1.0 INTRODUCTION

The Oakland County Information Technology (IT) Strategic Plan, similar to all strategic planning, is an ongoing process. The plan is a working tool to link the County’s goals with information technology to provide improved government functions and enhanced customer service. The plan is intended to allow for change over a period of time and serves as a broad guideline for action that can be revised as technologies emerge and the County’s business requirements change. As a working reference document, the plan will be distributed internally to County Representatives.

Both internal and external environments of the County are continually changing, and technology plays a critical support role in the development, implementation and enhancement of government services. As a result, the County recognizes the need to outline an overall approach for the selection, use, and support of technology that aligns with County resources, business needs, and processes. Therefore, a county-wide approach based on standards, consistency, and compatibility will make more cost-effective use of technology.

The Oakland County Information Technology Strategic Plan builds on the original Strategic Plan drafted in 1991 and later approved by the County Board of Commissioners. In addition, it is a compilation of other planning documents drafted by Information Technology’s Project Management Office (PMO) and other technology teams responsible for the implementation of these information systems. These planning documents have been supplied to the County Board of Commissioners over the past decade.

1.1 Scope of Strategic Plan

This is a strategic plan with a two to five-year planning horizon. Since it is difficult to predict the state of the information technology field beyond three years, the County has developed a flexible long-term strategy, not a detailed long-term plan.

This plan addresses all facets of the County’s information technology services and related infrastructures. It strives to maximize the benefits of high-level organizational cooperation while allowing individual and group creativity and flexibility. Therefore, the foundation for the plan includes trends in the information technology industry; an outline of customers and services; and an Information Technology vision accompanied by a mission statement, goals and guiding principles, critical success factors and the Information Technology Master Planning Process. A desired target environment along with strategies for organizational effectiveness, partnerships, and processes will be developed in subsequent revisions to this plan.
1.2 Oakland County Overview

Oakland County Michigan covers 910 square miles, has 62 cities, villages, and townships (CVTs) and is located in southeast Michigan, immediately north of the City of Detroit. Located astride the Interstate 75 corridor and at the heart of “Automation Alley”, Oakland County is a world class technology center. Oakland County’s population is 1.2 million, with approximately 485,000 parcels of property. Oakland County is generally recognized as one of the elite local economies in the United States. The County’s strong economic fundamentals and forward-looking policy initiatives are key reasons why it ranks among the one percent of U.S. counties with a AAA bond rating from multiple agencies.

Unlike many counties in Michigan, or in the nation, Oakland County and its local municipalities cooperate in the performance of services to residents. Traditionally, counties and CVTs work independent of one another - not in Oakland County. The County, on behalf of the local municipalities performs many services (much of which is in the technology arena) normally rendered by BOTH entities in other counties. The County often incurs the financially responsibility itself with incremental costs that provide direct technology programs and economic benefits to CVTs. In many instances, the funding of computer programs by the County would enable operating programs that could not otherwise be performed by smaller CVTs. This “centralized computing” practice is unique compared to many counties, where each of the local municipalities, and even County departments, has their own computer systems that do not integrate with each other.

Oakland County has been providing shared technology solutions to its local municipalities for many years. Due to recent economic struggles the need for shared technology services has become integral to reducing costs to successfully provide government services. To continue fostering intergovernmental cooperation while containing operating costs for everyone, Oakland County is committed to enabling as much technology sharing as possible. In 2011, Oakland County formed G2G Cloud Solutions to support technology sharing among governments via the web. Through this initiative participating government agencies benefit from the opportunity to use technology that may not otherwise be within reach. The government-managed technology solutions available through G2G Cloud Solutions support reduced operating costs and increased reliability, security, and privacy protection for government data.

Economic conditions have introduced new challenges in recruiting and retaining talented Information Technology professionals. These challenges are extraordinarily difficult due to the fact that many public sector IT professionals have undergone salary freezes, pay reductions, and benefit changes for several years. It is recognized that salaries are not the only recruitment and retention strategy and other strategies include work-life balance, flexible scheduling, telework, innovative projects, open team environments, career advancement, and training. These are all important strategies and are clearly needed to recruit and retain the new generation of IT workers. Government’s difficulty in competing for salaries and benefits leaves a gap that may not be overcome simply with improvements to the workplace. The private sector continues to be the public sector’s main competitor when recruiting and retaining a talented IT workforce.

Many governments have utilized selective outsourcing to fill the gap in resources in order to provide the necessary technology services. While this strategy is effective in delivering services, it can be more expensive. Longer term, the need to recruit and retain the proper resources is paramount to the long-term success of government IT. In conjunction with the Human Resources department, IT continues to explore and implement alternatives to continue to attract and retain the best technology professionals.
1.3 Information Technology Department Overview

The Department of Information Technology is a service bureau that provides IT services to 82 County Divisions, more than 100 local governmental units (assessors, treasurers, law enforcement, etc.), over 50 private sector customers, and over 1,700 Property Gateway customers. IT is responsible for over 150 major applications consisting of more than 8,000 programs and provides systems support, maintenance, enhancements and new development for all major systems applications.

The Department of Information Technology is under the administration of the County Executive and is comprised of the following five organizational divisions:

- Administration – Internal Services
- CLEMIS
- Application Services
- Technical Systems and Networking

The IT Department has 176 employees and approximately 50-60 contract professional services staff. There are approximately 52 unique job classifications within the IT Department.

Administration – Internal Services Division

The Administration Division is comprised of the following Operational Units: Project Management Office (PMO), Service Center Training & Communications and Administrative Services.

This Division supports Information Technology and the County in functions related to Project Management, Training and Customer Support. This includes the following:

- IT Annual Master Planning and Leadership Group Processes
- Project Management support and assistance to IT Project Managers
- Hands-on-instruction and training, customized to the needs of County employees to empower them with skills in standard software products, providing the skills necessary to complete their tasks effectively and efficiently
- Service Center Customer Support Services
- IT Employee Training and Education
- IT Department Communication Processes
- IT Service Center - Telephone Communications
- IT Purchasing, Accounts Payable, Billing and Clerical staff functions
- IT Department Policies and Procedures and Human Resource Administration
**CLEMIS Division**

The CLEMIS (Courts and Law Enforcement Management Information System) and Public Safety program provides computer technology, radio communications, and related services to criminal justice and public safety agencies (police, fire, and emergency medical services). CLEMIS, a regional law enforcement consortium, provides solutions through a cooperative effort that are affordable and efficient for agencies of all sizes. Over 200 police, fire and emergency medical services agencies in a five County region rely on CLEMIS for up to 20 different Public Safety software and hardware solution needs. By serving as a technical link among multiple agencies, the program promotes communication and sharing of criminal justice information. CLEMIS also facilitates the maintenance of fire and emergency medical records. The program's standards are monitored by the Advisory Committee, and seven sub-committees to ensure the integrity of information entered into the system. The CLEMIS program empowers criminal justice and public safety agencies to maximize the use of collected data, for their daily operations and comprehensive planning. This division is also responsible for the County's E911 equipment and its integration with the Computer Aided Dispatch system. CLEMIS staff provides all the necessary training to the agencies as well as 24 X 7 support. The CLEMIS Division is comprised of four teams: Public Safety Applications, FRMS-Biometrics Applications, CLEMIS Support Services, and Radio Communications.

**Application Services Division**

The Application Services Division is comprised of the following Operational Units: Land Management Technologies, Courts, Finance and Human Resources Systems and eGovernment. The program is responsible for development of new applications, enhancements to existing applications, and support and maintenance of both Oakland County developed software and purchased software.

The Land Management Technologies program is responsible for information systems used in land-related business functions. These business functions include: assessment, taxation, planning and economic development, homeland security, infrastructure management, and well/septic inspections. Geographic Information Systems (GIS) is the primary technology used to support these diverse departments and local CVTs.

The Courts program provides IT development to Oakland County's Circuit Court, Probate Court, the 52nd District Courts, Prosecuting Attorney, Clerk/Register of Deeds, Community Corrections, Board of Commissioners, Medical Examiner’s Office, Circuit Court Probation, and the non-CLEMIS functions of the Sheriff's Office.

The Financial/Administrative program provides IT development and support to Oakland County's County Executive, Treasurer, Management and Budget, Human Resources, Facilities Management, Central Services and Information Technology departments.

The eGovernment program supports the County’s entire Internet presence. In Fiscal Year 2018, the County’s oakgov.com website had 2.3 million users. Mobile and tablet users make up 53% of the total user base. The site had 75.7% returning visitors with 24.3% new visitors accounting for 12.2 million pageviews and 4.9 million sessions. In addition, the program provides web site content management activities including overall editing, proofreading, standards compliance, graphics, photos, sound and video.
**Technical Systems and Networking Division**

The Technical Systems and Networking Division are comprised of the following Operational Units: Data Base Administration, Server Administration, Network Services, Technical Operations, Workstation Services, and Telephone Communications.

The Technical Systems and Networking program manages the County-wide network, communications, and computing infrastructure 24 hours a day including:

- Monitoring, security, configuration, and troubleshooting activities
- Maintaining and extending a fiber optic network connecting the County and the CVTs to better coordinate data, video, and voice communications
- Managing file, print, application, and mail servers, including security administration, operating system upgrade and maintenance, capacity planning, anti-virus scanning, and monitoring
- Establishing standard development platforms and methodologies encompassing such areas as mainframe and PC application development, database creation, design, and naming, application product selection, and standard software suites and applications
- Developing procedures and plans to facilitate disaster recovery, data protection, and data recovery
- Workstation, workstation software, and workstation peripheral configuration, maintenance, delivery and problem resolution
- Traditional telephone services, pager services, pay phones and cellular phone services, having its own private branch exchange (PBX) system telephone switch allowing for reduced costs for operations, including toll charges

Additional information regarding the department of Information Technology can be found on the website at [http://www.oakgov.com/infotech/](http://www.oakgov.com/infotech/)

### 2.0 Mission Statement

To be a leader in providing government services through innovative, reliable, and responsive information technology solutions.

### 2.1 Guiding Principles

2.1.1 To provide the highest quality customer service in partnership with government agencies, citizens, communities, and customers internal and external to Oakland County

2.1.2 To provide leadership through the strategic use of technology

2.1.3 To ensure executive support and commitment from County Executive, Board of Commissioners, and other elected officials

2.1.4 To ensure all County agencies will be treated as equal and important partners of the IT Department

2.1.5 To empower IT customers to become more self-sufficient and technologically confident

2.1.6 To encourage county departments and local governments to use technology to improve and deliver services

2.1.7 To recruit and retain a technically competent workforce
2.1.8 To develop, maintain, and distribute high-quality information in support of decision making and collaboration
2.1.9 To effectively communicate with the customer community
2.1.10 To promote shared services through cross boundary collaboration
2.1.11 Embrace innovation in every aspect of government services

3.0 Strategies and Initiatives

The following Information Technology strategies represent broad statements of desired accomplishments: Each of these strategies is supported by projects within the IT Master Plan.

3.1 Provide an Enhanced Application Service Offering
3.1.1 Increase application integration and standardization through web services
3.1.2 Integrate mobility and location-based services in business applications
3.1.3 Promote and utilize shared services through the use of cloud technologies to offset costs and expand product offerings to customers
3.1.4 Improve the quality, reliability and availability of all applications
3.1.5 Increase the agility and responsiveness of business units by expanding customer analytics
3.1.6 Leverage the County’s web presence as a branded consolidated point of access to all County information and services.
3.1.7 Centralize and standardize identity and access management for all applications and content

3.2 Enhance ability to provide effective and timely customer service
3.2.1 Advance the use of IT Infrastructure Library (ITIL) best practice framework for IT Service Management
3.2.2 Implement Configuration Management Database to better identify IT Assets
3.2.3 Provide a high-quality training program to empower employees through technology
3.2.4 Utilize a formalized customer communication plan
3.2.5 Build IT Staff expertise through professional development
3.2.6 Expand capacity through ongoing organizational review and right sourcing

3.3 Implement a Standardized Infrastructure Strategy
3.3.1 Deliver services using a standardized shared technology infrastructure wherever possible
3.3.2 Implement a consolidated security management strategy
3.3.3 Develop and implement a policy for personally owned devices and services
3.3.4 Improve service availability through network design and management strategies
3.3.5 Enhance capacity planning and recovery management strategies
3.3.6 Adopt an enterprise architecture approach to technology planning, design and implementation
4.0 MEASUREMENT

Projects in the IT Master Plan are directly aligned with the goals and strategies of the IT Strategic Plan. The measurement of the projects detailed in the IT Master Plan are communicated in the Quarterly Status Reports. These reports contain a measurement of each program and project in the IT Department. In addition, Project Sponsors submitting IT project requests are required to complete the Return on Investment (ROI) Analysis. The ROI Analysis quantifies the anticipated benefits to Oakland County resulting from successful completion of the proposed project. The ROI Analysis documents development and operational costs as well as anticipated, quantifiable benefits resulting from the proposed project. The ROI Analysis is a living, breathing document that is updated and resubmitted throughout the life of the project. Master Plan and project status is continually provided to customers and the Board of Commissioners through quarterly Leadership Group meetings. Additional information can be found at www.oakgov.com/pmo. Oakland County Financial documents prepared by the Department of Management & Budget can be found at https://www.oakgov.com/mgtbud/fiscal/Pages/default.aspx

5.0 SUMMARY

With the internal and external business climates of the County in a state of continuous evolution, technology and information systems will continue to play a critical role in the delivery of efficient government services. The Oakland County IT Strategic Plan is a living document and supporting process that provides a flexible, compatible, and integrated technology and information system strategy.

The IT Strategic Plan builds on prior plans drafted by the IT Steering Committee. In addition, it is a compilation of other planning documents prepared by Information Technology’s PMO and other technology teams responsible for the implementation of these information systems. The foundation for the plan includes trends in the information technology industry; an outline of customers and services; and an Information Technology vision, accompanied by a mission statement, goals and guiding principles, critical success factors and the Information Technology Master Planning Process. In the future, this foundational plan will be used to develop subsequent revisions that include a desired target environment along with strategies for organizational effectiveness, partnerships, and processes.