's more crucial and important than ever to make sure that we get value for the money that's being spent, so I'd like to hear something from you about the target efficiency and the effectiveness.

Question 6. I want to talk a bit about angel investing. I met a young entrepreneur in San Francisco area a couple of years ago. It was amazing, the stories he had about the number of angel investors that would invest around \$100,000 in different ideas that they got off the ground. As MLA Bilous said, there were some unicorns in there, there were some that didn't work, but there were a lot of things happening fast. And how accurate this is, I don't know, but I also at the same time read an article that there were 230,000 Canadians in Silicon Valley in that same area. So I'm thinking, my goodness, maybe it's Canadians doing the angel investing down there or certainly a big percentage of it. I'm wondering what your ministry is doing, you know, to promote that, to maybe just get out of the way so business can flourish, but sometimes it's an awareness thing. I'd like to hear what you're doing to promote angel investing and the private sector.

Back to page 127. My last question is on your ministry fact sheet, your mandate and structure.

The ministry will continue to respect and protect the privacy of Albertans' personal information and will ensure the government is transparent through the Freedom of Information and Protection of Privacy (FOIP) Act and the Personal Information Protection Act.

I think your earlier answer to MLA Bilous suggested that your role was more oversight and that Service Alberta was more of the actual process and the nuts and bolts. But, Minister Glubish, I want to be honest, most Albertans think the FOIP system is totally broken. It takes forever to get an answer out of government. When it comes back, the vast majority is redacted or so much is redacted, it's unexplainable. What are your thoughts on making the process better?

Thank you.

**The Chair:** Thank you, MLA Barnes.

Minister, you have approximately 10 minutes to respond.

**Mr. Glubish:** Great. Okay. Well, let's try and get through each of these. First, on the broadband side. In terms of how we compare to other jurisdictions, I can say that we are roughly similar in terms of investment on a per capita basis in terms of attracting federal dollars.

One thing I will highlight is just that – because I think the member had highlighted some historical investment and historical trends, and I think that ties into the roughly a billion dollars that

Alberta spent on the Alberta SuperNet back in the day, which is a fibre backbone that connected hundreds of municipalities, thousands of public buildings like libraries, hospitals, universities, schools, municipal buildings, et cetera. And that is a backbone that has in some cases been able to be leveraged, delivering service to actual residents as well. That's some of the history.

And then, of course, our \$390 million commitment is the next stage. As a result of that, we've been able to attract \$390 million from the federal government to match that.

Absolutely, yes, we are partnering with private-sector partners. We're not looking to build this ourselves. What we've done is that we've created a framework by partnering with the federal government so that private-sector partners or prospective private-sector partners can come and say: "We have a project. We believe it's a good project. Here are all the details on the project. We would like to request funding." And then we work together with our partners in the federal government to determine which are the best-value projects that will give the best results for Albertans, and those are the ones that will be prioritized for funding.

So the short answer is yes. We are partnering with private-sector partners. There is no one-size-fits-all strategy, so, like, we can't just say that there's only one way to do this. In some cases it might be a municipality leading the project; in other cases it will be a telco or an Internet provider. In some cases it might be a First Nation community. There are all kinds of different ways in which we can do this, and the good news is that the broadband strategy allows that flexibility to select the best option in each different community. There are hundreds and hundreds of applications that we're going through right now.

In terms of the cell coverage, look, the key thing here I think that we need to point out is that telecommunications is federally regulated. So there are very few policy levers that we have to address this, but that said, the Premier acknowledged that there are certain corners of the province that certainly have poor coverage, so she asked me to look into: are there key areas, like major highways, where there's poor coverage today, where maybe we need to look at doing something? Over the next period here I'm looking forward to doing that work for her and reporting back to Albertans on what we see as being some options.

In terms of the digital ID and privacy and safety and just tying into the data strategy question, I want to assure the member and all Albertans that privacy is the cornerstone of everything we will do in my department. That is the first and most important piece to anything we do.

**9:20**

But we do live in a digital world. You know, all of our systems, whether it be our systems in government or the systems that our banks use or the systems that the companies we interact with on a day-to-day basis: they all have a digital element to them. Computers have been around for 50 years. They're not going anywhere. The question is: how do we use those tools, those technology tools, in a responsible way that protects Albertans' interests?

I'm pleased to say that my office and I work very closely with the Alberta Privacy Commissioner, who is an independent officer of the Legislature, whose job it is to stand up for the interests of Albertans, and we're making sure to involve her early and often in any work that we're doing to make sure that we get good advice and also look at crossjurisdictional analysis, so: what are the best practices around the world?

Right now any of our privacy legislation predates the Internet, so it never even contemplated the kinds of tools and technologies that are out there today. That's a big part of what we need to be contemplating as we look to prepare for the next 20 years. How do

we ensure that the policy tools we have to protect Albertans are designed with the modern world in mind? That is part of what the work on the data strategy is for.

In terms of malware infections I'm pleased to say that no infections went unprevented. So we had a 100 per cent success rate. All malware was blocked.

In terms of the next question, destination of choice for investors and some of the comments that the member raised there, he mentioned the 5 to 1 multiplier that we talked about earlier. I'm pleased to say that that is specific to Alberta Enterprise Corporation. For every dollar that Alberta Enterprise Corporation invests in a venture fund, \$5 gets invested by those funds into Alberta companies. The government of Alberta does not spend money to attract that investment. That is purely through the strong performance of Ms Williams and her team of doing good homework on selecting good private-sector venture partners, investing in them as part of their broader fundraising rounds and ensuring that they all have an office and a presence in Alberta so that they will always be looking into Alberta deals in addition to the other corners of the country and the continent that they operate in. As a result, they have invested \$5 for every dollar invested by AEC into Alberta companies. It's a great success metric, and we'll continue to monitor that. You know, given the length of time that AEC has been operating, I'm confident that they will be able to continue in that strong performance.

In terms of the comment about the 13.8 per cent increase in our budget I think the key thing here is – well, there are a couple of things I'd like to point out. First of all, when you're talking about tying spending to population growth and inflation, you've got to ask yourself: what's the right baseline? When we looked at the fact that so many of our technology systems were 30 or 40 years old, they're extremely out of date and unable to scale with the demands of a growing province. This was an area that required a bit of a rightsizing in its budget. I am confident that this is a responsible use of taxpayer dollars.

The other thing that I will point out is that the things that we invest in and build in terms of the technology backbone of government are going to save other departments money. Some of the investments we made in the Justice department, for example, made Court of King's Bench clerks 50 per cent more productive by eliminating all requirements to file things on paper. That means that for every staff that we are already paying for, they can do almost twice as much work, and that is going to help them to deliver better services for fewer dollars and chew through bottlenecks in service delivery. That's just one example of many.

The fact is that even though our budget has gone up by a level that is higher than inflation and population growth, we are going to help equip all government departments to keep their spending in line, and that is going to be good news for Albertans and good news for folks who are fiscally conservative in their values.

In terms of some of the other comments that the member had as questions – for example, Invest Alberta or other things – I'll just point out that we inherited the innovation piece from the former JEI ministry. The rest, I believe, is in with Jobs, Economy and Northern Development. So Invest Alberta is not a part of our budget.

In terms of angel investment I absolutely agree. There's an important role for angel investors. I mean, I myself was an angel investor. I personally invested in lots of tech companies alongside the venture fund that I helped to manage, and I know many folks in my personal life that are angel investors and who've been investing in technology for 30 years. It's a great asset class if you know what you're doing.

I think the key thing here is that the work that we are doing by supporting and partnering with organizations like Platform Calgary

and Edmonton Unlimited and some of the other different tech ecosystem institutions that are there to provide support to entrepreneurs but also to investors – my goal is to try and help get interested folks who might want to be an angel connected to that ecosystem, ensuring that they have more opportunity to get plugged in and meet entrepreneurs, meet mentors, meet investors, and learn about the process of: how do you evaluate a technology investment? How do you do that differently than evaluating a traditional cash-flowing business? Investing in construction or investing in oil and gas is very different in terms of how you evaluate an investment compared to investing in technology.

Helping to equip Albertans with the tools to make good decisions in that space I think will over time encourage more folks to get involved as angel investors but to do so in a way that will make them successful, because if they lose their money in a tech investment, they'll never invest in tech again. But if they make money, they'll be addicted to investing in tech for the rest of their lives. I can speak from personal experience.

In terms of the privacy and the FOIP question I can say that we're responsible for, like, the legislation that governs the rules, but Service Alberta is responsible for the delivery of information requests. So any comments or questions about that performance I think would be well directed to the Minister of Service Alberta and Red Tape Reduction. I hope that's helpful.

**The Chair:** Okay. Thank you, Minister.

That concludes the first portion of questions for independent members.

We will now move to the government caucus for 20 minutes of questions from the members. Would you like to combine your time with the minister's?

**Mr. McIver:** Well, we'll be consistent with what the minister is doing. He said he wanted to be consistent, so we'll go with the block time. With your permission, Chair, I will start, I'll go fast, and I will pass the puck, pass my time to my colleagues. Is that okay?

**The Chair:** That'll be okay. We will allow that.

**Mr. McIver:** Okay.

**The Chair:** You'll have 10 minutes' speaking time.

**Mr. McIver:** Okay. Thank you. Minister, thank you for being here. I'm talking fast because time is limited, of course. Technology and Innovation in the upcoming year has an artificial intelligence lab grant. I know that you and MLA Bilous talked some about this: \$3.4 million for the next four years to support operational and research activities, including AltaML, as you two mentioned earlier. The initiative is supposed to foster stronger partnerships between the public and private sector, which will lead to economic prosperity. With this in mind, I'd like to ask the minister of technology about the activities and results of this partnership. Can the minister provide more information about the work supported through this grant, how it benefits Albertans, and why they should be happy about it?

Now, briefly, one of the core tenets of Alberta's principles was the innovation system integration on line 2.2. That's being reduced from \$128 million to under \$60 million this year. Can you let us know a little bit about what that entails, how the cost savings were achieved, and what costs will fall into future years?

Finally, on the privacy issue, which you obviously discussed with some of my other colleagues across the way, it's increasing in budget from \$27.5 million to \$32.6 million. That's on line 2.1 of government estimates. Can you explain how the funds will be used

and what improvements Albertans will expect to see? As we all know, privacy is important to Albertans, particularly seniors but certainly all Albertans.

Now I'll pass the puck to MLA Walker.

**Mr. Walker:** Thank you so much, MLA McIver and Chair. It's great to be here. Minister, great to see you and your officials here. I'll just get right into my question and then cede my time to MLA Rowswell in this block segment.

Well, Minister, as the MLA for Sherwood Park I believe that investing in new technologies and digital solutions is crucial to create better services for Albertans. The 2023-24 budget for digital design and delivery includes \$40 million for the digital accelerator program. Now, I know that some of you may be thinking: "Why do we need all this technology? Back in my day we didn't have the fancy gadgets to get things done." Well, let me tell you that technology isn't just about having the latest, greatest gadgets. I know you know that, Minister. It's all about finding innovative solutions to the challenges we face and improving the lives of Albertans. And if you're still not convinced, just remember: without technology we wouldn't have things like Wi-Fi, smart phones, even drive-through Tim Hortons.

I was just in Japan in January. It was great. Such a tech, futuristic place, and I know we're competing and doing well, too. We're leaders like Japan is on technology. Love the bullet trains. So it is great to see the government embrace the power of technology and innovation and continue to move Alberta forward through technology. I am eager, Minister, to hear how the \$40 million from the digital accelerator program will help Alberta modernize government systems and create more convenient services for Albertans.

Thank you.

Chair, I'll cede my time to MLA Rowswell.

9:30

**Mr. Rowswell:** Thank you very much. I'm excited to speak about the investment being made in technology and innovation in our province through the Ministry of Technology and Innovation. Alberta is home to some of the most innovative companies and brilliant minds in Canada, and it's crucial that our government continues to support their growth and development.

One of the key ways the government is doing this is through Alberta Innovates. This organization plays a crucial role in driving innovation and commercialization in Alberta, and I'm pleased to see that the '23-24 budget includes over \$180 million in funding, almost a \$20 million increase from the previous year's budget.

I'd just like to highlight a few things in my own constituency of Vermilion-Lloydminster-Wainwright. Of course, we deal with lots of oil, but it's also a big agricultural area, and the technology that's involved in agriculture, with precision agriculture and all that type of stuff, is just amazing. You know, land mapping so that you can get variable-rate fertilizer application is one example. Another is spraying technology where if you overlap, a nozzle shuts off. It's amazing what's happening there. Some are even coming to where it will only spray where it identifies a weed. They're doing just great work in agriculture. Lakeland College, to capitalize on that, have started a crop technology program, and the seats were filled right away. It's doubling down on itself and is doing a great job.

One of the graduates of Lakeland College, actually, developed a company called Peregrine Glove, which was initially designed to play games – they wear a glove, and they touch their fingers to manipulate the screen – but that's evolved now into a training module where they put on the virtual glasses, they do the software to build an engine, and you can practise working on an engine. I

went and tried it. I stuck my head right inside the engine to look at the valves and everything else. It's just amazing, amazing work.

Now let's talk about the funding increase. It's like getting a raise at work but on a much larger scale. With this additional funding, Alberta Innovates will be able to invest in even more innovative projects and support the growth of our technology and innovation sectors. I think we can all agree that this is an exciting time for Alberta, for our province, and I'm grateful for the government's continued commitment to supporting the growth and development of our technology and innovation sectors through investments in organizations like Alberta Innovates.

With that said, Minister, can you speak to how Alberta Innovates plans to use this increased funding to support growth and development of technology and innovation in our province?

I will push that over to MLA Rosin.

**Ms Rosin:** Thank you so much.

I will be brief as well, knowing that time is of the essence. I want to talk about cybersecurity. Certainly, we hear a lot of conversations in our world these days about the need for cybersecurity, whether it be in relation to the invasion in Ukraine or others governments across North America banning platforms like TikTok from government devices or even, you know, conversations about sharing health care data. I think Albertans are increasingly concerned about cybersecurity and ensuring that their data is protected.

I'm just looking at line 5 of your government estimates. It shows that the funding for cybersecurity is increasing by nearly 50 per cent, which is quite significant, from \$8.8 million to \$12.7 million this year. I'm just wondering if you can discuss how that current cybersecurity budget is allocated, what those increases will be used for, and what additional programs the funds will be provided towards in this budget, if there are any new programs provided.

I will cede the rest of my time back to MLA Allard.

**Mrs. Allard:** Well, thank you very much. I wanted to just echo the question or comment around cybersecurity. With my role on the Energy Council that has been something that we have discussed repeatedly with respect to the cost and the way what they frame as terrorist activity has become more commonplace. I would echo the sentiments of MLA Rosin with respect to cybersecurity and the importance that we should be placing on that in this government. I'm sure the minister is well aware, so I'm curious to hear his answer.

I also just wanted to talk – I guess I have two minutes. As the MLA for Grande Prairie I understand the importance of accessible government services for Albertans no matter where they live, and I know the minister has been passionate about having accessible broadband and cell service across Alberta. I would certainly say, as the MLA that drives back and forth between Grande Prairie and Edmonton, that we're not there yet, but hopefully we'll get there.

I don't have a lot of time here. The '23-24 estimate for capital grants for technology support and operations is \$229 million, which is approximately \$33 million higher than the '22-23 budget if I'm reading it correctly. This significant investment in technology reflects our government's commitment to building more accessible and efficient government for all. By improving the accessibility of government services, we can make it easier, hopefully, for Albertans to interact with their government and receive the services they need to live their lives.

That said, I'll go back to accessibility online 24/7. Whether it's applying for a driver's licence or renewing a health card – which I actually recently did, and it worked really well, so thank you, Minister – Albertans should be able to access government services



any time and anywhere. More and more Albertans are relying on technology to access government services from the safety of their own homes.

It's important that the department is able to support government mandates and meet the needs of Albertans. I just wanted to ask the Minister of Technology and Innovation: what specific measures are being taken to ensure that the increase in the technology support and operations budget for '23-24 is utilized effectively to improve services for Albertans right across the province?

I think I'll cede the rest of my time. That's a lot of questions for the minister to answer.

**The Chair:** Okay. Thank you.

Minister, you have up to 10 minutes to speak.

**Mr. Glubish:** Okay. Great. Thank you. Some great questions. I guess we'll start off the top with MLA McIver's comments about the AI lab grants. This is something I'm personally really excited about. This was my idea from the outset, and to see it come to fruition has been very exciting. GovLab.ai: our mission with that is to build a sustainable innovation practice, to launch products powered by data and AI to benefit Albertans, to help improve service delivery, and then ultimately also, on top of that, to help to accelerate economic prosperity.

There are a couple of proofs-of-concept being explored right now in there. The education enrolment project: it's a model that uses school and student data to predict enrolment in new schools and in these models look at enrolment pressures and consider all kinds of variables like location, programming, grade configuration, and others to help determine enrolment trends. Given that the province spends \$200 million to \$700 million in new capital projects every year for schools, you know, if we could get a 1 per cent increase in utilization of existing assets, the impact to students and school authorities could lead to about \$19.6 million in annual savings. I think there's some opportunity there by just using the information that we already have in a proactive way. Using the power of AI-type tools could help us make better informed decisions about when and where we are building different schools and prioritizing the projects that will deliver the best results first.

Another one is a dead-tree detection project using satellite imagery to develop machine learning models to predict the location of dead trees, which will reduce preparedness and suppression costs by an estimated \$705,000 every year and ultimately enhance wildfire spread projections and increase public and firefighter safety.

There are many others, but just given the time we have, I'll maybe move on to some of the other questions from some of my colleagues.

In terms of line 2.2, the \$128 million change down to \$60 million, it's lower mostly due to a \$76.2 million decrease from the vaccine development program. You'll remember that during COVID there was a bit of a surge of investment into building capacity for vaccine development. That was a one-time program before, so of course there's no funding allocated for that in this current period. That should address that question.

In terms of the privacy funding increase, I mean, we've talked a lot about the importance of doing that, so I don't think anybody is opposed to that. Just some of the areas where the increase will come from: there's a \$1.36 million amount that is targeted to continue the modernization of our collaboration, security, and information management tools by implementing Microsoft 365 as the enterprise content management service. So that's one of the pieces. Another piece of that is about \$3 million that came over related to the overall

data strategy and the privacy-related work associated with that. I think that covers off that question.

**9:40**

Next, from MLA Walker, in terms of the digital accelerator: this, again, is something I'm really excited about. This is my baby. One of the projects that we will be tackling with this is the traffic tickets digital service, which enables citizens to manage their traffic tickets, including paying or disputing their tickets, online to streamline management of disputes for prosecutors, the result here being that Albertans would no longer need to take time off work or pay for parking downtown or have to wait for hours just to deal with a simple matter of a traffic ticket at a courthouse.

There's also the child intervention pre-intake digital service, which will automate pre-intake services and processes that have historically been very manual, and this is helping to reduce the average wait time to respond to a call about potential child abuse by about 50 per cent.

Those are just two examples.

Moving on to MLA Rowswell's comments about Alberta Innovates: again, you know, the work they're doing is really important. Some of the ag tech stuff that you're seeing in your riding has a lot of great potential. Certainly, Alberta Innovates has a portion of their work going into agriculture-related technology investments.

I just want to highlight this because this dovetails into something that Member Bilous had raised earlier. Yes, a lot of what the funding that we are giving to Alberta Innovates is for is to make sure they can maintain and continue to commit to multiyear commitments. There was the question about multiyear commitments to AMII – so I'm kind of killing two birds with one stone – and part of the reason for the increase to \$180 million is to ensure that Alberta Innovates has the means and resources to continue making these multiyear commitments like the one to AMII.

Moving on to cybersecurity, again, super important. Yes, MLA Rosin, we also banned TikTok from government devices, sharing in the concerns that the international community has in that space. Yes, our cybersecurity budget has increased significantly, from \$8.8 million to \$12.7 million. This is in part just because of the growing complexity of cybersecurity threats in today's day and age. Some of the increased investment is bringing in some new, cutting-edge tools for fraud detection online, using artificial intelligence and other modern technology tools, helping us to better and more rapidly detect threats as they're coming at us. We've had some great success with that. A great example was applying those tools to protect the online payments portal for the affordability program that we launched in January. These tools were able to detect attempts to penetrate that system and to prevent that. We're making targeted investments in the most modern tools out there to make sure that we are at the forefront of protecting Albertans' interests.

Tying into MLA Allard's comments about cybersecurity from her time on the Energy Council, I mean, it's not just about protecting Alberta's data and systems as a government, but it's also about saying: what do we need to be doing to make sure that the critical infrastructure that Albertans rely on every single day, whether it be pipelines or our electricity networks or our water networks to heat our homes and to ensure that we have clean water in our homes – that is why, as a part of our cybersecurity budget, we have allocated \$809,000 to continue the expansion of what I've called the cyber-Alberta program, the cybersecurity community of interest. That is saying: "Let's get the government of Alberta and the resources we have from a cybersecurity perspective to come together with private-sector and not-for-profit partners and

municipalities and other levels of government to say: we are all facing the same threats, and we all have different resources and different expertise; let's make sure we're all working with the same information about the best way to respond to threats." By doing this important work, I believe we will be able to increase the level of protection for Albertans against cyberthreats.

In terms of accessibility to government services wherever they live, I think, you know, MLA Allard highlighted a couple of examples of some services we've made some progress on. Absolutely, we're going to continue to do that.

One of the ways that we are going to prioritize which services get tackled next is that we have a deputy minister committee crossministry that will be looking at all of the prospective services scheduled for modernization, and they'll be looking at things like impact. What's going to deliver the biggest impact for Albertans? What's going to give them the best improvement in their experience, the biggest reduction in cost or time commitment to get something done, the biggest savings to the taxpayer so that we can – you know, it's the 80-20 rule: spend your energy on the 20 per cent of the things that will deliver 80 per cent of the results. That will be the lens through which that committee is looking at all of these things.

I guess I can give a couple of examples on some of the programs currently under way or planned – for example, with the digital accelerator program – that are in line with that line of questioning. In the tax and revenue administration's TRACS system there's a self-service online portal that we're working on to manage the tax programs for the GOA. Like, the legacy database system right now doesn't support new functionality for more modern applications, so we have an opportunity to create a more modern revenue management system across the government to simplify and to reduce duplication of components; to help implement new initiatives more quickly; having better, more fulsome administration functions for registration, assessment, audit, collections; and handling objections and appeals. We estimate this will avoid between \$4 million to \$7 million of unnecessary costs in maintenance every year and \$1 million per year in program enhancements and upgrades.

Hopefully, that gives you, like, a real-world example of the kinds of things we're working on.

**The Chair:** Thank you, Minister.

About 10 seconds remaining. Any further comments from government caucus?

Seeing none, we conclude the government members' first block of questions. We move now into five minutes of questions from the Official Opposition, followed by five minutes of response from the minister. MLA Bilous, you may proceed.

**Mr. Bilous:** Thank you, Chair. I just wanted to make a couple of quick comments before I get into my final block. Hopefully, we'll have a chance to hear from Ms Williams although I appreciate the fact that time flies, and two hours is, yeah, a short amount of time to go through this.

First of all, you know, I want to say, Minister, that I support your increase in the budget on cybersecurity, and I appreciate government members asking questions about this. I think it's absolutely critical to protect information, protect ourselves. We see cybersecurity on the rise globally. I've heard from many people that our federal government is not investing enough in cybersecurity, so I appreciate that the GOA is increasing their dollar amount.

I want to thank MLA Rowswell for bringing up ag tech, and I know that there's huge opportunity and potential with ag tech. We have leading institutions, from Lakeland to Olds to Lethbridge, that

are doing amazing work, so I want to encourage, Minister, your department and Alberta Innovates to continue to look at that.

Again, I mean, I'd love to get a deep dive with Alberta Innovates to look at, again: how is the pharmaceutical and life sciences strategy coming along? You know, I appreciate – and it makes me question. Sector strategies was something that former Minister Schweitzer and I talked about for years. Now that the ministry has been essentially blown up into five ministries, I'm not sure where sector strategies live, if any of them are with Minister Glubish.

My last couple of minutes. I just want to talk about competitiveness because I think it's absolutely critical when we talk about attracting investment. You know, I appreciate that Alberta's numbers have continued to grow, which is great to see. As I've said in question period, my concern is that Alberta is growing at a much slower pace than the rest of the country. Now, I recognize our innovators, our ecosystem is growing, and that's wonderful to see, but I recognize that we need to continue to be competitive. So my line of questioning now is around what was supposed to be in the budget but was pulled at the last minute, and that was a reintroduction of the digital media tax credit. Now, I know, Minister, that you've talked about this back in November, had committed to it. I know industry was working with you and your team, that were very excited about having a level playing field.

9:50

The reality is that Alberta digital media companies, gaming companies are at a disadvantage. I've spent a lot of time talking with a lot of the companies who, over the past four years, have grown, have hired, but not in Alberta. They're hiring in B.C., they're hiring in Quebec, they're hiring in Ontario, and it's a lost opportunity for us.

You know, from talking to some of the companies, they've said: listen, that tax credit benefits more than just games and entertainment; it benefits education, training, retail, oil and gas, tourism, health care, and more. And that was from the president of the Alberta chapter of the VR/AR Association, who said: I'm concerned about what the loss of this tax credit means for our ecosystem, which is largely made up of start-ups.

We know that, you know, companies have been told: well, the corporate tax rate in Alberta is the lowest in the country. The challenge is that many of these companies are reinvesting every dollar they have. They're not paying corporate taxes, so the tax rate could be zero. They're investing in growing and scaling. I know that the government is not opposed to tax credits. We've seen the film tax credit get an increase, which I'll be talking to your colleague about, and we've seen the explosive growth in that industry. So, really, my final questions are just around: why wasn't a digital media tax credit reflected in this budget? I'm curious to hear the reasoning of why it didn't get over the finish line.

I understand how government works. I get it would be called something different. It would have the current minister's own stamp on it, but the reality is that our industry – and there are numerous examples of companies that were about to pull the trigger on leasing new space, on hiring dozens if not hundreds of new employees, and now they've hit the pause button. So that expansion is going to happen, but it's not going to be in Alberta. When the digital media tax credit was here, the industry doubled their number of employees. It only was in place for about 18 months before it was pulled, but really I think that this is a real loss, and it's unfortunate that it's not reflected in this current budget.

**The Chair:** Good. Thank you, Member Bilous.

Minister, approximately five minutes to respond.

**Mr. Glubish:** Sure. I'll just quickly touch on a couple of pieces, and hopefully we'll have time for Ms Williams here. On the tax credit I'll just draw the member to my comments in question period yesterday. The key here is that when we are considering any kind of a program that will be giving taxpayer dollars in the tens of millions if not hundreds of millions of dollars to the private sector – I mean, the members from the opposition often criticize the government for corporate handouts and giving taxpayer money to private-sector businesses, but in this case they seem to be taking a completely different position.

I'm not taking one side or another. I'm just saying that, in this case, if we're going to consider a policy that's going to cost hundreds of millions of dollars, we need to do our homework and make sure that we have found a balance between the interests of the sector we are trying to support and the interests of the Alberta taxpayer. The fact was that the economic analysis to support policy was not ready. We need to do that homework. We owe it to Albertans to do that homework. We're going to work with industry as we continue to do that homework. That is what I would say in terms of why we've landed where we've landed on that front.

In terms of sector strategies, and specifically life sciences and pharmaceutical, I can say that, you know, I was just at a BioAlberta event yesterday. I'm very passionate about the power and the potential of life sciences technology. I'm personally interested and invested in this, and I'm looking forward to working on developing a bit more, fleshing out a bit more of a strategy there, recognizing that Alberta Innovates has a role to play, but I think it's also important for the Alberta government through my department to be thinking about: what are the things that we can be doing to move the needle to make Alberta a powerhouse in that space?

In terms of the software engineering question I'm acutely aware of that issue between software engineers and APEGA. I'll just point out that Minister Madu is working to find a resolution there, and I am supporting him in that as someone who understands the tech space very well.

In terms of the intellectual property side of things, look, I totally agree with you that it's important that we focus on that commercialization aspect. A personal anecdote. Before I was elected in 2019, we were looking at investing in a company, the fund that I was with, that was a spinoff of one of our major universities, a very exciting company. It met all our criteria. We were ready to sign the cheque, and then the issue was the technology transfer agreement from the postsecondary institution itself. It rendered that company literally uninvestable. I worked on that project for over a year, and we never got to pulling the trigger on the investment. Then I got elected, left, you know, the business, and it was about a year after that that they finally got through those hurdles and made that investment. How much time was wasted in the productivity there?

That said, I'm really – I've had lots of conversations with leaders from our postsecondary institutions, from the investment community on this very issue, of course, with my colleague Minister Nicolaidis, and I'm pleased that there's a lot of work going on there to make some improvements there, and we'll be supporting that work.

With that, I am going to turn it over to Ms Williams to maybe wrap up with a few comments about Alberta Enterprise Corporation.

**Ms Williams:** Excellent. Thank you for having me here today. Kristina Williams, president and CEO of Alberta Enterprise Corporation. I want to start with acknowledging all the women in the room. This is International Women's Day, so congratulations to everybody that's here in person and virtually. Also, I want to say a big thank you to all of you in the room, all the supportive

governments that we've had over the years. We've seen tremendous growth in the venture capital space. As the minister mentioned, 30 per cent increase in Alberta this year while the rest of Canada, or Canada as a whole, was down 30 per cent, and that is actually because of you and because of you allocating capital to this very important asset class.

So a couple of questions – or a lot of questions that we had. I'll endeavour to answer some of them in the time that I have. Over the life of AEC we've had \$350 million committed from the government of Alberta, from various governments. We have committed \$330 million of that to date in 31 funds, and we did six new of them this year. One will be announced tomorrow, and it's a very exciting one.

Sectors. We look at what sectors to invest in based on: what is the demand for capital? We try to match the supply of capital, so the venture capital funds that we invest in, to the demand of capital in this province, and we do deal-flow studies every number of years to evaluate that part.

Forward looking. We are looking at five new funds in the coming fiscal year to do those. Now, we are then going to be fully committed, we estimate. We can recycle the capital that we have in terms of returns that we've had, about \$90 million worth of returns from our prior investments, so the investments that have been performing well financially as well as economic development wise. But the economic development or the economic outlook, as we know, for the coming year may be looking a little bit more difficult.

Some of the questions that we had about angels and connecting to the valley. Some of the things that we are specifically doing is Start Alberta to connect investors . . .

**The Chair:** Good. Thank you. That concludes that block of time.

We now move to the government caucus for the remaining time in the meeting.

**Mr. McIver:** We would like to hear from Ms Williams. That's my question. What else does Ms Williams have to say that we haven't heard yet?

**The Chair:** Minister, your response.

**Mr. Glubish:** I would like to invite Ms Williams to respond.

**Ms Williams:** Excellent. Thank you very much. I appreciate that time.

Some of the initiatives that we are doing in terms of attracting venture capital and angel investors to Alberta are some very important things. We recognized a number of years ago that there was an inability for investors elsewhere to find Alberta deals, so we came up with the idea, together with industry, to create an open source data platform called startalberta.com. Part of the increased operating budget that we're receiving this year – and thank you very much – will go to making sure that this important data platform continues to be open source and available to all investors across the world.

We are also working with expat Canadians that are in the valley – there's an organization called the C100 – to promote Alberta companies and to attract the funds. A couple of the funds that we have attracted this year to the province: one is a New York based fund, and we actually just announced our investment in them yesterday. It's called Alpaca. They've already made an Alberta investment.

Back to the question around the timeline: how long does it take for us to invest the money versus it coming into companies? Our timeline on when we can invest in funds depends on when we have the capital available. As the minister pointed out, the \$175 million that was allocated to AEC in 2020 was in three tranches over three

years, so we had the last tranche of \$50 million this year, this fiscal year, and we're busy investing that as we speak. That was one of the New York based funds that we attracted.

We also attracted a fund from Seattle called Flying Fish. They have been very active in working with the DeepMind team to ensure that those scientists and those students that are working with DeepMind are staying here, and that will benefit Alberta technology companies versus working for a larger corporation. So we're excited about that.

In terms of our cost to the government for delivering, last year we had \$729 million of venture capital invested into Alberta. We were involved in 46 per cent of those deals, that would tie to our funds and their syndicate investors. Our costs last year to the government in terms of operations was \$3 million. I've had a

mighty team of seven working with me to do this. We're increasing now to 11.

**The Chair:** Okay. Thank you. I apologize for the interruption, but I must advise the committee that the time allotted for consideration of the Technology and Innovation ministry's estimates has concluded.

I would like to remind committee members that we are scheduled to meet tomorrow, March 9, 2023, at 9 a.m. to consider the estimates of the Ministry of Advanced Education.

Thank you, everyone. This meeting is adjourned, and the room needs to be cleared out as efficiently as possible because we have another meeting starting here at 10:15.

[The committee adjourned at 10 a.m.]







