Mono County and the Town of Mammoth Lakes have a long-term commitment to technology – specifically the implementation of high-value, modern systems which follow industry best practices. Combined with a talented collection of staff, these systems provide unique opportunities to solve complex problems in creative ways, more deftly manage information, and create a more efficient and cost effective way of doing business within a government agency. The focus of the Information Technology Strategic Planning effort is to gain a deep understanding of our business so that we can more carefully design how we operate and find more efficient means of doing so through the use of technology.

**OUR MISSION**

*Empower our community by providing exceptional technology and customer service.*

**VISION**

- Deliver exceptional customer service
- Provide a reliable modern infrastructure
- Improve business processes through technology
- Embrace and advance Best Practices
- Seek out collaborative solutions
- Value IT staff development, knowledge, individual needs

**VALUES**

- Resourceful
- Trustworthy
- Competent
- Positive
- Diligent
- Respectful

**STRUCTURE OF THE PLAN**

The 2018-2021 Mono County IT Strategic Plan is divided into two major sections: Core Services and Strategic Initiatives.
## CORE SERVICES

The following are the Core Services which IT provides to the organization. These are the areas in which we will always be working to maintain our existing technology footprint and ensure a high level of service.

<table>
<thead>
<tr>
<th>No.</th>
<th>Service Area</th>
<th>Services/Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>User Support &amp; Help Desk</td>
<td>Timely &amp; effective response, Quality engagement experiences for users, Work Order Management, Self Help Portal</td>
</tr>
<tr>
<td>2</td>
<td>Infrastructure</td>
<td>Life-Cycle Management, Standardized and integrated, Core Service Business Continuity, Disaster Response &amp; Recovery</td>
</tr>
<tr>
<td>3</td>
<td>Communications</td>
<td>Stable network and reliable fast internet, Integrated voice, video, chat communications, Disaster ready communications systems, Interoperable radio communications</td>
</tr>
<tr>
<td>4</td>
<td>Security &amp; Compliance</td>
<td>Data and network protection, Patches &amp; updates, State &amp; Federal compliance, Security training &amp; education</td>
</tr>
<tr>
<td>5</td>
<td>Business Operations &amp; Applications</td>
<td>Devices: Laptop, Desktop, Tablet..., Project Management/Business Process improvement, Industry standard application suites, System integration &amp; design</td>
</tr>
<tr>
<td>6</td>
<td>Technology for Public Engagement</td>
<td>Beautiful, modern website, Intuitive civic engagement opportunities, Open and transparent government resources, Highly leveraged GIS for storytelling</td>
</tr>
<tr>
<td>7</td>
<td>Training &amp; Education</td>
<td>TechResources Library, On-Boarding, Professional development &amp; growth, Peer mentoring</td>
</tr>
<tr>
<td>8</td>
<td>Policy, Practice &amp; Leadership</td>
<td>Develop and maintain modern IT policies, Look toward and implement best practices, Maintain awareness of emerging trends, Innovation</td>
</tr>
</tbody>
</table>

## STRATEGIC INITIATIVES

The IT Department is focused on work in six major Strategic Initiative areas as defined below.

<table>
<thead>
<tr>
<th>Information Technology</th>
<th>Geographical Information Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Customer Success</td>
<td>4 Engaged &amp; Empowered Users</td>
</tr>
<tr>
<td>Perpetuate our existing technology investments through maintenance, upgrades, and life-cycle management. Ensure a highly secure and stable environment which protects staff and constituent data and is designed around service delivery.</td>
<td>Cultivate, engage, and empower our users and constituents such that they can play a collaborative role in the development and maintenance of our datasets and improve the way we serve our communities.</td>
</tr>
<tr>
<td>2 Infrastructure &amp; Security</td>
<td>5 Usability &amp; Access</td>
</tr>
<tr>
<td>Deliver high quality telephony, voice, data, and radio communications for day-to-day operations and emergency response leveraging the opportunities provided by Digital 395 and other platforms.</td>
<td>Provide exceptional user experiences by delivering well-designed, modern, and fluid resources across various devices and locations.</td>
</tr>
<tr>
<td>3 Communications</td>
<td>6 Data Quality &amp; Availability</td>
</tr>
<tr>
<td>Provide exceptional user experiences by delivering well-designed, modern, and fluid resources across various devices and locations.</td>
<td>Deliver consistent and accurate data to end users and constituents while continually working to improve quality and expand the reach of our datasets.</td>
</tr>
</tbody>
</table>
## Customer Success

### 1.1 Empower customers to effectively utilize the technology we deploy

1. **1.1.1 Provide high quality customer support**
   - Deploy a new Work Order Management System focused on transparency and customer interaction
   - Improve customer access to support staff through phone, live chat, SMS, etc.
   - Provide timely and direct response to customers regarding work orders and target resolution

2. **1.1.2 Improve overall project delivery and increase customer satisfaction**
   - Utilize BA techniques to effectively gather requirements, refine needs, and develop project charters
   - Leverage Agile methodologies to improve project delivery and outcomes
   - Implement systems which provide transparency into work efforts

3. **1.1.3 Increase training for staff and provide self-help resources**
   - Grow a TechLead program in order to further capabilities within each department
   - Build out a customer portal for technology resources and support initiation
   - Offer a diverse set of training opportunities that are informed by end-user needs

### 1.2 Utilize technologies and systems to improve business operations and better serve our constituents

1. **1.2.1 Improve processes and operations through data-driven decision making**
   - Help define key metrics for each department which describe operational effectiveness
   - Implement performance tracking systems to gather data and make informed decisions
   - Evaluate business processes for continuous improvement

2. **1.2.2 Leverage technology to improve citizen engagement, interaction, and communication**
   - Maintain and incrementally improve County website and other digital media resources
   - Utilize Citizen Engagement and feedback technologies for input on key decisions and efforts
   - Assist departments in using Granicus and other available tech to better connect with their customers

3. **1.2.3 Leverage Enterprise and Business systems to improve operations**
   - Evaluate each department’s core business system(s) for needs, opportunities, and consolidation
   - Implement eSignature offering and integrate with enterprise document management system
   - Leverage Office 365 and SharePoint for collaboration, mobility, and productivity offerings

## OUTCOMES & MEASURES

- **Important public meetings are live streamed and recorded via Granicus**
  - December 2019

- **70% of IT support resources are available in an online portal which reduces support requests by 30%**
  - December 2019

- **75% of transactions occur on eSignature platform instead of via paper**
  - December 2020

- **50% reduction in paper and printing costs across both organizations**
  - December 2021
2 Infrastructure & Security

2.1 Develop and support a modern work place with complementary technology

2.1.1 Physical workspace design based on user needs and complimentary technology
- Participate in design phase of new facilities and offer guidance from a technology perspective
- Advocate for adequate and resilient technology improvements in all facilities
- Effective space and technology utilization which leverages modern work concepts & options

2.1.2 Plan for business continuity and disaster recovery
- Evaluate and develop BC/DR needs for each business line and their critical business functions
- Work toward implementation of short and long term plans and processes
- Increase awareness and training through regular exercise
- Facilities which reflect a modern workforce & technology use
- Resilient workforce capable of supporting our constituents

2.2 Ensure a safe and secure work place

2.2.1 Protect personnel, data, and systems
- Training, education, and awareness for IT and other personnel on security related topics
- MFA, DLP, MDM, and Encryption governed by effective monitoring for data security
- Leverage technology to improve physical and network security
- People and data are protected

2.2.2 Improve response to security events
- User engagement and awareness aimed at improving incident reporting
- Empower the Cyber Incident Response Team to effectively respond to security incidents
- Leverage local and national resources for effective and timely incident response
- Events are responded to appropriately

Outcome & Measures

- 98% of staff are resistant to phishing
  - December 2019
- 100% of Agency Owned Devices are encrypted
  - December 2020
- Clearly defined and completely understood process for security incidents
  - December 2019
- 100% attendance in security trainings
  - December 2021
3 Communications

Deliver high quality telephony, voice, data, and radio communications for day-to-day operations and emergency response leveraging the opportunities provided by Digital 395 and other platforms.

3.1 Deliver modern, reliable, and flexible communication technologies

3.1.1 Implement and leverage Unified Communications across the organization
- Implement and integrate new County phone system; Look for opportunities to expand reach
- Educate around opportunities for real-time collaboration and information sharing
- Promote adoption of features and functions to improve communication and business processes
  - Communication tools are effectively used by staff

3.1.2 Maintain a reliable, secure, and modern network
- Plan for and program network infrastructure upgrades
- Monitor, optimize, and upgrade broadband service as needed
- Deliver a high-capacity wireless network to all staff
  - High uptime with exceptional performance

3.1.3 Improved communications for disaster / emergency response
- Integrate IP & radio to implement an emergency communications platform
- Technology focused exercises centered around emergency preparedness and operations
- Develop and deploy an EOC in a Box solution for recovery and response
  - Enhanced emergency communication and situational awareness

3.2 Improve upon and leverage public-facing communications and broadband investments

3.2.1 Support businesses, residents, and visitors in leveraging Digital 395 to diversify our economic base and improve quality of life
- Partner with service providers to close infrastructure gaps and reach 98% access to Gigabit internet
- Develop information and tools which help users make informed decisions and adopt broadband
- Advise and support on Public WiFi offerings in appropriate communities
  - Informed and connected residents and visitors

OUTCOMES & MEASURES

- 99.9% network uptime for core infrastructure
  - December 2019

- Phone system outages are reduced to planned maintenance
  - June 2019

- 98% of Mono County households have access to Gigabit internet
  - December 2021

- Agency campuses are fully covered with WiFi commensurate with wired speeds
  - December 2020
GIS STRATEGIC PLAN (2019-2021)
GEOGRAPHIC INFORMATION SYSTEMS (GIS) DIVISION
Mono County Information Technology

Geographic Information Systems (GIS) have become a cornerstone of the technology services provided by Mono County Information Technology over the past 15 years. As mobility increases in the workforce, location awareness and a deeper understanding of geography is becoming paramount for everyday decision making across virtually every business line of our organization. The team that comprises the GIS Division at Mono County is committed to working collaboratively to deliver leading edge technology to internal staff, and the constituents we support. The following GIS Strategic Plan outlines the goals and methodology we will follow in this pursuit.

OUR MISSION

*Use geography as a means for collaboration, transparency, and decision making.*

STRUCTURE OF THE PLAN

The 2019-2021 Mono County GIS Strategic Plan is organized into three high-level Initiatives. Under each Initiative are a series of Goals, which are supported by Key Strategies and Tactics. Each of these main focus areas has associated Results, in addition to each Initiative a set of Key Outcomes.

The graphic to the right describes the visual layout of the plan which proceeds on the following pages.

INITIATIVES

This Strategic Plan focuses on three main Initiatives and associated Visions, as described below:

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Usability &amp; Access</td>
</tr>
<tr>
<td>5</td>
<td>Data Quality &amp; Availability</td>
</tr>
<tr>
<td>6</td>
<td>Engaged &amp; Empowered Users</td>
</tr>
</tbody>
</table>

These Initiatives are all ultimately aimed at delivering high quality data to our users through a variety of methods – namely focused applications or direct access to the data itself.

Our general approach is to leverage web-based technologies to facilitate near-real-time access to information, while simultaneously reducing or eliminating the impacts on GIS staff to produce such information.

Carrying out these Initiatives positions staff within our organization to make highly informed decisions based on high-quality information. It also positions Mono County in such a way that parties interested in conducting business, relocating, providing service, or otherwise engaging with us an organization have the best information available, with limited hassle to access it.

OUTCOMES AND MEASURES

Each of the Initiatives covered on the following pages features a series of immediate Results, as well as overall Outcomes which will be realized if efforts are successful in completing the work efforts.
Engaged and Empowered Users

Cultivate, engage, and empower our users and constituents such that they can play a collaborative role in the development and maintenance of our datasets and improve the way we serve our communities.

4.1 Integrate GIS as a key business system which assists with process improvement and operational efficiency

4.1.1 Leverage TechLeads as liaisons who engage for effective utilization of GIS within each department

7. Effectively engage departments to better understand business processes and user needs

Help SMEs develop applications which improve citizen engagement and outreach

Foster the use of emerging technologies and opportunities that may improve business operations

Empowered users who deliver appropriate and focused products

4.1.2 Eliminate barriers-to-entry for users such that GIS is more accessible and easier to use

Maintain the GIS User Group for disseminating information and seeking feedback

Produce written and video documentation and tutorials for all critical systems and key processes

Instill a level of awareness around GIS capacity as part of employee on-boarding and training

Extensive adoption of GIS across the organizations and among the public

4.2 Set a high-bar and lead by example where collaboration and engagement drive our work

4.2.1 Collaborate and coordinate with other agencies and key stakeholders

Participate in Regional User Group and similar meetings to share information and resources

Make tools, services, and resources available to partner agencies

Encourage partner agencies and stakeholders to adopt open standards for easy collaboration

Ready access to our data by others – and their data by us

4.2.2 Provide tools and resources that increase citizen and staff engagement and decrease staff demand

Provide a balanced application portfolio which addresses wide ranging user needs

Deploy easy to use web applications that are ‘mobile first’ and meet the needs of 90% of users

Design tools and applications which help our staff collect critical information from constituents

Engaged and informed citizens supported by simple applications

OUTCOMES & MEASURES

At least one Citizen Engagement application deployed for each agency

December 2019

Fully leveraged web GIS environment where all services are available on all devices from anywhere at any time

December 2020

SMEs in each department take responsibility for their data and online content

December 2021

Open standards based set of tools and data resources which can be fully leveraged

December 2021
5
Usability & Access

Provide exceptional user experiences by delivering well-designed, modern, and fluid resources across various devices and locations.

5.1 Improve security by implementing consistent and pervasive authentication experiences

5.1.1 Deploy a solution which provides a unique login for each user or entity
- Integrate existing Active Directory stores and other identity stores using industry standard products
- Implement a unified identity store across all applications and services
- Audit existing security and access and minimize shared accounts and privileges
- All users provided a ‘Single Sign On’ experience

5.1.2 Effectively protect applications and datasets
- Implement and integrate industry standard Multi-Factor Authentication tools
- Ensure proper security settings and permissions for all applications and datasets
- Provide a seamless & secure access experience for Public Safety personnel on mobile devices
- A highly secure & highly dependable application environment

5.2 Develop & deploy web and mobile apps that are focused, easy to use, current, and well-presented

5.2.1 Emphasize modern digital mapping, while simultaneously minimizing printed products
- Deploy requested maps as web services with beautiful cartography that meets user needs
- Leverage automation tools to deliver commonly accessed maps in an on-demand manner
- Implement on-demand print/output tools for all web apps enabling dynamic PDF and print outputs
- Increased portability and access to information; Reduced paper

5.2.2 Provide tools and resources that increase citizen and staff engagement and decrease demand on staff
- Provide a balanced application portfolio which addresses wide ranging user needs
- Deploy easy to use web applications that are ‘mobile first’ and meet the needs of 90% of users
- Design tools and applications which help our staff collect critical information from constituents
- Focused applications which support informed and engaged citizens

5.2.3 Develop, deploy, train, and leverage applications, online resources, and associated information for improved emergency preparedness & response
- Public facing content focused on emergency preparedness (and response – if needed)
- Robust application suite geared around supporting first responders during emergencies
- Consistent framework for communication across and between allied agencies around emergencies
- Prepared public & staff who can effectively react to emergencies

OUTCOMES & MEASURES

- All users will have unique and pervasive credentials that leverages SSO & can be integrated with MFA solutions.
  December 2019

- A web portal integrated with agency websites where users can find everything they need in 3 Clicks or Less.
  June 2019

- Preparedness Portal which provides constituents with key information around emergency readiness.
  December 2020

- Comprehensive data catalog where 90% of core agency datasets can be downloaded or directly connected to.
  December 2020
## OUTCOMES & MEASURES

### 6.1 Data Quality & Availability

Deliver consistent and accurate data to end users and constituents while continually working to improve quality and expand the reach of our datasets.

#### 6.1.1 Maintain data in its native and authoritative system

- Establish and adhere to guidelines for where data is to be stored - consolidate data as needed
- Provide direct access to data using web services and applications whenever possible
- Implement distributed database technology that helps ensure continuous data access

**High availability of authoritative data via standardized interfaces**

#### 6.1.2 Ensure data quality in all business systems through regular updates, and seamless integration

- Leverage SMEs or Tech-Leads in departments for data quality and consistency review
- Update data in siloed business systems from authoritative sources on a regular basis
- Develop and maintain current and descriptive metadata for all data products

**Consistent and accurate data exists in all business systems**

#### 6.1.3 Facilitate clean-up of core data sets

- Clean up geometry and attributes in the Parcel Fabric and other core data sets
- Perform analysis nightly to identify data quality issues
- Utilize interns where possible for data review and update efforts

**Accurate data sets in an established maintenance program**

#### 6.1.4 Minimize future errors by implementing quality control measures

- Develop solid SOPs, workflows, and business processes to ensure consistency in editing
- Utilize software functions to better manage edit sessions and ensure data quality
- Implement Linear Referencing and Associated Fabric Classes for relevant data sets

**Consistent, standard, and fully developed data meeting best practices**

#### 6.2 Leverage high quality data for informed, analytic-based decision making

- Deploy customer-facing applications and web resources allowing users to quickly and clearly interact with data
  - Develop an understanding of customer needs for effective design
  - Leverage dashboards, modules, and standardized interfaces for users to visualize & analyze
  - Utilize COTS and OOB technologies that are matched with user skill levels and needs

**Modular, reusable, and effective tools inform decisions and breakdown silos**

- Improve access to data by implementing data portals, enterprise-level search tools, and other externally-facing transparency tools
  - Consolidate geospatial data, maps, and applications in one easy-to-use location
  - Integrate data and associated information into the County & Town’s websites
  - Deploy an enterprise search tool which allows customers to easily and quickly find data & information

**Easy access to authoritative datasets and information**

### OUTCOMES & MEASURES

- **Dashboards deployed for operations within the Public Safety and Public Works departments**
  - December 2019

- **Enterprise Search functionality allowing constituents to find any information in 3 Clicks or Less**
  - December 2020

- **An implemented Quality Control system resulting in 90% error reduction identified during nightly update scripts**
  - December 2021

- **In all of the departments using GIS, a SME is maintaining departmental datasets**
  - December 2021