Town of Paradise Valley

Final Report

Information Technology Strategic Plan

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About Mindboard. Mindboard is an Enterprise Modernization Consulting organization that primarily serves the US public sector. The firm focuses on helping organizations modernize their operations through effective strategic planning, process streamlining and technological upgrades where appropriate. Our services include IT strategic planning, business process reengineering, system requirements definition, vendor and contractor selection and implementation, and enterprise architecture planning. Our team is comprised of industry experienced consultants and certified project management professionals who are service-oriented and excellence driven. Mindboard is an independent, third party consulting company that is not aligned with a particular technology or platform, allowing us to provide unbiased, client focused recommendations.

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Executive Summary

The Town of Paradise Valley (PV) was founded in 1961 to curb the advance of growing urban centers to the east and west (Phoenix and Scottsdale), and preserve the valley's history as a residential community, benefiting from a small government, firm zoning laws, and freedom from levies on the ownership of property. Largely, these core values and philosophies have remained intact for the last fifty-four years. Year-round, citizens enjoy limited government interference, while valuing services that are offered—e.g. the ability to walk to the local Post Office, pay utility bills in-person, or purchase a subscription to the Town's Alarm Service.

Following an uptick in break-ins in late 2012, a Public Safety Task Force was formed, and attention focused on the outdated technology being used by the PV Police Department (PVPD). The Town Council unanimously approved a significant budgetary allocation for modernization, outfitting the Police Department with the technology assets it needs to keep PV a safe and attractive residential community. This technology refresh has sparked a dialogue about the function of technology to deliver high-quality and efficient services to the citizens of PV without compromising the vision of small government that is essential to the Town's identity. After the completion of the PVPD's technology upgrade, the Town Council and Town's Information Technology staff initiated a selection process for a strategic technology plan vendor, allowing the opportunity for a third party to critically assess the Town's ability to leverage technology in the service of its citizens. This initiative will serve as a roadmap for addressing short- and long-term technology needs across the organization.

The selection process resulted in the Town engaging Mindboard, an independent third-party consulting firm, to conduct a current-state assessment of its Information Technology (IT) operations and provide recommendations on technology improvements in the form of a three-to-five year strategic plan that will ensure efficiency, effectiveness, and reliability in the Town's IT environment.

The primary goals of this engagement were to understand the current state of IT functions, the desired future state, and ensure that the Town possesses the necessary operational and technical capacity, skills, and resources to achieve the anticipated future state. To this end, Mindboard has developed specific and actionable recommendations which will enable the Town to maintain and support its current infrastructure, as well as position the Town to improve its IT functions in a cost-effective, responsive, secure, and stable manner.

As identified in this engagement, some of the critical challenges facing the Town of Paradise Valley include:

- Challenges to the delivery of day-to-day IT services and troubleshooting;
- Inadequate IT leadership;
- Delays in decision-making process regarding important long-term projects;

- Decentralized procurement, leading to instances of outdated and incompatible software implementation; and
- Outdated essential software and hardware outside of the Police Department.

To conduct this analysis, Mindboard utilized a four-dimensional approach, comprised of **People**, **Process**, **Policy** and **Technology (3PT)** to acquire a high-level understanding of the current state of the Town's IT environment. In addition to assessing each facet of 3PT individually, special attention was paid to interactions between each element. The 3PT approach was the critical core of the following assessment tasks:

- **Task 1: Documentation Review** – Reviewed all relevant documentation related to the delivery of IT services.
- **Task 2: Exploratory Meetings & Interviews –** Conducted personal interviews with key stakeholders within the Town to develop an understanding of the views and opinions of each department and stakeholder.
- **Task 3: IT Infrastructure Assessment** – Developed an understanding of the hardware, applications, and networking systems being used by the Town, including potential deficiencies or opportunities for upgrades.
- **Task 4: Review of Current IT Policies, Procedures, and SLAs –** Reviewed the policies, procedures, and Service Level Agreements governing the functionality of the Town's IT department.
- **Task 5: Conduct IT Gap Analysis –** Critically compared the current state of IT functions within the Town with the desired future state ascertained from the preceding activities.
- **Task 6: Develop IT Strategic Goals, Objectives, and Strategies & IT Strategic Plan –** Based on industry knowledge and experience, developed specific recommendations for actions that can ameliorate gaps identified in the ability of the Town to deliver essential IT functions.

The recommendations developed by Mindboard were based on the issues identified in the Gap Analysis, a critical part of the engagement that identifies and prioritizes challenges associated with the Town's technology environment. Recommendations were organized along a suggested implementation timeline, categorized in **immediate term** (0-3 months), **short term** (3-12 months), **medium term** (12 – 24 months), and **long term** (>24 months). The proposed strategic recommendations, in order of priority, are listed below:

Immediate Term Recommendations (0-3 months)

1. Create and fill the position of Information Technology Coordinator; Implement uniform process for IT helpdesk and troubleshooting
2. Update hardware/software inventory and centralize technology procurement
3. Invest in, and implement formal training program for IT staff
4. Integrate Payroll with an HRIS solution to improve payment processing functions

Short-Term Recommendations (3-12 months)

5. Select and implement a new permitting system for Community Development to include field inspection capabilities
6. Expand the Town website with e-solution(s) for applications, onboarding, and Community Development permitting functions
7. Update and expand administrative policies governing the appropriate use of technology resources, and include formal methods of updating and communicating them with the Town

Medium-Term Recommendations (12-24 months)

8. Form an IT Governance Committee with the purpose of establishing overall direction and priorities for technology at the Town of Paradise Valley
9. Procure and implement town-wide enterprise GIS system
10. Establish a centralized single-solution payment processing system
11. Procure and implement a modern work order management system for Public Works

Long-Term Recommendations (>24 months)

12. Select and implement an effective course of action for the Town's alarm system service
13. Procure and implement town-wide ERP system

Section 2: Critical Analyses and Deliverables

Section 2.1: Initial Findings

The first segment following primary data collection is the assembly of initial findings, organized by department. To gain a complete understanding of each department's current and desired future state, we utilized primary information from the interviews with key personnel and IT documentation we received. Below are the Initial Findings of the Current State Assessment (documented as of April 2015), applied as a basis for the subsequently developed **Gap Analysis (Section 2.2)**.

Municipal Court and Court Services

PV's Municipal Court Services predominately operates independently from the rest of the Town, due in large part to laws governing the separation of branches of government. Court Services utilizes a set of applications unique from the rest of the town, subject to the requirements of the Supreme Court reporting structure. The chief need expressed by the Town's Court Services was for a full-time member of IT staff assigned exclusively to the Courts to specifically manage upcoming projects. Currently, IT services are distributed across all town departments, which can result in a significant delay in day-to-day technology tasks—troubleshooting, desktop maintenance, patching, etc.

Additionally, the Court is in the process of upgrading the Justice Systems FullCourt software to FullCourt Enterprise, as well as initiating the purchase of an Interactive Voice Recognition (IVR) payment system. As part of those engagements, the courts have expressed a desire for a dedicated staff member who will be assigned full-time as a Project Manager for the FullCourt upgrade and provide benchmarking analysis and "legwork" on IVR selection and implementation.

For a time following the implementation of PVPD's new e-ticketing platform, Court Services was unable to accept the new e-tickets due to a misalignment between the tickets produced by PVPD's new software and the formatting required by the Supreme Court of Arizona. This has since been corrected, but could potentially have been prevented with communication between an IT Project Manager and each department affected by the PVPD refresh.

Human Resources

Paradise Valley's Human Resources Department is responsible for providing the services related to the recruitment, hiring, payroll, and benefits management. HR interacts with each employee of the Town individually, but predominately interacts with Administration and Government Affairs for payroll functions. Historically, payroll information, delivered in the form of paper timesheets routed from Administration and Government Affairs, was logged through Paychex and tracked in paper spreadsheets. There was no HRIS application, though a contract was signed, and initial payment made, to **Paycom Software, Inc.** for an integrated, cloud-based payroll and HRIS system. The contract was on hold, and was just recently implemented with a scheduled completion of

11/1/2015. This implementation will also resolve a misalignment between pay-dates for salaried and hourly employees and issues with calculating overtime.

It was expressed that, with the current staffing levels, there is only time for day-to-day tasks, perhaps a contributing factor to the delay in Paycom implementation. Document management is currently partially-handled by SIRE Technologies document management system, but is being replaced as part of a town-wide migration to Laserfiche and Granicus document management systems. The bulk of other HR functions are handled in a paper form, offering insufficient online integration, e.g. employment applications are in a printable PDF format. In this respect, current HR processes fall short of industry best practices and standards, which dictate use of an HRIS including seamless information sharing between HRIS and payroll systems. Currently, PV uses a cumbersome manual process for time entry and payroll, subject to human error and delays. This lack of integration ripples out, impacting payroll functions in the Administration and Government Affairs department and preventing all employees from accessing payroll information online.

Town Clerk

The Office of the Town Clerk is responsible for elections management, record-keeping, liaising with the Arizona State Legislature, and the role of internal webmaster, managing the Town's website and the publication of Town Council agendas, minutes, and video recordings. The office of the clerk is the single point of contact for press releases, mailing lists and subscriptions, form creation, service request tracking, bid postings, and content published to the Town's website. As a function of managing communications, the Clerk is responsible for social media content, as well as defining and maintaining standards of the Town's brand online. The Clerk recently spearheaded the planned transition to Laserfiche and Granicus for document management.

Though not directly under the domain of the Town Clerk, the concern was presented that administrative policies were last defined more than ten (10) years ago, and the last guidelines for the access and usage of internet resources were defined in 1998. Potentially irresponsible use (streaming and entertainment services) not only distracts individuals from their own jobs, but claims disproportionate bandwidth that slows other employees' tasks. It may be prudent to critically approach an updated set of administrative and data use policies, based on industry best practices and the Town's own needs.

The need was expressed for expanded training on the utilization of web resources in each department (including the maintenance and population of content on departmental web pages), as well as the use of Laserfiche, for which the Clerk is slated to act as technical support and provide troubleshooting services.

Community Development
Planning & Zoning, Post Office, Building, Fire Safety & Prevention, Code Compliance, Emergency Management

Community Development primarily interacts with permitting and compliance functions, tracking and enforcing zoning laws, issuing construction, remodel, and demolition permits, responding to property inquiries (water lines, sewer lines, addressing, etc.), among many other functions. Also under the purview of Community Development is Fire Safety & Prevention, managed by the Town's Fire Marshal, who is also one of the plan reviewers.

The primary need in this department, expressed both by Community Development staff and other departments within the Town, is for a modern and integrated permit processing application that includes support for inspection reporting, plan review process automation, and integration with a town-wide GIS solution. Currently CD is using an outdated and time-intensive permitting and tracking system comprised of the decade-plus-old Accella PermitsPlus, and an Excel spreadsheet for tracking work assignments.

Community Development also lacks field reporting capability, with field inspection data collection methods that range from paper notes to memorizing the inspection details of up to twenty sites per day, then compiling and completing the inspection report at the end of the day. This poses a concern with the accuracy of the report as well as a challenge to customer service, as it was noted that contractors often contact the department expecting details of the inspection the same day.

Some question was also posed as to the efficacy of process, in regards to document management and document sharing. Similar to Human Resources, the online system for permitting is a collection of printable PDF and Microsoft Word documents, some of which require editing before submittal.

Additionally, simple processes on the back end are held up by interactions between multiple unrelated systems, including paper maps, county-managed GIS systems, and other manual processes that have not been migrated to web or computer services.

Administration and Government Affairs: Finance
Accounting, Budget, Financial Reporting, Wastewater Utility, Alarm Services, Fire/EMS

The Department of Administration and Government Affairs at the Town of Paradise Valley manages the financial functions of the Town, including accounting, payroll, accounts payable (AP), and purchase orders. This department also handles billing for the following services:

- The Town's wastewater utility, which is paid through to Phoenix or Scottsdale, depending on which part of the Town the sewer line runs
- Alarm Services, for the Town-provided break-in, fire, or panic alarm system that dials directly to the Town's dispatch
- Fire/EMS services, which are respectively contracted to the City of Phoenix and a private vendor

Administration and Government Affairs primarily utilizes Caselle Clarity and Paycom for day-to-day accounting and payroll functions. Caselle offers a range of modules and internal applications for

budget, accounting, billing, receivables, accounts payable and more. Many of the potential functions of Caselle, including payroll and procurement, are not currently licensed and in-use. On the whole, Caselle appears to be an effective tool, with the exception of a few minor inefficiencies within the program. Journal entries related to payroll and payroll information are updated manually, and document management remains in paper form, similar to HR and the bulk of Community Development. Paycom recently replaced payroll functions, though the interaction between Paycom and Caselle still includes manual processes.

The Town has partnered with XPress Bill Pay to deliver online billing, though the Town must maintain "analog" bill pay options, at the request of the citizens. Business license payments can be collected at the Planning Department counter. The Town is currently unable to collect credit card payments in most cases (water billing can be collected by credit card in-person). The desire was expressed across departments to expanded options for credit card payments. However, the lack of a unified credit card payment processing policy and the necessary hardware to process newer chip-based credit cards has hindered this. The Town has recognized in the past that it may be prohibitive to pay the percentage fee to credit card companies/banks, particularly in the case of large permitting fees.

Administration and Government Affairs: Information Technology

Information Technology's role—both broadly and within the Town of Paradise Valley—has expanded in recent years with the advent of new and more accessible technologies that define and improve the way organizations function. IT at Paradise Valley manages the bulk of hardware, software, and networking infrastructure owned by the Town, including routine maintenance, backups and disaster recovery, technology upgrades and refreshes, and troubleshooting. This department has played an integral role in the PD's recent comprehensive technology upgrade, with dedicated staff members and resources allocated to completing the project.

Information Technology, for the most part, operates independently of the rest of the Department of Administration and Government Affairs, maintaining a reporting structure that routes through to the Director. Historically, the technology under the purview of IT would be limited to financial software for accounting and payroll. Now, every department depends on technology in some capacity to provide core services. Many organizations have not reorganized their reporting structure to reflect the expanded responsibility of Information Technology. This can happen for a few reasons:

- The organization has not taken the time to "catch up" to the explosive changes in how technology defines workflow
- Keeping IT under Finance has posed no significant hindrance to the IT function's ability to provide core services, or the creation of a separate department has promised no perceived benefits to the organization
- Maintaining staffing levels while increasing the number of departments can lead to a glut of middle management within a small organization, potentially decreasing efficiency.

Despite these three valid reasons for maintaining the traditional structure, it is important to critically assess the needs and services offered for each organization, to determine if some form of restructuring or autonomy is necessary for IT to function effectively and efficiently. Town Management expressed that the example provided by the Town Clerk's office might be considered for the rest of the organization as a way to reduce the IT work load. Users at the Town Clerk's office have the ability to troubleshoot a specific application issue directly with software vendors through support services agreements. The vendor is expected to provide a summary to IT of the issue and action taken and IT staff are brought in on the issue if it requires escalation, or needs elevated privileges to resolve the issue. If the user needs help in identifying the issue before calling support, or if the issue is not obviously tied to a service or maintenance agreement, IT staff handles the issue directly. This model is working well for the Police, Court and Administration and Government Affairs departments. While the idea is to be able to take advantage of existing or budgeted maintenance agreements to directly help end users, it should be noted that not all end users may be technically equipped to deal with vendors, thus delaying resolution of the issue.

The primary need identified by Information Technology was effective staffing practices. With three (3) full-time staff members—two (2) Analysts and one (1) Technician—and one (1) half-time Intern in prior years, one Analyst attributed gaps in service to a labor deficit, estimating the department is short staffed, based on the needs expressed by department directors. The allocation and management of staff was punctuated during the PVPD refresh, as the Technician was formally assigned to vehicle technology installs in PD and one Analyst adopted the role of Project Manager, leaving the remaining Analyst and Intern to manage day-to-day tasks, maintenance, and troubleshooting. These staffing practices have precipitated a number of complaints about the turnaround time on fixes, and the inconsistent quality of internal customer service that is provided.

In an effort to organize and manage day-to-day caseload, IT adopted use of Spiceworks, a web-based, free ticketing, tracking, and documentation platform. Without enforceable guidelines on best use and practices, many of the benefits of the ticketing system are being underutilized. Tracking is not being performed. No metrics have been defined against which to compare results. End users have expressed concern that Spiceworks is being used in place of providing high-quality customer service, and that tickets, even when routed properly through the platform, are being "lost" with no follow-up. As a result, the internal customers of IT have little confidence in the service being provided. Additionally, the ticketing system is not used for trend analysis and preventative maintenance. With no defined leadership role below the Director of Administration and Government Affairs, the department has been unable to determine best practices and create enforceable metrics for quality of service.

The perceived staffing deficit, PD refresh, and backlog of tasks and troubleshooting have prevented the department from following through on larger efforts to modernize. Discussions regarding migration to "Cloud-based" solutions have been halted, and the Town continues to back up data to tape. Procurement of a Town-wide GIS platform has stopped until a "needs assessment" can be completed, and departments continue to rely on multiple systems, workarounds, and resource-intensive manual processes. The alarm system provided to the citizens of PV is woefully outdated,

with key hardware components dating back to the 1980s; and the discussion on how to upgrade the system, as well as how to budget it in such a way that it is a profitable venture for the Town, had not taken place as of early 2015.

Challenges to Information Technology's effectiveness could stem from inefficiencies in the allocation of staff and a lack of accountability to internal leadership. One of the key elements identified as contributing to the success of PD's technology refresh was the culture of a law enforcement department, where there is a clear chain of command and the enforceable rules guiding the dissemination of direct orders. In its current state, the IT department reports "up the chain" to the Director of Administration and Government Affairs, who oversees five other divisions, and may or may not possess the technological expertise to make decisions in the best interest of the organization. The IT departmental staff meets weekly with the Director of Administration and Government Affairs for project updates, information sharing, and shared project management.

Finally, IT manages networking for PV (network map illustrated in the Supplemental Document to this report). Currently, all of the Town's business, regardless of department, resides on a single network. While this improves the capacity for data-sharing between departments, it may pose a potential data-security risk. As mentioned above (**Section 4: Town Clerk**), formal administrative and data-sharing policies have not been updated in more than a decade. Without enforceable guidelines on the use of extra-departmental data, this may pose a liability for the Town. More importantly, the unified network may be a factor contributing to the delay in moving to a cloud data storage solution, as Arizona state law prohibits criminal information from being stored in the cloud. To ameliorate this conflict, it may be wise to split the network, maintaining an isolated infrastructure for the PD that is separate from the rest of the Town. Court Services currently sit on a distinct network, as mandated by the separation of powers, and it may be wise to explore a similar arrangement for PD information.

Administration and Government Affairs: Intergovernmental

The Town management expressed a need for the following:

- Access to intergovernmental legislative analysis reports through sources such as Yellow Sheet, Arizona Capital Times, Legislation On Line Arizona (LOLA), etc.
- Access to other cities' analysis as well as to that of Arizona League of Cities and Towns
- Access to legislative bills through azleg.gov

Administration and Government Affairs: Purchasing

Procurement is mainly handled at a departmental level, with accounting support and compliance provided by the Department of Administration and Government Affairs. The Town management expressed the need for a full time Purchasing Officer position, to alleviate discrepancies and gaps in the procurement process, including, but not limited to information technology. The lack of a centralized procurement process, especially as it relates to IT purchases, may have led to redundant purchases, inefficient service agreements and general misalignment of IT purchases with the overall information technology infrastructure within the Town.

Police Department
Field Operations, Support Services, Emergency Communications

The Paradise Valley Police Department is broadly responsible for the safety of the citizens of PV. Their purview includes traffic safety, crime prevention and resolution, and emergency service dispatch. Having recently undergone a significant technology upgrade, very few gaps were identified in technology that may be preventing PVPD from fulfilling core functions. The only exception to this is the implementation of a town-wide GIS configured to serve all departments. The request for a GIS was repeated in nearly every department, each asking for a single, integrated solution that allowed "cross-talk" between the functional areas of each department. For example, there are instances in which PVPD may need to access Public Works data on traffic light locations or Community Development data on flood washes, addressing or permitting, among others.

Included in the technology refresh were New World Systems' CAD/RMS, automatic License Plate Readers (LPR) by L-3 Communications, Mobile Data Computers (MDC) hardware by Motion Computing and software by L-3 Communications, e-ticketing software and hardware by Brazos Technology, mobile radar by Stalker/Applied Concepts, and additional fixed radar by Redflex Holdings. These upgrades place PVPD well ahead of the industry standard, in regards to the technology assets it now possesses. That being said, in the wake of a substantial leap in technology assets, attention must be paid to how the Department is going to strategically move forward. Without a plan ensuring sustainable budgeting and administrative practices (regarding equipment maintenance costs, continued training, and staffing support), a reasonable concern is raised about the PD once again being left behind by technology, perpetuating the "leapfrog" model of technology adoption.

Public Works
Field Operations, Fleet Maintenance, Facilities Management, Engineering

Public Works provides routine maintenance and upkeep to public property and infrastructure, including traffic signals and signage, flood washes, roads, Town fleet maintenance (including police, post office, and administrative vehicles), Town property, and more. The department utilizes Lucity, implemented in 2014, currently owning licenses for pavement management and signage

maintenance, with plans to adopt additional Lucity modules that include work order management, facilities management, and customer service tracking. Ron Turley & Associates (RTA) Fleet Management System is used for tracking vehicle maintenance and vehicle-specific work orders, functioning as an all-in-one program as opposed to licensing modules for different functions like Lucity. Functions included in RTA are:

- Vehicle inventory, including:
  - Parts and equipment management
  - Warranty tracking
  - Odometer entry
- Work order management
- Vehicle repair history

Currently, Public Works does not utilize some functions of RTA, including fuel tracking, due to a disproportionate amount of time and effort to manually enter information. With the installation of PD's Mobile Data Computers, fuel tracking and other maintenance information is expected to automatically sync with RTA.

The bulk of other non-vehicle work orders are paper-based and being tracked in Microsoft Word or Outlook until the new Lucity module is adopted. Engineering uses Accela Permits Plus, the same outdated system being used in Community Development.

The most significant technology deficit voiced by Public Works was the need for a Town-wide GIS that includes storm-water drainage, sanitary sewer, traffic lights, and other data relevant to Public Works and other Town departments. Currently, the department is utilizing Google Earth Pro, which provides some core GIS services, but falls short in some functions. Particular challenges to GIS functionality are:

- Google Earth Pro does not have the ability to drill down to source data, and the information that is accessible cannot be queried
- The data collected and included in Google Earth Pro is incomplete and based on outdated information or errors. Some layers used for wash maps and flood control are, in some cases, only 40-50% accounted for.

Section 2.2: Gap Analysis

Objective

In order to gain a complete understanding of the issues and concerns related to the Town of Paradise Valley's IT environment, and to help formulate appropriate strategic recommendations for the organization, Mindboard conducted a comprehensive IT Gap Analysis. This IT Gap Analysis considers the current state of IT (as of April 2015) across the Town, in relation to the desired future state, and gaps present in the Town's pursuit of attaining the desired future state of IT.

Approach

Mindboard assessed the current ("As-Is") state and defined the desired future ("To-Be") state of IT at the Town. In the process, our team identified related "gaps" that need to be addressed before the Town attains its future state. The current state assessment (documented as of April 2015) is focused on leveraging the existing data gathered from the documentation review, interviews, and feedback from key personnel, in order to identify concerns/constraints and opportunities for enhancement. Furthermore, the future state describes specific results or most favorable outcomes based upon Town stakeholders' business vision/objectives, in conjunction with observed industry best practices. The **highlighted in blue** desired future state propositions and related gaps reflect Mindboard recommendations and industry best practices standards for each departmental section.

Current State	Desired Future State/Industry Best Practices	Gap(s)
Municipal Court and Court Services		
• Sharing IT staff with all other departments • Lack of IVR and phone payment system	• Dedicated full-time IT staff member for Courts • **Utilizing IVR with payment processing system and analytics**	• No full-time IT staff • **IVR is not yet implemented, and lacks payment system and analytics**
Human Resources		
• Using a cumbersome combination of **Paychex** and paper documentation for payroll • No **HRIS** solution • **Document management** is being handled by **SIRE** • Employment applications and hiring processes are managed through a printable PDF on the website	• **Using an integrated payroll and HRIS solution** • Document management in **Laserfiche** • **Using web service for employment application and onboarding** • **Provide up-to-date administrative policies governing the use of technology**	• Delayed adoption of **Paycom** • **Absence of an e-solution for application and onboarding** • Employee handbook has not been updated • Administrative policies are outdated

Current State	Desired Future State/Industry Best Practices	Gap(s)
Town Clerk		
• Using **SIRE** for document management • Town is using potentially outdated administrative policies governing the use of internet resources • Acting as tech support and troubleshooting for Laserfiche • Departments are not using electronic document management systems	• **Implement a modern and efficient electronic document management system** • **Town adopts modern and up-to-date administrative and data security policies** • Each department has staff capable of managing individual departmental web pages • **Allocate technical support and troubleshooting to the IT department**	• **New document management system not yet fully implemented** • **Absence of updated administrative policies** • **IT is not managing support and troubleshooting for all applications**
Community Development		
• Using **Accella Permits Plus** for permitting and **Excel** for tracking • No field reporting capabilities • Relies on paper mapping and County GIS for addressing and permit tracking • Paper intensive processes that create bottlenecks for efficient service delivery	• **Uses integrated permit processing application** • Department has the hardware and software necessary to deliver instant, in-the-field inspections and reports • **Makes use of integrated town-wide GIS solution**	• **Requires definition of needs for new permitting software, as well as procurement and fulfillment** • Absence of field inspection hardware/software • **Town is lacking integrated GIS solution**
Administration and Government Affairs		
• Using **Caselle Clarity** for accounting functions and **Paychex** for payroll functions • Implementing **Paycom** for payroll	• **Using automated payroll system that integrates with accounting software** • **Utilizing system that integrates accounting**	• **Paycom** not yet implemented, and interaction with Caselle is an unknown • **Town does not currently manage a solution for**

Current State	Desired Future State/Industry Best Practices	Gap(s)
• Currently cannot accept credit cards for most bill pay • Procurement is mainly handled on a departmental level, with accounting support and compliance provided by Administration and Government Affairs.	**and payroll workflow** • **Accepting credit card payments for all bills, or providing a convenient solution for PV citizens** • **Typically has a centralized Procurement officer**	**credit card payments** • **Town is lacking centralized procurement**
Information Technology		
• Reports to Director of Administration and Government Affairs • End-user confidence in departments abilities is weak • Majority of the staff is committed to PD refresh • Uses **Spiceworks** without enforceable use guidelines • All departments, with the exception of Courts, reside on a single network • Cloud computing is not being fully utilized • Current staffing floats around **1:24** (IT staff to Town staff) • Lack of consistent application of project management principles – project initiation, assignment, tracking, documentation	• **Uses clear reporting structure and internal "chain of command" to operate efficiently with enforceable guidelines for best practices** • Delivers consistent and high-quality customer service • Staff is allocated in such a way that day-to-day tasks and maintenance are not going undone • **Using an efficient ticketing system that fits well with the Town's business needs, including customer service metrics and the ability for end users to track ticket status** • **According to industry standards, ideal staffing ratio of IT staff to Town staff for an organization**	• **Lacks formal IT Governance policies** • **No enforceable standards or performance metrics for customer service** • **Priority and assignment of tickets has no recognizable system or order of operations** • **Inconsistent IT policy has delayed decision-making in regards to cloud computing and client-server infrastructure**

Current State	Desired Future State/Industry Best Practices	Gap(s)
	of this size lies between 1:20 and 1:30[1] (Organizations with tighter staffing ratios typically have an incentive or directive to stay cutting-edge) • **Best practices have been defined for service and task documentation, ensuring access to common fixes and processes**	
Police Department		
• Recently completed large-scale technology refresh • Uses up-to-date mobile field reporting and public safety hardware and software • Currently has partial GIS solution, as a part of **New World Technology's CAD/RMS** • Town-provided alarm service is using outdated technology	• PD continues to remain technologically relevant • **Makes use of Town-wide integrated GIS** • The Town provides a profitable and effective alarm service	• Standards for sustainable technology budgeting and maintenance have not been formally set • **Absence of a complete, integrated GIS solution** • A reasonable and effective course of action for the alarm system has not been selected
Public Works		
• Uses **Lucity** for pavement management and signage, and **Ron Turley & Associates Fleet Management System** for vehicle-specific work	• **Has computerized work order management system(s) for all Public Works functions, that includes:** **-Work order processing**	• **Absence of computerized non-vehicle work order management system** • **Town is lacking integrated GIS solution**

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[1] Organizing for Results: IT Structures and Staffing Survey people3, ITAA. 2003.

Current State	Desired Future State/Industry Best Practices	Gap(s)
ordering • Some functions of RTA cannot be utilized due to labor-intensive workflow • Uses partial GIS solution provided by Google Earth Pro, with population of data as low as 40-50% in some categories • As-built information for Town facilities non-existent, or not readily available	**-Mobility and on-site record-keeping** **-Workforce management** **-Geo-coding and GPS integration** • **PD vehicle information syncs automatically with Public Works work order management and tracking system** • **Makes use of town-wide integrated GIS** • **Keeps up-to-date with software and trainings to ensure department is utilizing current programs to their highest potential**	• Some employees are using outdated software • Old fleet management system needs refresh, expansion, and user training

Section 3: Strategic Recommendations and Action Plan

Based on the key findings identified from all project activities, Mindboard developed a set of recommendations. For implementation purposes, the recommendations were categorized into the following groups:

- *Immediate Recommendations (0-3 months)*
- *Short Term Recommendations (3-12 months)*
- *Medium Term Recommendations (12-24 months)*
- *Long Term Recommendations (>24 months)*

The following action plan presents Mindboard's strategic recommendations including action steps, resources, time-lines, and anticipated costs for successful implementation of each recommendation. The table below will provide a description of each line item included in the action plan.

Strategic Recommendation	#. Mindboard's recommendation
Gap(s) Addressed	Gaps, concerns, or risks associated with the strategic area.
Action Steps	A sequence of steps that must be taken, or activities performed, in order for the strategic recommendation to succeed.
Prerequisite(s)	Action steps, activities, or recommendations that must be completed prior to the implementation of the strategic recommendation.
Stakeholders	The parties affected by, or involved in the implementation of a strategic recommendation
Resources	The parties directly responsible for the implementation of the strategic recommendation.
Estimated timeline	The estimated amount of time required to complete the action steps.
Estimated cost	Estimated cost for implementing the recommendation based on industry averages. Note: cost estimates from vendors were not obtained.
Comments	Additional comments associated with the strategic recommendation.

3.1: Immediate Term (0-3 months)

Strategic Recommendation	**1. Create and fill the position of Information Technology Coordinator; Implement uniform process for IT helpdesk and troubleshooting.**
Gap(s) Addressed	In its current state, the Town's Information Technology department is lacking the direct oversight to ensure that staff resources are being utilized efficiently, and that longer-term projects are being managed in such a way that they will be completed in a timely and effective manner. There are challenges to the workflow of daily tasks, which results in a disproportionate number of unresolved IT issues. A tendency by some IT staff to "play catch up" without a clear system for addressing tickets can result in a poor quality of solution provided, or inconsistent customer satisfaction. The role of IT Coordinator will provide case management support to the team, ensuring that both daily tasks and long-term projects are being organized, addressed and completed according to an intentional and measurable process. Additionally, end user confidence in the IT service at the Town of Paradise Valley is low. The following specific gaps in the delivery of IT service were identified: • No enforceable standards or metrics for customer service • IT is not consistently managing support and troubleshooting for all applications • Management of tickets and IT issues has no recognizable process or order of operations
Action Steps	• Develop a job description. • Perform a search for qualified candidates. • Conduct interviews with the selected candidates. • Select the most suitable candidate. • Hire the candidate and assign responsibilities, including: 　• Draft standards for 　　o turnaround time on troubleshooting and day-to-day issues 　　o a practical method for addressing tickets by priority 　　o customer service and interpersonal minimums 　　o documentation and record-keeping 　• Conduct an end-user satisfaction survey with regularity, and modify expectations and standards based on feedback

Strategic Recommendation	1. **Create and fill the position of Information Technology Coordinator; Implement uniform process for IT helpdesk and troubleshooting.**
	(continued)
Prerequisite(s)	N/A
Stakeholders	All Town employees
Resources	Town Manager, Human Resources, IT Staff, Administration and Government Affairs
Estimated timeline	1 month
Estimated cost	Salary and benefits per Town policies
Comments	The Information Technology Coordinator will be a supervisory role that reports to the Director of Administration and Government Affairs. The chief responsibilities of the position will include project management, developing and enforcing IT service standards, and continuing an active role in day-to-day maintenance. Additionally, the Coordinator will be in charge of managing the activities of the IT staff, including, but not limited to weekly status updates, communication with the Town's executive team and ensuring that the overall strategic direction of the department is in line with the Executive vision. Implementing this recommendation will also ameliorate some of the issues with the perception of internal customer service at the Town. These standards are very dependent on the size and nature of the organization, and must be corrected as workload changes.

Strategic Recommendation	2. **Update hardware/software inventory and centralize technology procurement.**
Gap(s) Addressed	Desktop maintenance is not being completed in an efficient and effective manner. With the available staff and size of the organization, alternative methods of approaching hardware and software maintenance are worth exploring. Additionally, procurement of technology is being handled on a departmental level, with financial oversight and accounting support from Administration and Government Affairs. Departments often consult with IT as a courtesy, but the Town would benefit from a formalized chain of approval for technology purchases to ensure integration with Town goals.
Action Steps	• Inventory current hardware and software • Determine timeline for updating inventoried hardware and software • Explore options for hardware leasing or implementing virtual desktops • Assign procurement approval duties for technology to the IT Coordinator, who then determines procurement "workflow" that

Strategic Recommendation	**2. Update hardware/software inventory and centralize technology procurement.**
	(continued) includes approval with both IT and Administration and Government Affairs
Prerequisite(s)	**Recommendation 1:** Create and fill the position of Information Technology Coordinator
Stakeholders	All end users, IT Staff
Resources	IT Staff, Administration and Government Affairs
Estimated timeline	3-4 months
Estimated cost	Staff time, TBD
Comments	

Strategic Recommendation	**3. Invest in and implement formal training program for IT staff.**
Gap(s) Addressed	Keeping IT staff's skill sets current in order to effectively manage the Town's current and future IT infrastructure.
Action Steps	• Identify IT staff skill sets • Identify gaps in specific skill sets compared to current and anticipated technology implementations • Develop and implement annual training program that helps the IT staff maintain and enhance their skills
Prerequisite(s)	**Recommendation 1: Create and fill the position of Information Technology Coordinator; Implement uniform process for IT helpdesk and troubleshooting.**
Stakeholders	IT Staff
Resources	Town Manager, Human Resources, IT Staff
Estimated timeline	1 month
Estimated cost	TBD
Comments	The Town's IT staffing levels, compared to the current workload and strategic vision of the Town management, is considered to be adequate. However, given the technology investments that the Town is poised to make over the next several years, it is imperative that the IT staff's skills are kept current through a formalized training and education program.

Strategic Recommendation	**4. Integrate Payroll with an HRIS solution to improve payroll function.**
Gap(s) Addressed	Human Resources and Administration and Government Affairs have begun

Strategic Recommendation	4. **Integrate Payroll with an HRIS solution to improve payroll function.**
	(continued) procurement on **Paycom**, but it has not yet been implemented as of April 2015.
Action Steps	• Find a reasonable course of action to correct pay schedule misalignment • Implement Paycom HRIS and Payroll system
Prerequisite(s)	N/A
Stakeholders	Human Resources, Administration and Government Affairs
Resources	Human Resources, Administration and Government Affairs, IT Staff
Estimated timeline	2 months
Estimated cost	TBD
Comments	Integrating payroll functions with an HRIS system will replace cumbersome and resource-intensive processes, which will benefit the Town's operations and improve service delivery. The HR Department has already contracted with Paycom for their services.

3.2: Short Term (3-12 months)

Strategic Recommendation	5. **Select and implement a new permitting system for Community Development to include field inspection capabilities.**
Gap(s) Addressed	The current permitting system, **Accela PermitsPLUS**, is an outdated solution that lacks the features of a modern permitting system. There is no support for field reporting, workflow management or GIS mapping. The Community Development department must rely on adjacent systems, including separate maps for addressing, sewer and water lines, and washes.
Action Steps	• Conduct needs assessment, business process review and requirements definition • Initiate vendor selection/evaluation • Conduct contract negotiations with the selected vendor • Begin implementation of new system
Prerequisite(s)	**Recommendation 2:** Centralize hardware and software procurement with IT
Stakeholders	Community Development
Resources	Community Development, Administration and Government Affairs, IT Staff
Estimated timeline	3-4 months
Estimated cost	TBD
Comments	In order to determine the best permitting system that meets the Town's

Strategic Recommendation	5. Select and implement a new permitting system for Community Development to include field inspection capabilities.
	(continued) needs, it is imperative that the Town conduct an analysis of the Community Development Department's needs and develop specific system requirements. These requirements can then be used to compare off-the-shelf products available in the market and identify best fit to the Town's business processes and needs.

Strategic Recommendation	6. Update Town website with e-solution(s) for applications, onboarding, and Community Development permitting functions.
Gap(s) Addressed	As other systems are modernized, website functionality for end users and constituents must be updated. Community Development and Human Resources both provide printable PDF files for the bulk of permitting and application functions.
Action Steps	• Define functional and technical requirements for this website update • Redefine business process • Analyze and define interfaces and integration requirements for new web form functions
Prerequisite(s)	Website should be updated alongside new software procurement.
Stakeholders	End users, Town constituents
Resources	Town Clerk, IT Staff
Estimated timeline	Ongoing
Estimated cost	Staff time
Comments	The Town may consider taking action to leverage or expand existing intranet infrastructure to support internal communication and data sharing.

Strategic Recommendation	7. Update administrative policies governing the appropriate use of technology resources, and provide formal methods of communicating them to Town staff
Gap(s) Addressed	• Employee handbook has not been updated • Administrative policies are outdated
Action Steps	• Develop technology policy templates • Document end user and IT processes and interactions with technology, and reconcile with the policy templates • Develop IT policies and procedures defining requirements and compliance mandates in the conduct of all employees, contractors and vendors at the Town. The policies should address, at a minimum:

Strategic Recommendation	7. Update administrative policies governing the appropriate use of technology resources, and provide formal methods of communicating them to Town staff
	(continued)
	o Documentation
	o IT security
	o Data backup and records retention
	o Internet, intranet, and e-mail policy, including the appropriate use of Town bandwidth (e.g. streaming entertainment services)
	o Hardware and software rocurement
	o Hardware and software management
	o IT hardware lifecycle management
	o Software licensing and usage
	• Determine responsibility and procedures for establishing and coordinating IT policies and procedures across the Town
	• Establish a formal method of communicating the IT policies and procedures throughout the Town as well as updating the policies
	• Assign responsibilities to specific staff to review and amend the IT policies and procedures at least once every two years
Prerequisite(s)	**Recommendation 1:** Create and fill the position of Information Technology Coordinator. **Recommendation 4:** Define measurable and enforceable standards for providing Information Technology service, including internal customer interaction.
Stakeholders	End users, IT Staff
Resources	IT Staff, Town Clerk, Human Resources, end users
Estimated timeline	1-2 months
Estimated cost	Staff time
Comments	In order to keep current, and to ensure that new or emerging technologies are being utilized in an appropriate and effective manner, the Town must regularly update administrative policies and best-use practices. This ensures that the technology investments made by the Town are being used to their full potential. Additionally, policies on the ethical use of data must cover data security and confidentiality. While there was no current risk identified, a lack of formal confidentiality and data security could pose a future liability for the Town.

3.3: Medium Term (12-24 months)

Strategic Recommendation	8. **Form an IT Governance Committee with the purpose of establishing overall direction and priorities for technology management at the Town of Paradise Valley.**
Gap(s) Addressed	• Ongoing IT strategic decision making and oversight
Action Steps	• Define objectives, responsibilities and functions • Determine stakeholders • Determine frequency of meetings • Determine method for prioritizing IT related projects
Prerequisite(s)	**Recommendation 1:** Create and fill the position of Information Technology Coordinator. **Recommendation 4:** Implement uniform process for IT helpdesk and troubleshooting.
Stakeholders	IT Staff, Town staff
Resources	IT Staff, Town Manager, Administration and Government Affairs, Town staff
Estimated timeline	1 month
Estimated cost	Staff time
Comments	The IT Governance committee will balance centralized maintenance, purchasing, and decision-making with input from various stakeholder departments. Defining a process for decision-making can go a long way to ensuring that "big conversations" are held and that significant changes are implemented and managed with ease. Once day-to-day IT tasks are brought under control (Recommendation 4), and the process for making decisions is clarified to an accessible "order of operations," then delayed conversations, such as the alarm system or cloud/client-server infrastructure, can take place and come to a clear solution. This strategic recommendation includes ensuring that projects and solutions are financially sustainable before procurement, with special attention paid to budgeting recurring maintenance costs, licensing fees, and funding of future upgrades.

Strategic Recommendation	9. **Procure and implement a town-wide enterprise GIS system.**
Gap(s) Addressed	Access to GIS data, and quality of the data available, are inconsistent. Each department is using a partial solution, including Maricopa County's GIS

Strategic Recommendation	9. Procure and implement a town-wide enterprise GIS system.
	(continued) data in Community Development, Google Earth Pro with partially-populated data layers in Public Works, and limited licenses of ArcGIS.
Action Steps	• Write and issue RFP/RFQ for needs assessment and solution selection • Initiate vendor selection/evaluation • Conduct contract negotiations with the selected vendor • Begin planning and implementation of new system
Prerequisite(s)	**Recommendation 2:** Centralize hardware and software procurement with IT **Recommendation 5:** Define decision-making framework and project management standards **Recommendation 6:** Define procurement best practices, particularly RFP/RFQ standards, as advised by the Procurement officer
Stakeholders	All town end users
Resources	IT Staff, Administration and Government Affairs, end users
Estimated timeline	3-4 months
Estimated cost	TBD
Comments	The Town previously released a "GIS Strategic Plan" RFQ, the scope of which was to undertake an assessment of the existing GIS infrastructure and data elements. The execution of this project will allow the Town to move to a centralized GIS environment where each department will have access to the same authoritative GIS database, allowing for more accurate and faster decision making based on geo-spatial data.

Strategic Recommendation	10. Establish a centralized single-solution payment processing system.
Gap(s) Addressed	• Interactive Voice Response system is not yet implemented for several departments • Lack of credit card payment system and analytics • Feasibility of the Town accepting credit card payments has not yet been determined in light of technology requirements and acceptable fee sharing
Action Steps	• Write and issue RFP/RFQ for needs assessment and solution selection • Initiate vendor selection/evaluation • Conduct contract negotiations with the selected vendor • Begin implementation of new system
Prerequisite(s)	None

Strategic Recommendation	10. Establish a centralized single-solution payment processing system.
Stakeholders	(continued) All town end users
Resources	IT Staff, Administration and Government Affairs
Estimated timeline	3-4 months
Estimated cost	TBD
Comments	Court is currently implementing an IVR without payment processing, and the Town may benefit from consolidating payment functions to a single solution that includes IVR and credit card payment processing.

Strategic Recommendation	11. Procure and implement a modern work order management system for Public Works.
Gap(s) Addressed	The Town's Public Works department currently only makes use of an electronic work order management system for fleet maintenance and management. Paper or manual work order management poses a variety of challenges, including issues with organization, tracking, and data sharing. Additionally, the current fleet management software being used by Public Works, **RTA**, is outdated, and requires prohibitively cumbersome manual input of data. Information, such as fuel tracking, could easily be automated by a modern work order management system.
Action Steps	• Write and issue RFP/RFQ for needs assessment and solution selection • Initiate vendor selection/evaluation • Conduct contract negotiations with solution vendor • Begin implementation of new system
Prerequisite(s)	
Stakeholders	Public Works
Resources	Public Works, IT Staff, Administration and Government Affairs
Estimated timeline	3-4 months
Estimated cost	TBD
Comments	Modernizing work order management will improve Public Works service delivery by automatically generating and tracking work orders, increasing efficiencies in maintenance, asset tracking, routine ordering and fulfillment, and countless further functional areas. An upgrade or replacement of the Public Works' outdated current fleet management system will allow the Department to adapt to ongoing modernization measures.

3.4: Long Term (>24 months)

Strategic Recommendation	**12. Select and implement an effective course of action for the Town alarm system service.**
Gap(s) Addressed	The Town's alarm service is being delivered at a net loss to the Town, with some question as to whether users are being billed properly. Additionally, the quality of service being paid for by citizens is undetermined due to lack of reliable and supportable hardware.
Action Steps	• Define the functional and technical requirements of a Town-provided alarm service, based upon a Council-supported business model • Analyze and define interface opportunities with billing and financial software • Follow procurement protocol to acquire a new system
Prerequisite(s)	
Stakeholders	Citizens of PV, Administration and Government Affairs, IT Staff
Resources	Administration and Government Affairs, IT Staff, PD Staff
Estimated timeline	3-4 months
Estimated cost	TBD
Comments	If billed, purchased, and managed properly, a Town-provided alarm service does not have to be a loss for the Town. Courses of action were expressed during our analysis, which could lead the alarm service to become a profitable, or at least sustainable, venture for the Town.

Strategic Recommendation	**13. Procure and implement town-wide ERP system.**
Gap(s) Addressed	A centralized Enterprise Resource Planning (ERP) system that integrates administrative information will help consolidate job functions and standardize the flow of information. Currently, the Town is integrating Payroll with HRIS, and a comprehensive ERP system implemented at a future date will include these functions and more.
Action Steps	• Write and issue RFP/RFQ for needs assessment and solution selection • Initiate vendor selection/evaluation • Conduct contract negotiations with the selected vendor • Begin implementation of new system
Prerequisite(s)	
Stakeholders	End users, IT Staff
Resources	All Town staff
Estimated timeline	3-4 months
Estimated cost	TBD
Comments	N/A