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Information Technology Strategic Plan

30 October 2017



FY 2018-2020

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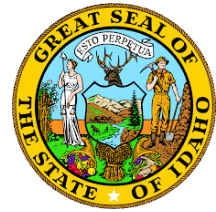


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Letter from the IT Manager

Information technology (IT) is critical for ACHD's mission and its successful operations. When IT initiatives align with the strategic goals of ACHD, the impact can be transformative – improving business operations to deliver quality services, and fomenting improvement through the intelligent use of data.

The Plan is our coordinated effort to integrate the ACHD team, processes, technology, information, and governance in a way that fully supports the needs of the ACHD workforce, our partners, and our customers, while addressing our ever-evolving mission challenges. It recognizes advancing IT capabilities and resources that can improve the District's operational efficiency, mission effectiveness, and front-line operations.

The key word for this Plan is **AGILE**: ACHD must move away from a legacy, capital-intensive approach and embrace an acquisition strategy that supports rapid deployment, agile development, and shared technologies. This means deliberately moving toward a consumption-based model which involves acquiring services rather than assets, where appropriate and cost-effective, similar to successful practices in private industry. This improves service delivery through service consumption as an operational expense, as well as adds new service offerings during the life of a contract without protracted procurement cycles.

The Plan identifies five goals, their respective objectives, and suggested key strategies. We have endeavored to balance “commodity” IT services that are vital for smooth day-to-day operations and leveraging new, innovative technological solutions.

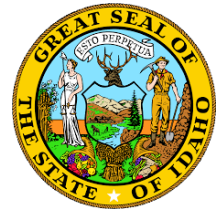
The Plan addresses the resources needed for two key strategies: the deployment of the Laserfiche document management tool throughout the ACHD community; and the upgrade of Microsoft Office products as they approach their end-of-life in 2019/2020. Overall, it is understood that new resources and the re-allocation of existing IT resources will be required to execute the strategies and accomplish projects identified in the Plan. The effectiveness of any strategic plan also requires careful and timely execution; operational plan activities will guide the execution of the Plan and will be developed that outline how the Plan's goals and objectives will be accomplished. The operational plan, a granular-level action plan, will require action by the ACHD Information Technology Advisory Committee (ITAC) to create priorities for the projects, establish accountabilities, formulate success indicators, and identify resources needed to implement the projects.

I extend my gratitude to the ITAC for providing valuable input about the needs of ACHD. Thanks to the ACHD Executive Team, managers, and administrators who provided ideas for the Plan, with special thanks to the ACHD IT Team for their contributions to the project.

Michael Stanton
ACHD Information Technology Manager



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Executive Summary

The purpose of the Information Technology Strategic Plan is to leverage information technology (IT) to advance the mission of ACHD, to help achieve the goals identified in the ACHD Strategic Plan, and to shape the future direction for IT initiatives. The Plan is the culmination of an in-depth process that involved strategic thinking, research on IT trends, and discussions about technology needs with the ACHD community. The Plan was envisioned and created with guidance from the ACHD ITAC. The plan will provide direction and set IT priorities for the next three years.

Vision Statement

Enable the ACHD mission through excellence in information technology.

Mission Statement

The ACHD IT Team enables resilient capabilities to achieve interoperability, collaboration, information sharing, and unity of effort for ACHD and its partners.

Principles

- **People First:** Our workforce is our priority. We create an open, honest, caring workplace where individuals have opportunities to test their potential.
- **Secure:** We have a smart, effective, efficient, risk-based approach to security. We are prepared and resilient.
- **Innovative:** We provide the information and tools to enable innovative problem solving. We partner with industry to bring smart innovations from the private to the public sector.
- **Integrity:** We do no harm. We are transparent and fair.
- **Results Oriented:** We are flexible, responsive, and service minded. We recognize the urgency of our missions.
- **Efficient:** We are cost effective, efficient, and look for innovative solutions. We share resources.
- **Collaborative:** We choose to partner first, to coordinate and leverage efforts. We are interoperable and integrated.

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Goals, Objectives, and Outcomes Overview



People and Culture: Attract and develop an engaged and skillful IT workforce to ensure long-term mission success.



Attract, develop, and maximize retention, engagement, and productivity of a high-caliber IT professional workforce through inclusive, effective leadership, and investment in succession planning and employee development.



Solidify a unified culture of mission-focused and results-oriented performance across the ACHD IT Team to increase organizational performance.



Enable the ACHD workforce to execute its responsibilities more effectively through access to data and technology.



Foster innovative thinking and creativity through a systems approach to idea sharing and collaboration with ACHD and its customers.



Outcome: An engaged IT workforce that possesses relevant skill sets, provides innovative IT solutions and works collaboratively to support mission demands.



Innovative Technology: Transform the ACHD workplace by enabling end user capabilities through access to data and services anywhere, anytime.



Optimize the end user experience with data, access, and services, providing cost efficiencies and workforce productivity.



Develop interoperable technologies that enable detection of and resilience against threats.



Advance the implementation of the ACHD information sharing environment by developing highly-available, automated systems.



Enable end-to-end delivery of mobile solutions that enhance enterprise-wide mobile computing capabilities for successful mission outcomes.

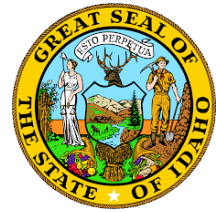


Outcome: IT resources, including networks, systems, and data, are available for the right people, at the right time, in the right locations, for improved mission execution. The ACHD workforce is mobile, interoperable and secure.





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Service Delivery: Establish a model for continuous business process improvement that enables transparent, data-driven decisions and rapid delivery of high quality IT capabilities.



Enhance IT capabilities of ACHD and its partners by ensuring operational excellence, framed by service level agreements that meet the requirements of the mission.



Create a customer service model to improve delivery of high quality IT services, including transparent expenditures and consumption-based costs.



Advance the adoption of scalable, flexible, cost-effective, accessible services through enterprise and brokered service offerings.



Promote effective, timely, and informed decision-making through analytic, knowledge-based technologies and workflow process re-engineering.



Institute agile project management practices wherever possible.



Outcome: IT services operate in accordance with service level agreements. IT business processes support the transition from traditional service provider models to new broker models, including transparent, consumption-based billing.



Cybersecurity: Empower ACHD and its partners to operate secure IT systems and networks, keeping ahead of evolving cyber threats.



Adopt risk-based common policies and best practices that meet and anticipate compliance standards to effectively eliminate vulnerabilities and mitigate cybersecurity threats.



Enable secure communications to effectively support the mission of ACHD and its partners.



Enhance the ACHD security model by moving to a next-generation network security architecture that accommodates public cloud services, improves on a policy enforcement point structure, and integrates new technologies.



Outcome: IT systems and networks are proactively managed and monitored to ensure weaknesses are identified, compliance with best practices is maintained, and risk-based strategies are in place to adjust to rapid changes in the threat landscape.





Governance and Accountability: Improve the IT environment through the maturation of IT governance and accountability.



Streamline reporting processes to allow for increased focus on workload productivity.



Improve transparency of IT costs through enhanced service and performance metrics.



Employ robust governance processes for guiding IT investments that includes roles and responsibilities at both ACHD headquarters and component levels.



Promote strategic sourcing or other procurement vehicles capable of enabling mission critical activities for more efficient and cost-effective provision of services.



Outcome: Enterprise IT governance and management practices drive decision-making to achieve efficiencies, maximize investment value and optimize IT support for successful mission outcomes. Roles and responsibilities are clearly defined, ensuring transparency and accountability.



Goals, Objectives, and Outcomes Details

GOAL 1: PEOPLE AND CULTURE

Goal: Attract and develop an engaged and skillful IT workforce to ensure long-term mission success.

ACHD missions are challenging, budgets are limited, and IT is evolving at a rapid pace. Successful execution of all ACHD missions demands a well-informed, agile, connected, and unified workforce to anticipate, detect, target, and disrupt threats. Attracting, developing, and retaining the highest-quality workforce that can meet today's and tomorrow's challenges is critical to all of the ACHD components and missions.

Outcome: An engaged IT workforce that possesses relevant skill sets, provides innovative IT solutions and works collaboratively to support mission demands.

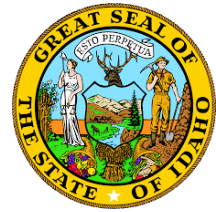
OBJECTIVES

1.1 Attract, develop, and maximize retention, engagement, and productivity of a high-caliber IT professional workforce through inclusive, effective leadership and investment in succession planning and employee development.

The IT Team is creating a work environment that offers employees greater opportunity for career development and cross-training, and that develops and maintains effective, skilled leadership who foster an inclusive environment where employees feel engaged, productive, and valued. This



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environment is especially important in attracting and developing an IT workforce with the critical skillsets needed to transform the organization. The IT Team will continue to implement strategies to close potential skill gaps through vigorous outreach, recruiting, training, and succession planning. Outreach initiatives with universities, industry, and technical training centers will continue.

1.2 Solidify a unified culture of mission-focused and results-oriented performance across the ACHD IT Team to increase organizational performance.

The IT Team is committed to continuous employee training that includes not only the IT skills required, but that emphasizes development of mission-focused discipline, a security mindset, and innovative problem-solving. The IT Team will strengthen workforce morale and performance through the promotion of a culture of accountability that recognizes and rewards results.

1.3 Enable the ACHD workforce to execute its responsibilities more effectively through access to data and technology.

The IT Team will empower employees by improving information sharing and communications. By developing an innovative contemporary communication framework and by provisioning flexible mobile tools, the IT Team will enhance workforce effectiveness in the field, on the job site, and in headquarters, improving service to our partners and customers.

1.4 Foster innovative thinking and creativity through a systems approach to idea sharing and collaboration with ACHD and its customers.

The IT Manager recognizes the importance of embracing differences in people and knows how to connect the dots among those differences to get the best outcomes from the team. This is what cultivates a workplace environment of continuous improvements, innovation and initiative. The IT Team embraces an innovation mindset where each employee learns to apply the differences that exist in one another for their own success and that of the organization.

GOAL 2: INNOVATIVE TECHNOLOGY

Goal: *Transform the ACHD workplace by enabling end user capabilities through access to data and services anywhere and anytime.*

People are able to interact with the world around them in new ways due to the ubiquity of network connectivity and the proliferation of smart devices. Everyone wants real-time data and analytics. Our goal is to make technologies available to provide the right information, to the right people, at the right time, in order to help ACHD workers perform with greater efficiency, productivity, and safety.

Outcome: *IT resources, including networks, systems, and data, are available for the right people, at the right time, in the right locations, for improved mission execution. The ACHD workforce is mobile, interoperable, and secure.*

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OBJECTIVES

2.1 Optimize the end user experience with data, access, and services, providing cost efficiencies and workforce productivity.

The IT Team will develop a data road map, including an acquisition strategy and implementation plan, of existing ACHD data. Building on previous efforts toward data aggregation, the IT Team will work collaboratively throughout the organization to provide information to leadership and employees on the data contained within the systems, and on opportunities to create accessible data sets and to present better information to decision makers.

2.2 Develop interoperable technologies that enable detection of and resilience against threats.

The IT Team Department is furthering the investment to improve communications, both wireless and cellular, and achieve and maintain interoperable communications capabilities. This involves a unified effort across the enterprise to assess gaps and obstacles, and develop a roadmap to successful interoperable communications.

2.3 Advance the implementation of the ACHD information sharing environment by developing highly-available, automated systems.

The IT Team will continue to grow its information sharing capacity by adopting a collaborative, mission-centric approach; utilizing shared technology platforms; embracing a customer-focused information delivery model; and integrating security and privacy into technology solutions. This will include evolving information-sharing segment architecture; developing agile and mission-based information sharing platforms and applications; and establishing strong governance, succinct strategy, enforceable policy, and clear standards.

2.4 Enable end-to-end delivery of mobile solutions that enhance enterprise-wide mobile computing capabilities for successful mission outcomes.

The IT Team is exploring a mobile computing environment to enhance mission effectiveness, improve the end-user experience, and enable cost reductions in both hardware and device support. The transformation will require strong collaboration with IT stakeholders, customers, and partners to execute. As technology evolves, the IT Team will move beyond its current capabilities to provide additional features and services to the mobile end user device and application computing environment.

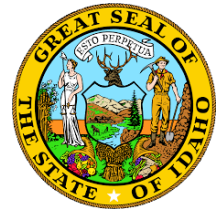
GOAL 3: SERVICE DELIVERY

Goal: *Establish a model for continuous business process improvement that enables transparent, data-driven decisions and rapid delivery of high quality IT capabilities.*

ACHD is examining new IT developments to increase business productivity. How ACHD does business directly affects its ability to obtain and implement the latest IT developments in a timely and effective manner. An ACHD business owner must institutionalize a cross-lines-of-business, cross-component, and cross-ACHD mentality to not only maximize the effectiveness of IT investments, but also to adopt a strong, customer service-oriented model for doing business. The IT Team will work in



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partnership with component and headquarters executives to transform the ACHD business model to adapt to the continuously changing IT environment, and to become a true model of customer service.

Outcome: *IT services operate in accordance with service level agreements. IT business processes support the transition from traditional service provider models to new broker models, including transparent, consumption-based billing.*

OBJECTIVES

3.1 Enhance IT capabilities of ACHD and its partners by ensuring operational excellence, framed by service level agreements that meet the requirements of the mission.

By providing enhanced IT capabilities, the IT Team will empower employees with unparalleled access to information and services. The IT Team's philosophy is one of continuous operational improvement throughout the organization by focusing on the needs of the customer, optimizing investments for shared value, and meeting mission requirements. The IT Team will identify operational strengths and weaknesses, and redesign processes, policies, and standards for the best possible execution of mission requirements. In particular, the IT Team will focus on removing barriers and avoiding unnecessary limitations to agility, flexibility, and resilience.

3.2 Create a customer service model to improve delivery of high quality IT services, including transparent expenditures and consumption based costs.

The IT Team continues to move away from a legacy, capital-intensive approach and embrace an acquisition strategy that supports rapid deployment, agile development, and shared technologies. The IT Team is deliberately moving toward a consumption-based business model which involves acquiring services rather than assets, where appropriate and cost-effective, similar to successful practices in private industry. This improves service delivery by allowing customers to pay for individual use and service consumption as an operational expense, as well as add new service offerings during the life of a contract without protracted procurement cycles.

3.3 Advance the adoption of scalable, flexible, cost-effective, accessible services through enterprise and brokered service offerings.

The IT Team will continue to increase the use of cloud and commodity services. As a private and public cloud enterprise services provider, we must be mission-enabling and customer-focused, while generating cost savings and improving security. Our strategy also calls for a shift in the paradigm from builder to broker, from service provider to service consultant. The IT Team recommends moving expeditiously into the Enterprise Computing Services (ECS) model. The ECS model of acquisition is to establish a portfolio of cost-effective, secure, and reliable computing services that facilitate timely provisioning and delivery of services, and enable mission success. ECS will encompass brick and mortar data centers, IT data center support, cloud service brokers, and ECS facilitators.

3.4 Promote effective, timely, and informed decision-making through analytic, knowledge-based technologies and workflow process re-engineering.

The IT Team will continue to analyze and redesign the workflow within and between enterprises in order to optimize end-to-end processes and to make better informed, unified, and expedient

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business decisions. The IT Team will develop and employ technology tools to support and automate the integrated collection of key program information for critical analysis and enhanced decision-making across the enterprise.

3.5 Institute agile project management practices wherever possible.

Agile project management is a methodology mainly used in software development that places large emphasis on collaboration, flexibility, continuous improvement and high quality results. A majority of IT-related ACHD projects benefit when managed using the lean concepts promoted by the Agile project management methodology.

GOAL 4: CYBERSECURITY

Goal: *Empower ACHD and its partners to operate secure IT systems and networks, keeping ahead of evolving cyber threats.*

The IT Team's strategy is to develop and implement information security policy to align with the Federal Information Security Modernization Act of 2014 (FISMA), and to ensure IT investment and portfolio decisions align with cybersecurity priority capabilities. IT Team goals include the adoption of common cybersecurity tools and policies to enable secure communications, along with designing an IT architecture with resiliency as an always-on state, built to survive failure.

Outcome: *IT systems and networks are proactively managed and monitored to ensure weaknesses are identified, compliance with best practices is maintained, and risk-based strategies are in place to adjust to rapid changes in the threat landscape.*

OBJECTIVES

4.1 Adopt risk-based common policies and best practices that meet and anticipate compliance standards to effectively eliminate vulnerabilities and mitigate cybersecurity threats.

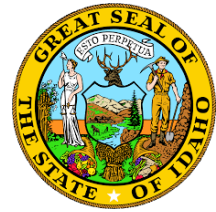
By fully adopting a Continuous Diagnostics and Mitigation (CDM) program, the IT Team can manage security by comparing what the network looks like to what it should look like, and present the differences in a way that prioritizes the highest risk issues first. The CDM is a dynamic approach to fortifying the cybersecurity of government networks and systems; it provides departments and agencies with capabilities and tools that identify cybersecurity risks on an ongoing basis, prioritizes these risks based on potential impacts, and enables cybersecurity personnel to mitigate the most significant problems first. In addition, the IT Team is defining "system health" for mission essential systems and assets, by identifying and evaluating the systems in the end-to-end business processes across the lines of business in a holistic approach.

4.2 Enable secure communications to effectively support the mission of ACHD and its partners.

ACHD communicates across the enterprise through a vast array of interdependent systems,



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services, and resources. The ACHD communications network extends beyond the infrastructure to include mobile devices and wireless networks. The IT Team will advance mobility and mitigate risks associated with securing mobile devices. The IT Team will evaluate mobile solutions to ensure cost-efficiency, effectiveness, consistency, and security.

4.3 Enhance the ACHD security model by moving to a next-generation network security architecture that accommodates public cloud services, improves on current Policy Enforcement Point structure, and integrates new technologies.

The resilience, availability, and security features of IT systems must keep pace with mission requirements, and stay well ahead of network threats. Legacy systems and technologies (usernames and passwords) are being strengthened for an impregnable IT infrastructure. The IT Team will adopt the Intrusion Defense Chain model. Cyber-attacks often occur in phases—a chain of events referred to as the Intrusion Kill Chain—that are often repeated, reused, and predictable. To more effectively combat a cyber-attack, the IT Team identifies the weakest link in the Intrusion Kill Chain. This methodology—Intrusion Defense Chain—provides a powerful new approach to proactively engage, sustain, and continuously improve active cyber defenses.

GOAL 5: GOVERNANCE AND ACCOUNTABILITY

Goal: *Improve the IT environment through the maturation of IT governance and accountability.*

Continuing to mature IT governance and accountability across ACHD requires every executive, manager, and employee in the District to focus on creating an environment that rewards collaboration, promotes best practices, and shares accountability so that the District can fulfill its mission. The IT Team continues to improve IT program performance by focusing on the maturation of IT governance, accountability at all levels, and leveraging shared best practices across the Enterprise.

Outcome: *Enterprise IT governance and management practices drive decision-making to achieve efficiencies, maximize investment value, and optimize IT support for successful mission outcomes. Roles and responsibilities are clearly defined, ensuring transparency and accountability.*

OBJECTIVES

5.1 Streamline reporting processes to allow for increased focus on workload productivity.

The IT Team is automating data collections, coordinating across lines of business, and making oversight processes leaner and faster. The IT Team will increase productivity by providing technical expertise and resources, such as proven tools for best practices and standards, to program managers across the ACHD mission areas.

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5.2 Improve transparency of IT costs through enhanced service and performance metrics.

ACHD Headquarters, Components, and the IT Team will support each other by forging effective partnerships and providing value-added support services to ensure that investments are optimized and aligned with missions and objectives. The IT Team will work across ACHD to promote IT cost transparency that enables customers throughout ACHD to understand and control their own consumption-based costs.

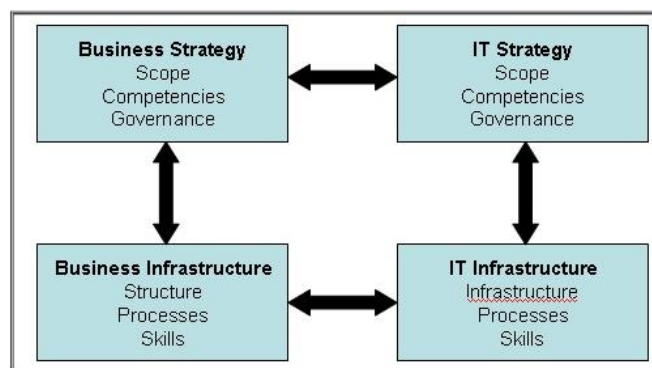
5.3 Employ robust governance processes for guiding IT investments that includes roles and responsibilities at both ACHD Headquarters and Component levels.

Through enterprise architecture, ACHD Headquarters works with Components to develop a unified framework of roles and responsibilities for collectively managing IT investments. The IT Team will work across mission areas to establish policies, standards, and processes for IT investments, ensuring secure environments, consistent frameworks, and efficient use of resources.

5.4 Promote strategic sourcing or other procurement vehicles capable of enabling mission critical activities for more efficient and cost-effective provision of services.

The IT Team will identify opportunities for resource sharing, coordination of multi-Component projects and programs, consolidation of activities, implementation of common infrastructure services, and collaborative procurement possibilities. ACHD's approach to commodities-related business decisions will be enterprise-focused, selecting current strategic sourcing contract vehicles and enterprise license agreements where possible, and collaborating across the department to develop new strategic sourcing vehicles.

Strategic Alignment

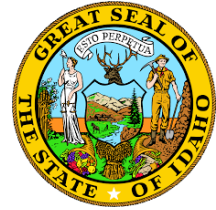


Using the framework above, the following drivers serve as foundational elements for the IT Strategic Plan:

1. IT will advocate for adequate IT funding to allow for new IT initiatives.



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2. IT will encourage and provide training and professional development opportunities for IT staff and work with Executive Management to monitor and adjust IT staff positions and salaries.
3. IT will continue to share knowledge and align efforts with other departments to avoid duplication of effort, create enterprise wide standards, and leveraging existing resources.
4. IT advocates improvements in ACHD Information Technology Advisory Committee processes and actions. These improvements include improved communications and reporting.
5. IT advocates providing a five year life-cycle of desktop systems by introducing solid state drives that will replace existing hard drives. In addition, laptop/docking station configurations will be deployed where appropriate to improve our business continuity posture.
6. IT will continue to build fault tolerance and redundancy into critical information systems to support minimal interruptions of critical services at a reasonable cost.
7. IT must take a proactive and aggressive posture to monitor and design innovative solutions that provides managed and cost effective solutions for bandwidth management. IT will work with the Engineering Department to ensure that upgrades planned to the traffic network are compatible and timely with core network upgrades.
8. IT must be involved in creating a comprehensive solution for adding, managing and documenting changes to the physical layer of the ACHD copper and fiber network.
9. IT will examine various options related to high availability and disaster response of our data servers in order to provide for an application fault tolerant environment.
10. IT will deploy, over the life of this strategic plan, and throughout the ACHD community, a secure, collaborative and effective document management system using Laserfiche.
11. IT must continue to supplement campus network connectivity with a managed, secured wireless technology.
12. IT will continue to develop intranet and Internet web sites and applications capable of displaying content on mobile devices.
13. IT will continue to thoroughly analyze Cloud Computing applications for viability, economy, reliable service and risk.
14. IT will continue to develop, expand and deliver GIS services to the staff and public.
15. IT will continue to develop and communicate clear and enforceable policies to address the management and protection of information and the security of IT resources.

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16. IT recognizes that technology changes faster than most business can keep up with. The proliferation of mobile technology, the Internet of Things (IoT) and cloud computing has changed the types of “assets” connected to networks. IT will research and offer alternatives to implementing cybersecurity “best practices” across our increasingly unstructured and decentralized network.

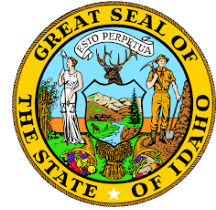
Strategic Planning Process

The ACHD IT Strategic Plan provides the District’s IT workforce with a strategy for focused collaboration on achieving our goals and objectives, enabling mission success. The development of the Strategic Plan is an iterative multi-stage process that includes reviews and assessments, aligning strategy to government mandates and mission requirements.



Operational Plan Activities

Operational Plan activities will guide the execution of this strategy and will be developed by the IT Team and the ACHD IT Advisory Committee (ITAC). The strategy is executed incrementally through the planning process to achieve our longer-term IT goals. The ITAC and the IT Team regularly review the progress of the operating plan to ensure alignment to the Strategic Plan



goals. ITAC prioritizes the elements of the Strategic Plan to drive actions and investments toward successful mission delivery.

Tactical Planning Overview

Attachment 1 contains the suggested initiatives and projects to the ACHD ITAC for their consideration, priority, and to ensure they support the IT Strategic Plan goals and objectives. In keeping with Agile practices, the number of suggested activities is small, the timeframe is brief (one year or less, wherever possible), and the repeatable process includes tracking and updating the Operational Plan to ensure the goals of the IT Strategic Plan are met. Each part of the Operational Plan will include the scope, milestones, and metrics to achieve the desired results. The Operational Plan is periodically reviewed and refined to adapt to challenges and ensure success in achieving the objectives and larger strategic priorities.

GOAL 1: PEOPLE AND CULTURE

1. The IT Team will hire interns in FY18 that will work in the following areas: Networking; GIS; and Records Management.
 - a. The Networking intern should evolve into a full-time employee beginning in FY2020. This employee would assume responsibilities as a cybersecurity analyst.
 - b. The GIS intern may evolve into a full-time employee if the expansion in GIS-related data, especially LiDAR data, becomes a reality.
 - c. The Records Management intern should evolve into a full-time employee beginning in FY2019. This employee would assume responsibilities related to the rollout of Laserfiche document management system throughout the ACHD community.
2. The IT Team will develop a matrix of primary and alternate personnel related to the key processes and activities conducted by the IT Team.

GOAL 2: INNOVATIVE TECHNOLOGY

1. The IT Team will be attentive to new and emerging technologies, including networks, systems, and data, so they are available for the right people, at the right time, in the right locations, for improved mission execution.
2. Many of these emerging technologies are cloud-based, which offer both rewards and risks in their implementation and usage.
3. In a discussion regarding the Bike Map developed by GIS, it was proposed to including a routing feature so that users could develop a route to travel. It was also proposed to add the Bike Map to the existing ACHD application that is available on Apple iTunes and Google Play.

4. The GIS group would like to expand the current Roadwork in the Area (RITA) offering and add more interactive features.

GOAL 3: SERVICE DELIVERY

1. A number of software products used by ACHD will reach their end-of-life over the next three years. The table below reflects the magnitude of this problem:

Product	End of Life	Remarks
SQL Server 2008 R2	2019	Primary ACHD data repository
Office 2010	2020	Primary ACHD office tools
Project Server 2010	2020	Primary tool used by Capital Projects
SharePoint 2010	2020	Primary tool used by Capital Projects
Windows 7	2020	Primary desktop operating system
Windows Server 2008 R2	2020	Primary network server operating system

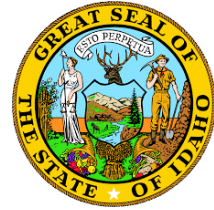
2. The IT Team has already begun testing alternative solutions to these programs. We are especially interested in Office 365, Project Online, SQL Server 2016, Windows 10, and Windows Server 2016. They offer services operated in accordance with service level agreements, and will lead to a transparent, consumption-based billing model. Decisions will have to be made with regard to priority and rollout options.

GOAL 4: CYBERSECURITY

1. The IT Team currently has team members with the requisite skills to adopt common cybersecurity tools and develop policies to enable secure communications, along with the ability to design an IT architecture with resiliency as an always-on state, built to survive failure.
2. More information is needed in order to deploy a Continuous Diagnostics and Mitigation program. Of particular interest is training requirements and staffing needs. Improved security should be a key benefit and worth the effort.
3. A planned, regularly scheduled, series of audits will need to be developed so that the ACHD network and its dependencies can be properly reviewed and evaluated.
4. An annual audit of the ACHD infrastructure, with clear objectives and activities, will need to be developed that will build on the audit that occurred in 2016.
5. Near-term, training will be needed to build on the skill sets currently in place. Specifically, training (and certification) in ethical hacking, auditing, and penetration testing will be needed.



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6. By FY2020, a full-time employee should be hired, whose primary responsibilities will be related to cybersecurity.

GOAL 5: GOVERNANCE AND ACCOUNTABILITY

1. The ACHD Team's goal – to improve the ACHD IT environment through the maturation of IT governance and accountability – is a bit of a gray area. The reason is that it is unclear to what degree the District should adhere to Ada County, the State of Idaho, and/or Federal governance and accountability requirements.
2. As a result, this goal will require research, discussion with ACHD executives, review by the ACHD Legal Team, and the ACHD Commission.
3. The ACHD Team will use the Idaho Technology Authority (ITA) as the starting point for our research.
 - a. Created by statute in 2013 to respond to advances in information technology and telecommunications, the Idaho Technology Authority (ITA) operates strategically to leverage opportunities for improving the efficiency and productivity of state government. The ITA combines the business perspective of state government and the private sector with the technical expertise of its subcommittees to “ensure a coordinated approach to the design, procurement and implementation of information technology and telecommunications systems for both state government and the public.” (I.C. § 67-5745)
 - b. Included in its duties, the ITA reviews and evaluates IT and telecommunications systems, and prepares statewide IT and telecommunications plans. Additionally, the ITA identifies technology opportunities and facilitates and monitors statewide programs, to ensure they are effective, beneficial, and utilized on a statewide basis.

Budget Considerations

There are three key projects in FY18-20 that will require close attention.

Laserfiche Deployment

The deployment of Laserfiche document management services throughout ACHD will take the better part of four years. Costs associated with this deployment are shown below:



Year	Activity	Projected Cost
2017	Licensing	\$34,960
	Software Support	\$18,000
	Workflow Configuration	\$22,275
	Requirements Gathering	\$47,300
	FY17 Total Cost:	\$122,535
2018	Licensing	\$102,240
	Software Support	\$78,484
	Onsite Training	\$11,000
	Project Management Services	\$16,500
	FY18 Total Cost:	\$248,224
2019-2020	Software Support	\$78,484/year
	Consulting Services	\$40,000/year
	FY19-20 Total Costs:	\$236,968
	Total Project Costs:	\$607,727

The impact of this project is considerable. It will change the way we approach any document we need, the way it is used, and how it is made available for retention and storage.

Managed Print Services

The ACHD Commission chose to open the Managed Print Services contract for bid. The IT Team welcomes this opportunity, as it not only allows us to see alternative proposals to meet our needs, but also offers an opportunity to review our printing, copying, and scanning operations. In FY17, ACHD paid \$120,000 for our managed print services; this included a minimum number of copies to be produced by ACHD. We have exceeded this minimum every month this fiscal year, averaging an additional \$8,000 per month in print charges. Combined with the deployment of Laserfiche throughout the District, the IT Team anticipates a lessening in these costs and improved productivity.

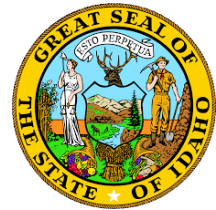
Microsoft Products End-of-Life

Every Microsoft product has a lifecycle. The lifecycle begins when a product is released and ends when it's no longer supported. We have an opportunity to move our usage of Microsoft products from the view of a capital expense to an operational cost.

In FY17, ACHD entered into its final year of a 3-year contract entered into with Microsoft for a variety of products. The base payment was \$115,000 and, after a process Microsoft refers



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to as a “True Up”, we paid an additional \$30,649 to obtain all of the new licensing we needed as the result of new hires, new equipment, new requirements, etc.

Under the current system, we can never decrease the number of licenses we have. As a result, we often have licenses that are not needed because of personnel changes and so forth.

With the rollout of Office 365 and other applications, Microsoft has moved into the “Software as a Service” arena. As such, licensing is more dynamic, in that we can change our license count throughout the year, and thus pay for what we need. In addition, the cloud-based versions of Microsoft products will be updated by Microsoft, including new features and patches.

The table below compares our current monthly pricing model (per person) and the new one from Microsoft:

Product	Current Pricing	New Pricing	Remarks
Office	\$18	\$8 to \$35	Features vary
Project Pro	\$27	\$7 to \$55	Three levels

Similar improvements will be available for the other Microsoft products we use.

While overall costs will remain similar to our current levels, we anticipate an overall improvement in the contract/licensing side of things, with an improvement in the services that will be provided.

Summary

The ACHD community is facing a culture change: Laserfiche deployment; Microsoft end-of-life realities; new managed print services; moving to a mobile, cloud-based environment. Some changes will be easily embraced; others will be met with institutional resistance.

The IT Team is committed to focus on the following areas: Structure and Process; People; Incentives; and Controls. Flexibility, communication, and resiliency will have to be engrained in every project, decision, and choice. This commitment of the IT Team, with the support of ACHD executive leadership, will set the direction of the ACHD community for years to come.



Attachment 1

IT Team Innovation Ideas
Project List

IT Team Innovation Ideas FY 2018 - 2020

Idea	Description
LiDAR System	The IT Team has taken on responsibility to take the next steps in determining the feasibility of using this technology at ACHD.
IT Onboarding	We would like to develop our own onboarding training.
Communications	Examine alternative methods of communications beside email (ALL STAFF).
Ground Penetrating Radar (GPR)	The IT Team has been approached about working with a diverse team of ACHD personnel to determine the feasibility of incorporating this technology into ACHD.
Learning Management System	HR would like a system for the administration, documentation, tracking, reporting and delivery of educational courses or training programs.
Predicting Potholes	A 'smart city' initiative, the project uses existing traffic cameras to provide data related to traffic volume and other metrics, such as the age of the pavement, while also considering weather and other anomalies like traffic accidents or department maintenance to anticipate when a section of street will fail.
Nanofabrics, nanofibers, and stuff like flexible cement by Allied Foam Tech Corp	Not a strickly IT play here, but this new tech possibly has an application for us here at ACHD. It's a wood-like flexible cement foam that can be as light as wood and can be nailed, cut and screwed like wood. It can be used where conventional brittle cement and concrete cannot be used. It may replace plastics and wood where economics, long term outdoor durability and flammability are needed. http://alliedfoamtech.com/Appshingles.htm
New Azure Services	Following the acquisition of Cloudyn earlier this year, Microsoft said it will be making Azure Cost Management services -- for optimizing cloud spending -- available to customers and partners for free through next June. Microsoft also announced the general availability of SQL Server on Linux, Windows and Docker, as well as the availability of data migration services for movement of on-premise SQL Server databases to an Azure SQL database. Meanwhile, Microsoft said that Azure Stack, the company's hybrid cloud platform, is now shipping from initial hardware partners HPE, Dell EMC and Lenovo.
Mixed Reality	The Windows 10 Creators Update will be the most powerful and affordable way to experience mixed reality. Microsoft announced that HP, Lenovo, ASUS, Dell and Acer will ship the first VR headsets capable of mixed reality through the Creators Update. Coming in 2017, these accessories will contain built-in sensors to enable inside-out, six-degrees of freedom for simplified set-up and to more easily move around your home as you experience virtual worlds — no markers required.

IT Team Innovation Ideas FY 2018 - 2020

Idea	Description
AR and VR	<p>We've already seen some major steps forward for augmented reality (AR) and virtual reality (VR) technology in 2016. Oculus Rift was released, to positive reception, and thousands of VR apps and games followed. We also saw Pokémon Go, an AR game, explode with over 100 million downloads. The market is ready for AR and VR, and we've already got some early-stage devices and tech for these applications, but it's going to be next year before we see things really take off. Once they do, you'll need to be ready for AR and VR versions of practically everything—and ample marketing opportunities to follow.</p>
Machine Learning	<p>Machine learning has taken some massive strides forward in the past few years, even emerging to assist and enhance Google's core search engine algorithm. But again, we've only seen it in a limited range of applications. Machine learning has entered into almost any type of consumer application you can think of, from offering better recommended products based on prior purchase history to gradually improving the user experience of an analytics app. It won't be long before machine learning becomes a kind of "new normal," with people expecting this type of artificial intelligence as a component of every form of technology. Azure machine learning is the Microsoft platform for use by data scientists and artificial-intelligence software developers. Recently announced updates will include new tools for development of machine-learning models that make use of major open-source technologies. In addition, Microsoft announced an integration of the Azure CosmosDB database service with the Azure Functions server-less platform, which is aimed at enabling quick software development in response to data from IoT sensors and other sources.</p>
Automation	<p>Marketers will be (mostly) pleased to learn that automation will become a bigger mainstay in and throughout 2017, with advanced technology enabling the automation of previously human-exclusive tasks. We've had robotic journalists in circulation for a couple of years now, and I expect it won't be long before they make another leap into more practical types of articles. It's likely that we'll start seeing productivity skyrocket in a number of white-collar type jobs—and we'll start seeing some jobs disappear altogether. When automation is combined with machine learning, everything can improve even faster, so 2017 has the potential to be a truly landmark year.</p>

IT Team Innovation Ideas FY 2018 - 2020

Idea	Description
Humanized Big Data	Big data has been a big topic for the past five years or so, when it started making headlines as a buzzword. The idea is that mass quantities of gathered data—which we now have access to—can help us in everything from planning better medical treatments to executing better marketing campaigns. But big data’s greatest strength—its quantitative, numerical foundation—is also a weakness. In 2017, I expect we’ll see advancements to humanize big data, seeking more empathetic and qualitative bits of data and projecting it in a more visualized, accessible way.
Physical - Digital Integration	Mobile devices have been slowly adding technology into our daily lives. It’s rare to see anyone without a smartphone at any given time, giving us access to practically infinite information in the real-world. We already have things like site-to-store purchasing, enabling online customers to buy and pick up products in a physical retail location, but the next level will be even further integrations between physical and digital realities. Online brands like Amazon will start having more physical products, like Dash Buttons, and physical brands like Walmart will start having more digital features, like store maps and product trials.
Microsoft Cognitive Services	Microsoft said that its collection of APIs for AI capabilities, Cognitive Services, has received some enhancements that developers should find useful. A new text analytics service for language processing is now generally available, the company said. The service offers features such as extraction of key phrases and language detection. Meanwhile, improved search capabilities available as part of Cognitive Services are coming in October, with the introduction of Bing Custom Search and Bing Search v7, Microsoft said.
Microsoft Teams	Microsoft’s vision for workplace communications will see the Microsoft Teams collaboration app replacing Skype for Business in Office 365 "over time". Teams is now getting new calling features such as call transfer, voicemail and calling to and from external phone numbers. Meanwhile, Skype -- which powers much of the existing communications in Teams -- is getting enhanced infrastructure for improved quality of voice and video communications.
Advanced Threat Protection Enhancements	Office 365 will be getting improvements to its Advanced Threat Protection (ATP) capabilities, through new features to combat phishing, impersonation and domain spoofing. Windows Defender ATP will also now have capabilities to fix certain security issues, rather than just alert users about them. And Azure ATP, which is going into limited preview, will offer enhancements to improve the speed of security incident investigation.

IT Team Innovation Ideas FY 2018 - 2020

Idea	Description
MS Dynamics 365	<p>Microsoft announced updates to its Dynamics 365 suite that aim to make the cloud CRM and ERP system more flexible. The company said it wants users to be able to move into Dynamics 365 gradually if they prefer, and so the firm is debuting "modular apps" that offer limited slices of functionality inside the platform. The Attract modular app will focus on helping users to recruit qualified job candidates, while the Onboard modular app will offer personalized onboarding for new employees. Attract and Recruit will be available within the Dynamics 365 for Talent workforce solution "later this year," Microsoft said. This has a potential play with a future integration with the ACHD onboarding process.</p>
Hybrid Possibilities with SharePoint 2016 and O365	<p>a. OneDrive Redirection: Though this has been available in SharePoint 2013 since SP1, with SharePoint 2016 you can redirect your My Sites to your Office 365 subscription's OneDrive for Business host. In other words, if a user clicks on OneDrive, he'll be redirected to his Office 365 My Site and no longer to his on-premises sites.</p> <p>b. Sites you follow in one place: Now users can click on "Follow" both On-Premises and on their Office 365 and see them all in one place under the "Sites" app in the App Launcher. The wizard to configure either of the simple scenarios above work very well, as long as you follow the requirements.</p> <p>c. Hybrid Cloud Search This is what a lot of us have been waiting for, a unified Search experience. Put simply, the Office 365 Search will take your On-Premises SharePoint Search Index so that it can give you results from both for the same query. You should know that you'll have to use the Office 365 Search for this to work. If SharePoint 2016 On-Premises users query against their On-Premises Search service, it'll continue to only give them local results only.</p>
Microsoft Delve 365	<p>A way to search for information about something, such as documents, data and metadata. It's like the search function of Laserfiche but integrated into SharePoint and Office 365.</p>
Microsoft Surface Studio	<p>Surface Studio is a new class of devices that transforms from a workstation into a powerful digital canvas, unlocking a more natural and immersive way to create on the thinnest display ever built. With a 4.5k ultra HD screen, Surface Studio delivers 63 percent more pixels than a state-of-the-art 4k TV.</p>

IT Team Innovation Ideas FY 2018 - 2020

Idea	Description
Microsoft Surface Dial	Surface Dial is a new peripheral designed for the creative process. It integrates with Windows 10 to work with any Surface device for a faster and more intuitive way to scroll, zoom and navigate. The Dial also enables a set of unique experiences exclusive to Surface Studio.
Microsoft 3D ArtStudio	Microsoft introduced a new way to bring your ideas to life with Paint 3D, your new 3D art studio. Microsoft also introduced the new online community Remix3D.com, connecting creators and creations around the world. Remix 3D will enable all new scenarios for creators to share their 3D creations broadly with the Remix 3D community.
Office Apps and 3D Support	The Windows 10 Creators Update is bringing new features to Office apps, including support for 3D models and new inking capabilities. With PowerPoint on Windows 10, you will be able to add 3D models to bring your presentations to life and you will be able to change perspectives of 3D models by rotating in three dimensions and apply transitions like Morph to apply cinematic 3D animation. The new inking capabilities announced today in Office include Ink Editor in Word, which lets you use your digital pen intuitively to make changes directly in Word, making your pen a more powerful editing tool than ever.

Business Analyst Proposed Projects FY 2018 - 2020

Project List (WHAT)	Suggested Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Keystyle Portal: Make accessible from outside	2	S	16 hrs	Ken, Chris	Keystyle Portal / Firewall???	Mobile access	Security concerns
Keystyle Portal: implement PO module and Expense Reporting	3	S	40 hrs	Ken	Keystyle Portal	Requested by Accounting and IT	Budget?
Keystyle Portal: Expand use of time off request	6	S	120 hrs	Ken	Keystyle Portal	Documents requests and approval process	Departmental Cooperation
Integrate Web/TrakIT Payment Sites with Vista	5	M	80 hrs	Ken, Clint, Craig, Keystyle	Custom import template into Vista Cash Receipts	Save time and increase accuracy for entering customer payments	Contractor availability, budget
Research and select new software for iFYWP/Budget	1	L	240 hrs	Ken, Clint, Christine, Ryan	TBD	Financial manager end of life is 2019 and we want to find software that will allow the iFYWP and Budget to collaborate	Software availability
Contract Management Software	1	L	6-8 mos	IT Team, Legal	Meeting Manager Pro	Continue from current project list	N/A
Agenda Creation Software	1	L	6-12 mos	Current Agenda Creation SW Team	Meeting Manager Pro	Continue from current project list	N/A
Asset Management Software	1	L	12-18 mos	Current Asset Management SW Team	Dude Solutions	Continue from current project list	N/A

GIS Proposed Projects FY 2018 - 2020

Project List (WHAT)	Top 5 candidate (PRIORITY)	Est. Time (HOW LONG)	Dev Team (WHO)
RITA upgrade/Traffic data integration -Beginning December 2017 - Phase 1) Replace the current system of creating and emailing pdf lists and maps on a daily basis with a permanent, automatically updated web mapping service available on the ACHD website. Phase 2) Integrate Traffic Ops info such as Web cameras, message boards, and traffic incidents into the system.	YES	2 years	GIS, IT Development, Traffic Ops
ArcGIS Pro migration - Develop a training plan for integrating GIS Pro software into our workflow. ArcGIS Pro will eventually replace ArcMap as the ESRI mapping standard within 2-4 years. ArcGIS Pro is a native 64-bit app designed to integrate with map services and the web more completely. Eventually almost all of our mapping will be based on web services. Phase 1) Identify training opportunities. Phase2) Migrate ArcMap projects. Phase 3) Migrate ArcGIS Desktop processes.	YES	3 years	GIS
GIS Development Server - possible solution through MS Azure. Phase 1) Acquire server space. Phase 2) Install ArcGIS software. Phase 3) Set up new/access current SQL instance. Phase 4) Copy/restore data to new environment. Phase 5) Set up data connections. Phase 6) Test connections/processes/speed.	YES	< 1 year	GIS, IT Network
Storm Drain mapping backlog - Utilize student intern to catch up on backlog of projects to be mapped. Phase 1) Research and compile list of subdivisions and projects to be mapped. Phase 2) Pilot test one typical subdivision and one major project. Phase 3) Define and implement priorities for remaining subs and projects.	YES	2 years	GIS
ArcGIS Server/SQL migration - Phase 1) Work with IT staff to coordinate migration to SQL2016 or higher. Phase 2) Integrate and migrate AGS processes to work in updated SQL environment.	YES	< 1 year	GIS, IT Network
LiDAR projects - Phase 1) Begin exploring ways to integrate LiDAR data into current GIS processes. Phase 2) Pilot project incorporating ROBIN data collection effort.	YES	2 years	GIS, IT, Survey, Drainage

GIS Proposed Projects FY 2018 - 2020

Project List (WHAT)	Top 5 candidate (PRIORITY)	Est. Time (HOW LONG)	Dev Team (WHO)
Pedestrian Bike Transition Plan update - assist with P&P project to update the 2004 original plan. Major areas of focus will be on mapping support for sidewalks and ped ramps.	YES	< 1 year	GIS, Planning & Programming
TRAKiT GIS upgrade - add new features and capabilities to the TRAKiT system as requested from Dev Services.	YES	1 year	GIS, Development Services
UAS projects - Begin Incorporating drone imagery into current ortho-mosaic acquisition process.	NO	3 years	GIS
Traffic Count application - integrate traffic count application with GIS to solve problem of not being able to update traffic count GIS data layer without a lot of hurdles.	NO	1 year	GIS, IT Development, Traffic
Laserfiche integration with GIS - Phase 1) Identify and rank datasets to integrate. Phase 2) Evaluate vendor possibilities to assist with integration. Phase 3) Pilot project for smaller dataset. Phase 4) Begin larger-scale integration	NO	3 years	GIS, Records Management, Consultant
Asset Management expansion - Expand Mobile 311 modules to possibly include Facilities, Sidewalks, and Signs.	NO	2 years	GIS, Maintenance
Public Map Portal - Develop the ACHD website to contain a map portal showing all of our current public facing web mapping applications. Ada County has a map portal that shows as a good example: https://adacounty.id.gov/Mapping-Services .	NO	< 1 year	GIS, IT Web Development
IFYWP Storybook Map - enhance the IFYWP ArcGIS Online presence with an updated and improved mapping experience, enabling the public to view and comment on the proposed IFYWP.	NO	< 1 year	GIS, Planning & Programming
Bike Lanes Routing App - create a web-based mapping application that will allow a user to plug in a location or address and create an ideal bike route. Phase 1) Build a connected network of ACHD bike facilities and pathways. Phase 2) Creation of the actual routing application.	NO	1 year	GIS, Planning & Programming, Consultant

GIS Proposed Projects FY 2018 - 2020

Project List (WHAT)	Top 5 candidate (PRIORITY)	Est. Time (HOW LONG)	Dev Team (WHO)
Traffic Ops integration - Fiber - assist Traffic Ops dept with updating and maintaining fiber and related layers. Assist with integration with into main ACHD mapping systems and away from storing on individual machines.	NO	2 years	GIS, Traffic Ops
2019/2020 Ortho Imagery Project - Incorporate the newest countywide aerial imagery into ACHD's GIS systems. Phase 1) Upload new aerial photos from external hard drive. Phase 2) Process imagery into a mosaiced raster dataset. Phase 3) Add to ACHD2 database and incorporate into ArcGIS and Geocortex.	NO	3 years	GIS, IT Network

Network Group Proposed Projects FY 2018 - 2020

Project List (WHAT)	Top 5 Candidate	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Mobile Device Manager	Yes	L	12-18 mos	Network Group Pilot Group	TBD	Need a better way to administer mobile devices, such as smartphones, tablets, laptops, and other mobile systems.	Budget, time
Cisco Firewall FIREPOWER	Yes	M	40 hrs	Network Group	Cisco ASA	Internet protection and content filter	
ACHD Intranet Social Media	Yes	S	12 mos	Web Dev Network Group	TBD	Add communications portal	Departmental Cooperation
Upgrade Service Desk Software	Yes	L	12 mos	IT Team	TBD	Easier for users to submit Service Desk tickets with knowledge base, more effective control of mobile devices, more accurate IT inventory, all in one place.	Budget, time

Network Group Proposed Projects FY 2018 - 2020

Project List (WHAT)	Top 5 Candidate	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Upgrade Equipment Inventory System	Yes	M	6-8 mos	Web Dev Network Group	TBD	Treat the employee as the main asset with equipment assigned to them, instead of the other way around. For some reason WASP isn't working for us any longer; doesn't seem to be thought about for updating when changes are made with the PC, the job position or the employee. Then it is not accurate when we need info from it.	Contractor availability, budget
Security Audit	Yes	L	3-6 mos	Network Group	TBD	Both internal and external. Internal with training and external from an outside consultant. Could then make this an annual check.	Budget, Culture
Single Sign-On (SSO)	Yes	L	3-6 mos	Network Group	On-premise Cloud	Allow a person to sign on once to access applications.	Budget, Training

Network Group Proposed Projects FY 2018 - 2020

Project List (WHAT)	Top 5 Candidate	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Upgrade Windows Server	Yes	S	12-18 mos	Network Group	MS Windows	Current server end-of-life approaching.	Budget
SQL Server Migration	Yes	S	12-24 mos	Network Group Web Dev	MS Windows	Current server end-of-life next year. New features and opportunities available now.	Budget, time

Records Management Proposed Projects FY 2018 - 2020

Project List (WHAT)	Top 5 Candidate	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Laserfiche Integration	Yes	S	12-36 mos	IT Team	Laserfiche	Deploy Laserfiches to improve business processes, productivity, etc.	Time, training, culture
Tellus 3.0	Yes	S	12-18 mos	IT Team	Laserfiche	Make improvements as necessary to improve process.	Time, training, culture
Administrative Compliance Audit	Yes	S	12-18 mos	IT Team	Laserfiche	Make improvements as necessary to improve process.	Time, training, culture
Project Initiation Form	Yes	M	12-18 mos	IT Team	Laserfiche	Make improvements as necessary to improve process.	Time, training, culture
Training Request Form	Yes	M	12-18 mos	IT Team	Laserfiche	Make improvements as necessary to improve process.	Time, training, culture
Public Records Request	Yes	M	12-18 mos	IT Team	Laserfiche	Make improvements as necessary to improve process.	Time, training, culture
Travel Reimbursement Form	Yes	M	12-18 mos	IT Team	Laserfiche	Make improvements as necessary to improve process.	Time, training, culture
Traffic Investigation Request	Yes	M	12-18 mos	IT Team	Laserfiche	Make improvements as necessary to improve process.	Time, training, culture
Clean up RIM Records	Yes	S	12-24 mos	RM Group	Laserfiche	ate existing files to Laserfiche sy	Time, personnel

Additional Laserfiche projects in Laserfiche Projects sheet

Web Development Proposed Projects FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Winter Operations microsite	1	S	30 hours	Diane	achdidaho.org	Make winter operations informatin available to staff and citizens in a easy-to-access place available anywhere.	Awaiting info.
Project Server Online launch support	2	L	440 hours	Shannon, Clint	Project 2016, Project Online	Upgrade our MS Project environment. Incorporate EVPM reporting.	
O365 launch support	3	L	450 hours	Shannon, Clint	O365	Upgrade ACHD Office environment, and improve collaboration with introduction of OneDrive, Skype, and Yammer.	Unforeseen integration issues with existing systems and/or processes.
Office 2010 runtime / MS Access on Windows 10 / O365 VM Test	4	S	8 hours	Clint	MS Server 2016	Test running legacy applications on the latest OS and Office environment to ensure continuity of operations. Part of O365 upgrade initiative.	
Project Initiation Form App	5	L	480 hours	Diane, Craig, Clint, Ken	LF Forms	Convert manual system into an automated, paperless, process-based system.	Require assistance of Accounting staff to define business process.
Training Request Application	6	L	480 hours	Diane, Ken, Craig, Clint	LF Forms	Convert manual system into an automated, paperless, process-based system.	LF Forms upgrade. Require assistance of HR staff to define business process

Web Development Proposed Projects FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
License Agreements TrakIT module	7	M	160 hours	Clint, Ken, Craig	TrakIT	Consolidate License Agreements into TrakIT system and clean up data to improve accuracy and streamline process.	Poor data quality.
Commuteride Phase 4 App Upgrade (Rewards and incentives, checks and balances Viewpoint integration)	8	M	120 hours	Clint, Ken, Craig	MS SQL	Enable Commuteride staff to manage rider and driver info from within new Commuteride app.	VRT CR takeover / VRT decisions
Employee awards tracking application	9	L	160 hours	Clint, Ken, Craig	LF Forms	Convert manual, paper-based system into an automated, paperless, process-based system. Upgrade forms, process and reporting.	LF Forms upgrade. Require assistance of Accounting staff to define business process.
Travel / Expenses Application	10	L	240 hours	Clint, Craig, Ken, Stella, Peggy	LF Forms	Convert manual system into an automated, paperless, process-based system. Upgrade forms and process.	LF Forms upgrade. Require assistance of Accounting staff to define business process.
Commuteride Phase 2 App Upgrade (PowerApp Front End)	11	M	160 hours	Clint, Ken, Craig	PowerApps	Replace legacy network-based system into web app format available anytime, anywhere.	VRT CR takeover / VRT decisions. MS O365 licenses.

Web Development Proposed Projects FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Commuteride Phase 3 App Upgrade (Public-facing Montly Report)	12	S	40 hours	Clint, Ken, Craig, Diane	LF Forms	Replace paper-based, error-prone process with web-based solution available anytime, anywhere that will improve data processing speed and accuracy.	VRT CR takeover / VRT decisions
Stormwater - tracking of additional information	13	S-M	100 hours	Craig, Clint, Ken	SQL, Access to PowerApps	Modify database to track additional features.	Potential need to integrate with data from other sources, increasing project scope.
Street Saver Automation	14	S	40 hours	Craig	Cloud	Design new automation process for the rebuilding of the Street Saver and Pavement Management databases to cut down on time between updates.	Possible issues with task scheduler and network causing a malfunction as it did the previous time that automation was set up.
Phase 3 Eprocurement Project: ViewPoint / BID-X / B2W / Pay Estimate Integration improvments	15	M	240 hours	Craig, Clint, Ken, Keystyle	SQL, Access to PowerApps	Modify database to track additional features.	Additional process design work needs done. Keystyle availability.
Intranet update	16	L	1600 hours	IT Team	TBD	Upgrade to HTML5, CSS3, improve integration with other systems at ACHD.	
Outfalls Application	17	M	640 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	

Web Development Proposed Projects FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Right-of-way Application	18	L	960 hours	Ken, Craig, Clint	PowerApps or Third-party software		Integration with Sharepoint and ArcGIS / ESRI
Work Order integration	19	M	640 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	
Materials Used Module	20	M	640 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	
Ponds integration	21	M	640 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	
Inventory integration	22	S	80 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	
Adopt-a-Highway integration	23	S	80 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	
Workorder Form integration	24	M	640 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	
Graffiti Report Form integration	26	S	80 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	
Pond Inspection Form integration	27	M	640 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	

Web Development Proposed Projects FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Platform (HOW)	Rationale (WHY)	Potential Roadblocks
Adopt-a-Highway integration	28	S	80 hours	Ken, Craig, Clint	Dude	Use existing ACHD web app to improve integration and standardization.	
ARCGIS traffic cam / incident report upgrade	29	S	60 hours	Clint, Gail	ArcGIS	Use existing ACHD web app to improve integration and standardization.	Awaiting vendors build of KML export. Approval by Craig Quintana

Tentative Process Improvement Projects (Laserfiche Integration) FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Customer (WHO)	Platform (HOW)	Rationale (WHY)
Budget Transfers and Adjustments Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Standby Letter of Credit Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Mileage Reimbursement Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Damage Claim Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Inactive Records Retrieval Request Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Record Schedule Change Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Record Storage Transfer Request Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Records Destruction Authorization Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Laserfiche Document Scanning Request Form		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
ACHD Single Project Fiber Optic Facilities Permit		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
ACHD Master Fiber Optic Facilities Permit		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Public Information Request Form		M		Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Request for Temporary Employee		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.

Tentative Process Improvement Projects (Laserfiche Integration) FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Customer (WHO)	Platform (HOW)	Rationale (WHY)
Request for Regular Employee		S	2 weeks, 1 PTE	Clint, Craig	Chief of Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
Request for Safety Glasses		S	2 weeks, 1 PTE	Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
Reimbursement from for boots and coveralls		S	2 weeks, 1 PTE	Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
Request for Limited Term Employee		S	2 weeks, 1 PTE	Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
Quarterly Employee Nomination Form		S	2 weeks, 1 PTE	Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
ACHD Team Innovation Program submission form		S	2 weeks, 1 PTE	Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
Direct Deposit Paystub via Personal Email		S	2 weeks, 1 PTE	Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
Life Insurance Beneficiary Form		S	2 weeks, 1 PTE	Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
Subdivision Improvement Agreement Form		S	2 weeks, 1 PTE	Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Development Agreement		S	2 weeks, 1 PTE	Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Traffic Engineering Application		S	2 weeks, 1 PTE	Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Agreement to Transfer Personal Property Form		S	2 weeks, 1 PTE	Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Right of Entry		S	2 weeks, 1 PTE	Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.

Tentative Process Improvement Projects (Laserfiche Integration) FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Customer (WHO)	Platform (HOW)	Rationale (WHY)
Property Use Agreement		S	2 weeks, 1 PTE	Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Right of Way Application		S	2 weeks, 1 PTE	Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
Safety Near Miss Report		S	2 weeks, 1 PTE	Clint, Craig	Accounting	LF Forms	Streamline processing, reduce paperwork and improve integration.
Expense Report		M	6 weeks, 1 PTE	Clint, Craig	Accounting	LF Forms	Streamline processing, reduce paperwork and improve integration.
Event sign in sheet (tablet / pen app)		S	2 weeks, 1 PTE	Clint, Craig	Staff	LF Forms	Streamline processing, reduce paperwork and improve integration.
New-Hire On-boarding Process Form		L	5 months, 3 PTE	Diane, Clint, Craig	HR	LF Forms	Streamline processing, reduce paperwork and improve integration.
Contractors Information Sheet		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Cost Share Application		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Driveway Approach Request		M	3 weeks, 1 FTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Fire Department Approval Form		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
GIS Digital Data Request Form		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Impact Fee Appeal Form		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Impact Fee - Application for Individual Assessment Form		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.

Tentative Process Improvement Projects (Laserfiche Integration) FY 2018 - 2020

Project List (WHAT)	Priority (WHEN)	Rough Scope (L, M, S)	Est. Time (HOW LONG)	Dev Team (WHO)	Customer (WHO)	Platform (HOW)	Rationale (WHY)
Impact Fee - Tax and User Fee Credit Application		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
License Agreement Application		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Public Records Request		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Sidewalk Inspection Request		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Snow Removal Permit Application		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Special Even Permit		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Storm Water Drainage Confirmation Agreement		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Storm Water Dewater Permit Form		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Temporary User Permit		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Tenant Improvement Form		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Traffic Investigation Request Form		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Truck Restriction Permit		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.
Weed Control - No Spray Request		S	2 weeks, 1 PTE	Diane, Clint, Craig	Engineering	LF Forms	Streamline processing, reduce paperwork and improve integration.