2022 STATE OF COLORADO DIGITAL GOVERNMENT STRATEGIC PLAN

COLORADO
Governor's Office of
Information Technology

OIT

LETTER FROM THE GOVERNOR

As Governor, I worked with the legislature and agency leaders to help provide funding, services, support, and information to Coloradans. Moreover, we prioritized delivering services digitally, not only to provide options for far less in-person contact, but because our constituents have come to expect modern, innovative, responsive, and digital services from their state government.

While I am proud of this work, too many Coloradans still experience challenges trying to access critical government services, and that is not acceptable. The experience of the past three years has left me with a clear and resounding message: Colorado has long been a leader in innovation and digital government, but we still have work to do.

Our constituents expect their government to be modern, innovative, responsive, and digital. After months of speaking to residents, understanding their needs, and examining potential opportunities to meet those needs, we have produced a plan that will make Colorado a leading innovator in digital services and responsive government.

All indicators show that digital is here to stay, and the investments in this plan will have long-lasting benefits—for individuals, families, businesses, and the entire Colorado economy. I am eager to support this plan's strategies, and look forward to working with stakeholders inside and outside of government to implement them and achieve our shared goals.

Governor Jared Polis

CONTENTS

INTRODUCTION: IMPROVING DIGITAL GOVERNMENT IN COLORADO

Over the past decade, private sector companies have brought significant innovations to digital service delivery and customer experience, raising the bar for all institutions to deliver on customer expectations, needs, and preferences. This includes public institutions, where constituents are increasingly expecting their governments to be digital, responsive, innovative, and reliable. In this context, Governor Polis and state lawmakers asked the Governor's Office of Information Technology (OIT) to produce a strategic plan that sets bold ambitions and aspirations for digital government.

To produce this plan, we assessed the current state of digital services the state provides with a focus on the availability and the quality of those services. As part of this assessment, we interviewed thousands of stakeholders, met with residents from across the state, surveyed and met with community organizations and local governments, and leveraged a

suite of analytical tools to unearth where Colorado is hitting the mark in terms of providing services digitally, and where services are less accessible and could be improved.

Above all else, we learned that residents and other state end-users want a government that is simple, reliable, and digital. Colorado has succeeded in many respects, but we also found significant opportunities to improve digital government in a way that reflects the lived experiences of our residents. The strategies outlined in this document are rooted in this philosophy.

The strategies in this plan are big and bold. But they are also imminently actionable. With significant investments and coordination among and across government and within our communities, we're excited to roll up our sleeves and put this plan into action.

CURRENT STATE ASSESSMENT AND FINDINGS

Sources of insight

2,000+
Colorado residents surveyed and interviewed

20+
services assessed for digital availability and quality

80+
interviews with agency, state, OIT, SIPA, organization and municipality leaders held

200+
local and regional governments and community organizations surveyed

---

Colorado has been a leader in delivering innovative digital government to residents

CO ranks in the top 10 of customer experience nationally. Of services assessed, 16% were fully digitally available and 72% were moderately digitally available

12% 16%
72%

- Fully digital
- Moderately digital
- Slightly digital
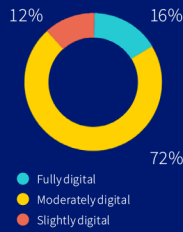
The migration to digital has accelerated through the pandemic, but residents need support in the transition

89% Of residents are likely to keep using digital channels post-COVID

23% Even with this expansion, 23% of residents prefer to interact with the state through non-digital channels, suggesting that high quality in-person and over-the-phone options are important, as well as helping to support residents who may need help getting online or using digital services

---

There is room for improvement in access and delivery of digital service:

Creating experiences that are simple, reliable, and consistent will be key in the digital transformation of the state's services

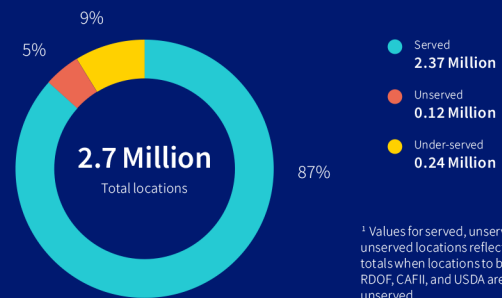Residents who most need government services are often dealing with the most journeys

The digital services that are entirely digitally available are largely informational in nature (e.g., find a state park) **or relatively simple transactions** (e.g., reserve a campsite)

Essential services (e.g., income support, human services, health care coverage) **were found to be moderately digitally available and are some of the states most complex services to access**

36% Of resident satisfaction with the state is driven by how **reliable, consistent,** and **simple** digital services are

50% Only half of Colorado services assessed are currently available as **one-stop experiences**

14% of locations in Colorado are unserved or under-served—with ~360k locations lacking adequate access to broadband

Colorado broadband availability[1]

9%
5%

2.7 Million
Total locations

87%

- Served **2.37 Million**
- Unserved **0.12 Million**
- Under-served **0.24 Million**

[1] Values for served, unserved, and unserved locations reflect location totals when locations to be served by RDOF, CAFII, and USDA are considered unserved.

The four barriers to network access and adoption are

Affordability

Lack of infrastructure

Lack of devices to access the internet

Limited digital skills & support

If you want to help someone, help them. Shorten the questions and make sure people are getting the help they need.

-Colorado resident

Residents report frustration and difficulty getting help

33%
Only one-third of services offer help through digital means out of the 21 assessed

36%
of residents prefer to reach out to the state on their own (versus the state proactively reaching out) demonstrating the importance of intuitive and clear journeys

30%
of residents prefer the state to proactively reach out, highlighting opportunities for data sharing to enable proactive eligibility notifications and identity management

---

Colorado has an opportunity to better serve communities that have been historically marginalized

When surveyed, residents from a few marginalized communities reported lower satisfaction with the state

Overall statewide customer satisfaction (CSAT) score for state government services is 7.4 out of 10

CSAT difference,
N=1,921 respondents

7.4 Statewide customer satisfaction score (CSAT)

Category	Subgroup	-1	-0.5	0	0.5	1
Gender	Female			-0.1		
	Male			0.1		
	Others	-0.7				
Income in USD thousands	<25		-0.2			
	25-50		-0.5			
	50-75			0		
	75-100			0.3		
	100-150			0.4		
	150-200			0.5		
	200+					1.3
Residence	Urban			0.4		
	Rural		-0.2			

COLORADO'S DIGITAL GOVERNMENT ASPIRATIONS

Colorado has three "North Star" aspirations to deliver a more digital government and better experience for residents:

Connect all Coloradans

Bolster economic opportunity by connecting 99% of residents, particularly those in growing rural communities, to high-speed internet

Expand opportunity and reduce poverty

Ensure every resident understands and easily accesses the programs and services for which they are eligible to improve income security, health outcomes and overall wellness

Make government easy

Make interacting with state government simple, less time consuming, and more digital, especially for the most essential services and programs

Aspiration #1:
Connect all Coloradans

Access to high-speed internet is foundational in today's digital economy. With respect to government services, improving and remaking individual programs and journeys only matters if residents can connect to the internet in the first place. Given unprecedented levels of federal investment, we aspire to connect every household to affordable, high-speed Internet in the next five years.

Aspiration #2:
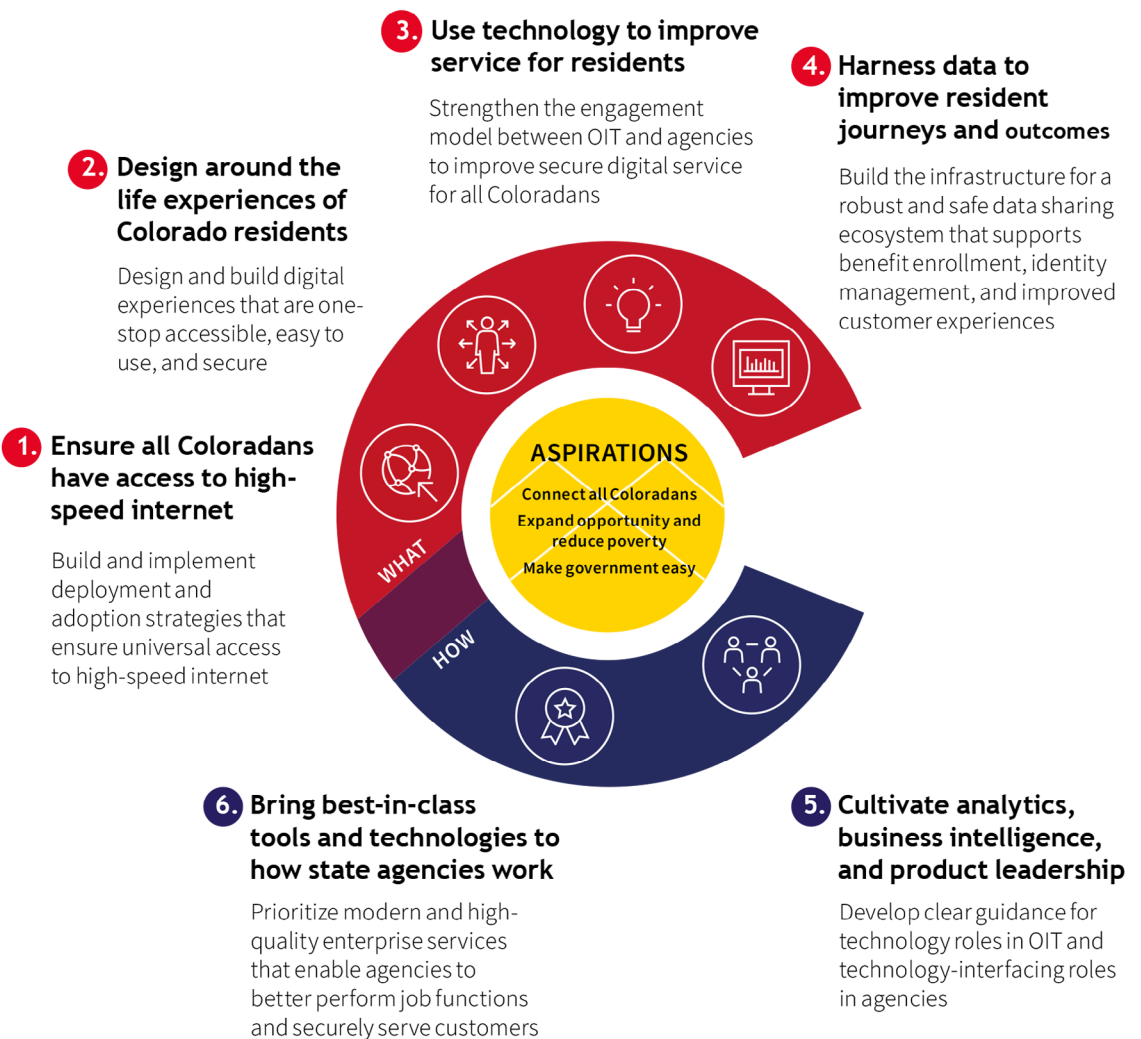## Expand opportunity and reduce poverty

To access public benefits, residents often have to proactively seek and search them out. Even after finding them, residents then have to navigate a complex set of instructions, applications, and requirements. By using the data we already have, we can work to ensure every resident is notified about the programs and services for which they are eligible. We aspire that residents can easily be notified of eligibility and enrolled in programs that can improve their income security, health outcomes, and overall well-being.

Aspiration #3:
Make government easy

When seeking benefits, services, or information from the state, Colorado residents desire simple, less time-consuming, and more digital interactions. This is especially true for the most essential services and programs (e.g., income support, health care, human services, etc.). This aspiration also advances equity, as residents from marginalized communities can often experience the most significant pain points in seeking help from the government.

We have outlined six key strategies to enable Colorado to deliver on these aspirations:

Colorado's roadmap for digital government
STRATEGIES

3. Use technology to improve service for residents

Strengthen the engagement model between OIT and agencies to improve secure digital service for all Coloradans

4. Harness data to improve resident journeys and outcomes

Build the infrastructure for a robust and safe data sharing ecosystem that supports benefit enrollment, identity management, and improved customer experiences

2. Design around the life experiences of Colorado residents

Design and build digital experiences that are one-stop accessible, easy to use, and secure

1. Ensure all Coloradans have access to high-speed internet

Build and implement deployment and adoption strategies that ensure universal access to high-speed internet

ASPIRATIONS

Connect all Coloradans

Expand opportunity and reduce poverty

Make government easy

WHAT

HOW

6. Bring best-in-class tools and technologies to how state agencies work

Prioritize modern and high-quality enterprise services that enable agencies to better perform job functions and securely serve customers

5. Cultivate analytics, business intelligence, and product leadership

Develop clear guidance for technology roles in OIT and technology-interfacing roles in agencies

SIX STRATEGIES TO DIGITIZE AND IMPROVE RESIDENT EXPERIENCE

1. ENSURE ALL COLORADANS CAN ADOPT AND ACCESS HIGH-SPEED INTERNET

The lives of Colorado residents are becoming more and more dependent on the availability of affordable, high-speed internet – a trend that was significantly accelerated by the COVID-19 pandemic. As state services become more digitally enabled, access to broadband is an evermore critical precursor to accessing public benefits and services. Closing the digital divide – that is, bringing broadband internet to those that do not have it – will allow Colorado residents to participate in the 21st century economy (e.g., telehealth, virtual education, etc.). In this way, focusing hundreds of millions of dollars of federal investment in broadband will promote economic development, education, health care and public safety throughout the state.

Ensuring universal access to broadband may be achieved through network deployment (e.g., the underlying infrastructure) and meaningful adoption (e.g., affordability, access to internet-ready devices, and digital literacy). To achieve universal access, the Colorado Broadband Office will design a strategic plan to build physical infrastructure that provides high-speed internet across the state. Concurrently, efforts will be made to overcome economic and social barriers that prevent people from accessing the internet, especially those coming from communities that have been historically marginalized. Finally, the Colorado Broadband Office will partner with other organizations to grow the necessary workforce to support the undertaking.

How will we get there?

1.a Design an infrastructure deployment strategy

1.b Develop initiatives to address adoption and equity gaps

1.c Continue to meaningfully engage local stakeholders

1.d Grow the workforce required to support the deployment strategy

14%

of Colorado locations do not have access to reliable high-speed, affordable internet

2. DESIGN AROUND THE LIFE EXPERIENCES OF COLORADANS

We know that when people search for government services, they are most likely going through a significant life experience: losing a job (e.g., applying for unemployment benefits), having a child (e.g., applying for childcare benefits or seeking early child education), or age-related milestones (e.g., applying for a driver license or registering to vote).

Yet all too often, government services are designed in a way that reflects how government is structured and operates, and not necessarily on the lived experiences of residents and other end users. Many residents find applying for public benefits, accessing government services, or otherwise seeking basic information frustrating, often because their expectations for simplicity, reliability, and digital availability are not met.

In this context, a core component of Colorado's digital strategy is to shift its approach in delivering services away from confusing government silos toward one that is more human-centered and resident focused.

This includes creating a single state app where residents can complete all business from beginning to end with the state easily and securely. A human-centered approach also means radically simplifying processes across journeys and agencies – removing sometimes onerous and complex journeys that frustrate residents and leave many without the services and/or benefits for which they might be eligible.

Additionally, Colorado residents expect to be able to navigate state services (also known as customer journeys) independently, or easily access help and other resources when questions arise. As such, Colorado is investing in simplifying journeys and providing self-service tools for renewing, updating, keeping track of the status of applications or services and resolving questions without needing help. Colorado will also work to consolidate service desks across agency services to provide consistent, high quality support.

How will we get there?

2.a Digitize high volume state services into a single state app

2.b Provide tools and services for users to help resolve questions on their own

2.c Consolidate service desk and support functions across agencies and services

2.d Develop standards for resident ownership of decisions about if/how their data is shared

2.e Root experience design in user-backed research and human-centered needs

2.f Name the strategic leader for resident experiences across journeys within OIT

2.g Ensure all resident journeys are cybersecure

"Individuals out there are struggling to survive, they don't have time to research SNAP and Medicaid and how to apply for them"

– Nonprofit leader working with residents in poverty

3. USE TECHNOLOGY TO IMPROVE SERVICE FOR RESIDENTS

Colorado is a leading state in digital services, but residents often report frustration when digital services don't work the way they are supposed to or when they find that they have to switch from a website to go in-person or talk on the phone to get a service. This can often feel like they have to start the process all over again. We found that this is a particular challenge for residents seeking help – with only one-third of services offering a digital way to get help.

In order to improve the experience of residents across services, Colorado will enhance the use of technology across the government – with the Governor's Office of Information Technology playing an important role to work across agencies and the needs of residents who are accessing multiple state services. This also involves improving program management and focusing on change management so that the digital transformation can be as successful as possible.

How will we get there?

3.a Enhance the engagement model between OIT Directors and department leadership to strengthen the use of technology to enable business strategy

3.b Reinforce OIT's charge to work across departments, identifying high value enterprise services to address shared needs

3.c Focus on adoption and change management in technology implementations, and center the needs of residents when implementing technology solutions

3.d Improve demand management and service portfolio management under OIT

3.e Continue to invest in project management work as part of digital transformation

3.f Implement clearer protocols and lines of communication for agency procurements

49%

of residents reported that they had to switch channels (digital, in-person, or phone) at least once in order to complete a government service journey and only 16% of journeys assessed are fully digitally available

4. HARNESS DATA TO SECURELY IMPROVE RESIDENT JOURNEYS AND OUTCOMES

Coloradans should be able to give the state their personal information once - like an address – rather than submitting the same information over and over again on different state government websites and apps. And when a big life event happens – such as the loss of a job or birth of a child - Coloradans should be able to quickly understand the government services for which they qualify, and easily apply to and receive those services. With greater data sharing across state agencies, Coloradans could use a single digital identity to share personal information between agencies, saving time and enabling the state to better secure and protect their information.

Colorado's data aspiration – to share the right information with the right people at the right time – will enable a reality where residents can easily get the services they need with minimal friction.

This will require cooperation across Colorado's state agencies, including creating and deploying more strict standards and technology for interoperability. Agencies will also be able to combine the data they have to create better insights and help support more data-driven policy so that the state can more effectively serve residents.

How will we get there?

4.a Continue to invest in and accelerate implementing the state's data strategy

4.b Enable secure data sharing and interoperability to accelerate cross-agency delivery

4.c Implement resident identity management and resolution

4.d Embed best-in-class cybersecurity protocols to enable secure data sharing and maintain resident trust

"We have not been able to successfully bring on talent to set the tech direction. We don't have the staff to get over the hurdle of refactoring legacy technology"

– Agency-IT leader

5. CULTIVATE ANALYTICS, BUSINESS INTELLIGENCE AND PRODUCT LEADERSHIP

The State of Colorado's main asset to achieve this digital government transformation is our people. Cultivating the right analytics, business intelligence, and product leadership talent in agencies across the government will be a crucial component of achieving the aspirations laid out in this strategic plan. Similarly, building digital literacy capabilities for state agency staff and residents will serve as a critical accelerator.

Colorado will develop a talent strategy for technology roles in OIT and technology-interfacing roles in agencies to work together. This collaboration will set the right direction for technology, and enable the best service delivery through digital tools. As part of this strategy, Colorado will also invest in upskilling existing employees, implementing a plan to develop digital literacy capabilities across state government, and empowering product ownership and technology-informed decision-making within agencies. These strategies will help to strengthen the important analytics, business intelligence, and product link between technology and service delivery in agencies.

How will we get there?

5.a Define a talent strategy for technical roles in OIT and technology-interfacing roles across agencies

5.b Invest in digital literacy capability-building across agencies

5.c Incorporate analytical leadership and customer experience skills into agency leadership roles

5.d Seek opportunities for agencies to improve product ownership and strategic/service decision making

"Even as a state employee, figuring out where to go and what agency to access was so difficult. I wish that as a resident, my information would be pulled from other departments. Right now I have to enter my information every time, which is frustrating"

– Agency leader

6. PRIORITIZE MODERN AND HIGH-QUALITY ENTERPRISE SERVICES

State agencies are direct providers of several benefits (e.g., food assistance, health care subsidies) and services (e.g., finding a state park, registering a vehicle) that help support families, enable economic development, and make Colorado one of the best states in the country to live and work. In order to participate in an increasingly digital government and serve the needs of Coloradans today, agencies require access to modern technology tools and platforms.

OIT is the central service provider of technology for the state – providing computers, internet and networking services, infrastructure, and productivity tools. In each of these areas, there are opportunities to modernize both the technology that agencies have at their fingertips, as well as streamline the process by which they can access that technology.

Continuing its IT transformation initiative, OIT will focus on ensuring that IT shared services are efficient and reliable to access for state agencies. In addition, OIT will work to create a standardized process by which agencies can access their support, including a single modern portal to request help and services. Building on recent investments by the legislature, Colorado will continue to invest in phasing out outdated systems and replacing them with high-quality, contemporary tools.

In tackling complex technology projects within numerous agencies, it is crucial to establish standard procedures for prioritization and funding of initiatives. OIT will focus on establishing clear structure when planning technology initiatives, and ensure that technology is implemented in ways that quickly identify and incorporate leading practices and lessons learned from previous work.

How will we get there?

6.a Improve core IT services to agencies

6.b Establish a centralized process for state agencies to access IT help and services

6.c Continue retiring technology debt and modernizing core platforms

6.d Adhere to OIT's EPMO governance

Legacy systems and technical debt ranked in the top choices for IT leaders and agency leaders' biggest obstacles to advancing digital government .

ROADMAP AND EXECUTION

To execute our strategy, we've developed actionable initiatives under each of the six strategies and have grouped them into three main "waves" (starting in the next 6 months, 6-12 months, and 12+ months). Actions are classified in waves based on the level of effort required to implement them, their feasibility, and the interdependencies between initiatives across several strategies.

Strategy actions can be tiered in three waves

Wave 1: Next 0-6 months

1.a Design a broadband infrastructure deployment strategy

1.b Develop initiatives to address broadband adoption and equity gaps

1.c Continue to meaningfully engage local stakeholders

1.d Grow the workforce required to support the broadband deployment strategy

2.d Develop standards for resident ownership of decisions about if/how their data is shared

3.a Enhance the engagement model between IT Directors and department leadership to strengthen the use of technology to enable business strategy

3.b Reinforce OIT's charge to work across departments to understand high-value needs that could be addressed with enterprise solutions

3.e Continue to invest in project management work as part of digital transformation

3.f Implement clearer protocols and lines of communication for agency procurements

4.a Continue to invest in and accelerate implementation of state data strategy

6.b Establish a centralized process for state agencies to access IT help and services

6.c Continue retiring technology debt and modernizing core platforms

Wave 2: Next 6-12 months

2.a Digitize high volume experiences into a single state app

2.b Provide tools and services for users to help resolve questions on their own

2.e Root experience design in user-backed research and human-centered needs

2.f Name the strategic leader for resident experiences across journeys within OIT

2.g Ensure all resident journeys are cybersecure

3.d Improve demand management and service portfolio management under OIT

4.b Enable secure data sharing and interoperability to accelerate cross-agency delivery

4.d Embed best-in-class cybersecurity protocols to enable secure data sharing and maintain resident trust

5.a Define a talent strategy for technical roles in OIT and technology-interfacing roles across agencies

5.b Invest in digital literacy capability-building across agencies

5.d Seek opportunities for agencies to improve product ownership and strategic/service decision-making

6.a Improve core IT services to agencies

6.d Adhere to OIT's EPMO governance

Wave 3:
Next 12+ months

2.c Consolidate service desk and support functions across agencies and services

3.c Focus on adoption and change management in technology implementations, and center the needs of customers/residents when implementing technology solutions

4.c Implement resident identity management and resolution

5.c Incorporate analytical leadership and customer experience skills into state leadership roles

CONCLUSION AND NEXT STEPS

This strategic plan was developed from insights shared in interviews and surveys of thousands of residents, local and state government leaders, and community groups. We have set three important aspirations for digital government in Colorado, and believe these strategies are important steps towards meeting our goals.

Transforming digital government and resident experiences will be enabled by key factors across the state:

— A common vision of digital government across state agencies

— Strong sponsorship from the Governor's Office and agency leadership, along with appropriate resourcing from the Colorado General Assembly

— An integrated, enterprise view of all technology in the state, including agency applications and services

— Clear ownership, accountability, and decision governance of the digital government priorities and initiatives across the state

— A statewide culture that centers around the needs of Colorado residents in decisions

To meet our ambitious aspirations for digital government, we plan to iterate as we implement the strategies and will continue to engage stakeholders on an ongoing basis to ensure that we meet the evolving needs of Colorado residents.

COLORADO

Governor's Office of
Information Technology

Governor's Office of Information Technology
601 E. 18th Ave., Suite 130, Denver, CO 80203
303.764.7700
oit.colorado.gov | oit@state.co.us