City of Winston-Salem Information Technology Strategic Plan

2017 - 2021

Table of Contents

I. City Government

Our Mission:
The City of Winston-Salem provides quality, affordable services that ensure the health, safety, and well-being of citizens, while collaborating throughout the community to ensure its economic, social, and environmental vitality.

Our Vision:
A municipal government, deserving of public confidence that provides excellent and innovative services, and is an active and cooperative partner in creating a vital community.

Our Values:
- Openness
- Integrity
- Equity
- Accountability
- Teamwork
- Respect for all citizens
- Fiscal soundness
- Continuous learning and improvement

II.   Information Systems Department

Our Mission:
The mission of the Information Systems Department is to lead the use of information technology by providing technology infrastructure, planning, guidance, and resource management to assist the City in achieving its business objectives. Delivery of efficient and effective services is deployed through a focus on forward-looking methodology using best practices and performance measurement techniques.

Program Descriptions:
- **Administration**
  Provides leadership, planning, training, support, and fiscal stewardship of all Information Systems programs. Establishes policies and procedures for managing the City's information technology assets.

- **Infrastructure Services**
  Develops and maintains the city-wide computing and telecommunications networks, servers, email, and storage infrastructure including an active-active secondary data and disaster recovery operations center.
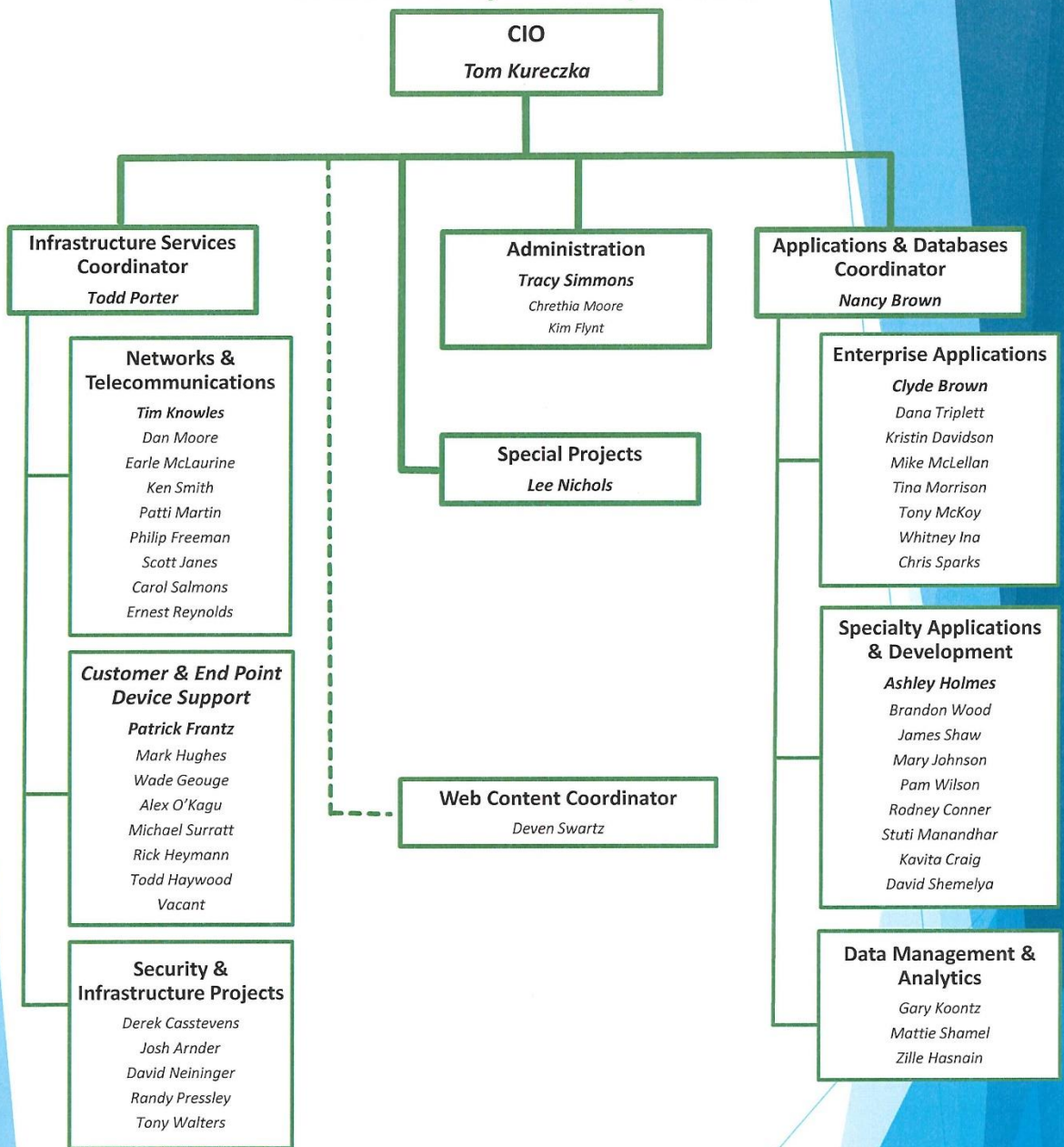
  Orders, installs and maintains all end point devices, including desktop and mobile equipment, peripheral equipment, and standard desktop applications.

  Manages the Customer Service Center and provides a single point of contact for problem reporting, tracking, and resolution services for users of information technology systems; with a goal of restoring service as quickly as possible.

- **Applications & Databases**
  Provides implementation and support of new and existing computer technology in the areas of application and data management.

Information Systems Department

CIO

Tom Kureczka

Infrastructure Services Coordinator

Todd Porter

Administration

Tracy Simmons

Chrethia Moore

Kim Flynt

Applications & Databases Coordinator

Nancy Brown

Networks & Telecommunications

Tim Knowles

Dan Moore

Earle McLaurine

Ken Smith

Patti Martin

Philip Freeman

Scott Janes

Carol Salmons

Ernest Reynolds

Special Projects

Lee Nichols

Enterprise Applications

Clyde Brown

Dana Triplett

Kristin Davidson

Mike McLellan

Tina Morrison

Tony McKoy

Whitney Ina

Chris Sparks

Customer & End Point Device Support

Patrick Frantz

Mark Hughes

Wade Geouge

Alex O'Kagu

Michael Surratt

Rick Heymann

Todd Haywood

Vacant

Specialty Applications & Development

Ashley Holmes

Brandon Wood

James Shaw

Mary Johnson

Pam Wilson

Rodney Conner

Stuti Manandhar

Kavita Craig

David Shemelya

Web Content Coordinator

Deven Swartz

Security & Infrastructure Projects

Derek Casstevens

Josh Arnder

David Neininger

Randy Pressley

Tony Walters

Data Management & Analytics

Gary Koontz

Mattie Shamel

Zille Hasnain

III.   Strategic Framework

In January 2017 City Council and staff, working with the consulting firm FountainWorks, executed a strategic planning process. The process began with senior level staff identifying current issues, trends, and factors that have an impact on Winston-Salem's current state. Senior level staff reviewed economic, demographic, technological, and other changes that affect the landscape and environment of the City and the way the City provides services to residents. Staff compiled potential priority items to address perceived short and mid-term needs for the City.

The Mayor and City Council then engaged in a two-day workshop to create a strategic framework to help guide the City's actions over the next four years. At this workshop, the Mayor and City Council affirmed the six strategic focus areas previously identified and also re-affirmed the objectives under each focus area.   The six strategic focus areas are:
(Note – all strategic focus areas and their objectives are listed in Appendix A: Mayor and City Council Strategic Objectives 2017 – 2021)
- Economic Vitality & Diversity
- Safe & Secure Community
- Livable Neighborhoods
- Healthy Environment
- Quality Transportation
- Service Excellence

City Council then reviewed the input from senior staff and undertook a context mapping exercise to define trends and challenges in providing City services. The Mayor and City Council were asked to brainstorm potential top priorities for each of the strategic focus areas. Priorities were identified and ranked as short term (2017-2018) and mid-term (2019-2021) strategies within each focus area. Following the workshop, staff created individual action items to help accomplish each of the strategies.

The City's Strategic Plan was produced through the planning process and adopted by City Council in May 2017. The Strategic Plan can be viewed in full at http://www.cityofws.org/Portals/0/pdf/performance-accountability/2017-2021%20Strategic%20Plan.pdf?ver=2017-06-20-123026-860

The Strategic Plan is formatted in a manner that includes the strategies and associated action items identified by the Mayor and City Council. Each of the six strategic focus areas includes a list of the objectives. Objectives are broad categories under which individual strategies fall. Strategies are individual priorities, identified and ranked by the Mayor and City Council within each focus area, that are intended to produce outcomes that reinforce the stated objectives. Beneath each strategy are action items, individual tasks that the City will accomplish. The hierarchy is as follows:

Strategic Focus Area
→ Objective
→ Strategy
→ Action Item

The Information Systems Department used the City's Strategic Plan as a framework and guide in creating the Information Technology Strategic Plan (IT Strategic Plan).   The IT Strategic Plan needs to correlate the development, implementation, and use of technology with the City's mission and Strategic Plan. We

must prioritize and implement effective and responsive practices and technology solutions that support the vision and direction presented by the Mayor and City Council. To fully support the Council's directives, the department must be forward-looking, innovative, and deliver solutions that utilize industry best practices around I.T. service delivery and project management.

The IT Strategic Plan, Key Work Items as assigned by the City Manager, and fiscal year operating budgets and work plans will be established and adjusted as needed to accomplish the City's objectives.
The IT planning activities and daily operations will consider service strategy keys, guiding principles and best practices, ITIL Service Management, and project management (PMI and PMBOK) practices.

NOTE: This document contains acronyms and terminology commonly used in information technology. Appendix B is a glossary of those acronyms and their translations, terms and definitions. Please consult that listing as needed.

IV.   Executive Summary

At the core of the IT Strategic Plan is our Service Strategy. Our goals and objectives are built around the purpose that everything we do should align with the needs of our citizens, our elected officials, City departments, and the customers we serve. We must strategically balance our service portfolio between the demand for our services and the financial and budgetary constraints which control our capacity.

Strong relationships with our business partners help us gain a thorough understanding of their business operations and needs. It allows us to propose and implement innovative and cost-effective technology solutions that deliver services which help achieve the desired business outcomes.

Utilizing ITIL best practices frameworks around Change Management helps us define specific and measurable metrics, providing us with a barometer of the service demands of our customers.

Tying our investments to service delivery strategies and the city's overall budget further tracks and illustrates the value of technology. Measuring and reporting on our Service Level Objectives and following PMI methodology brings transparency to how well we perform our work and highlights how our services add value to the mission, vision, values, and strategic objectives adopted by our City Council to enhance the quality of life for the citizens of Winston-Salem.

Improvements in technology around access, bandwidth, security, and processing capacity will allow for the expansion of our services, empowering our customers with the tools and data they need to efficiently and effectively run their business operations - anytime, anywhere, from any device.

Our Service Strategy Keys include:
- One Team
- Customer Focused
- Professionalism
- Ownership and Accountability

V.   Goals of the Information Systems Department

As we define and execute our annual work plans and related operating and capital budgets, we consider core goals and principles to guide our process. The primary goals are:

Goal One: Partnering and Expanding Relationships

Goal one is to collaborate with our internal City departments and customers; our elected officials; our county; regional groups; and the business community to deliver technology solutions that enhance the lives of citizens.

Guiding Principles:
- Technology must provide a service to the customer and meet a business need.
- We live and work in a digitally connected world.
- Working Together Everyone Achieves More (TEAM), and working with outside groups and agencies leverages our strengths and understanding.

Goal Two: Innovation & Best Practices

Goal two is to implement "smart" innovative technologies via the Internet of Things, mobile, and hosted "cloud" services that improve the quality of life for our citizens and visitors while supporting proven best practices around the delivery of efficient, cost-effective services by City staff.

Guiding Principles:
- Technology must provide a service to the customer and meet a business need.
- We live and work in a digitally connected world.
- Maintain a healthy and proper balance in the use of in-house development, third party products, and hosted solutions.
- Stay current on and leverage emerging technologies where appropriate to carry out the City's mission.
- Balance access to information with a level of security that protects data integrity and preserves the public's trust.
- Many services that we support must be available and accessible on a 24 x 7 basis.

Goal Three: Support Open and Transparent Government

Goal three is to support all of our internal City departments and their business practices in compliance of open and transparent government requirements and practices.

Guiding Principles:
- Technology must provide a service to the customer and meet a business need.
- We live and work in a digitally connected world.
- We must maintain compliance with the North Carolina Public Records Laws and other similar legal requirements.
- We serve all demographics of people and we must offer as many channels as we can for access to City services and information.

VI. Specific Work Items for Information Systems for 2017 – 2021

Each year Information Systems works with our IT Steering Committee to develop a list of new work items and solutions that will be included in the following year's operating and capital budgets and work plans. Some of these items are defined as Key Work Items by the City Manager and tracked and reported on through an in-house written application.

As a result of the Council's planning process and City's 2017 – 2021 Strategic Plan, there are some specific items that have been identified for the Information Systems department that will be included in our annual work plans. Those items specifically identified are:

- Economic Vitality and Diversity focus area – Implement a student information technology internship program for WinstonNet labs.
- Safe and Secure Community focus area – Replace the current obsolete Fire Department records management system.
- Safe and Secure Community focus area – Review the need for additional public safety resources to enhance operational and project based analysis.
- Livable Neighborhoods focus area – Develop a digital community resource center to enhance communications and promote civic participation.
- Service Excellence focus area – Review information request mechanism for elected officials and make recommendations to increase the timeliness of feedback.
- Service Excellence focus area – Review City web site needs and propose redesigning the website to provide better communication strategies and increase the usability of the City's website search functions.
- Service Excellence focus area – Begin implementation of the Automated Meter Infrastructure (AMI) project.
- Service Excellence focus area - Infrastructure Improvements

Infrastructure Component	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Data Closet Upgrades	$450K			$100K	$250K
Server Infrastructure Upgrades	$40K	$60K		$200K	$50K
Storage Infrastructure Upgrades	$150K	$50K	$200K	$450K	
Online Backup / Restore	$110K				$120K
Security Improvements	$100K	$50K	$100K	$75K	$50K
Datacenters / UPS / HVAC	$25K			$35K	$400K
Firewall upgrades	$300K	$100K	$70K		$100K

Appendix A: Mayor and City Council Strategic Objectives 2017 - 2021

Economic Vitality & Diversity
Economic vitality and diversity requires a healthy local economy that serves all segments of the population and provides the monetary resources necessary to support the community. This includes sustaining a tax base sufficient to fund community services, providing members of the community with sufficient wages, and providing capital for community development.

1. Recruit and Retain Employees
2. Promote Downtown Revitalization
3. Promote Commercial Development in Economically Disadvantaged Areas
4. Enhance Skills of Workforce
5. Develop and Redevelop Commercial / Industrial Business Park Sites
6. Assist Small Businesses with Innovation and Entrepreneurship
7. Promote Travel and Tourism

Safe & Secure Community
Public safety is the foundation upon which any successful city is built. Absent this, it is difficult to attract businesses, residents or visitors, which in turn create the economic vitality that sustains our community.

1. Expand Community Policing
2. Reduce Crime and Fear of Crime
3. Enhance Fire Prevention Programs
4. Improve Public Safety Service Quality

Livable Neighborhoods
Livable neighborhoods are the basic building block for our city's quality of life. They create an environment where people feel welcome, want to spend time, and want to interact. Livable neighborhoods provide access to adequate transportation, shopping and recreation options, encourage residents to maintain their homes, and celebrate our values, history and culture. Livable Neighborhoods also includes facilities and activities that foster good physical health.

1. Improve Character and Condition of Neighborhoods
2. Expand Housing Assistance Programs
3. Support Public Art / Community Appearance
4. Preserve Historic Resources
5. Support Including All Community Populations
6. Expand Open Space and Recreational Facilities
7. Expand Access to Healthy Food Options

Healthy Environment
A healthy environment ensures that the places we live, work and play are safe and conducive to overall good health. It includes such traditional measures as air and water quality, waste reduction and disposal, and policies that sustain our environment.

1. Protect Land and Reduce Sprawl
2. Enhance Air Quality

3. Support Green Initiatives
4. Manage Water Quality & Quantity
5. Develop Comprehensive Solid Waste Management Strategies

Quality Transportation
Our transportation systems influence virtually every aspect of community life. They are the means for moving people, goods and services throughout our community, and they play a significant role in shaping patterns of growth, facilitating economic prosperity, and influencing the character and livability of our city and its neighborhoods.

1. Improve Integrated Road Network
2. Expand Bike / Sidewalk / Greenway Network
3. Enhance Public Transit

Service Excellence
Excellent citizen service is the cornerstone of responsive government, without which it is impossible to fulfill our vision statement for city government. Service excellence is based on the City's 10 Keys to Service Excellence. But it also includes ensuring that city employees have the knowledge and tools necessary to provide excellent service, as well ensuring sound management of city resources.

1. Ensure Service Delivery Efficiency and Effectiveness
2. Enhance Employee Professional Development and Training
3. Maintain City's Financial Strength
4. Expand Policy and Oversight & and Reporting Mechanisms

Appendix B: Glossary

Change Management – Processes and procedures to access all proposed changes to existing IT infrastructure, applications, and databases; and to plan, manage, and report on all approved changes through implementation and closure. The goal is to improve upon, and minimize any impact to, service quality and daily operations.

ITIL – Information Technology Infrastructure Library

PMI – Project Management Institute

PMBOK – Project Management Body of Knowledge