



# Information Technology

---

## Mission Statement

To provide County employees a premier level of workplace technology while delivering both an expeditious and expert level of customer care.

## Programs

---

[Information Technology](#)

[Geographic Information Systems](#)

## Information Technology

---

### Activities

Provide support services for County departments, agencies, and employees such as miscellaneous necessary ~~desktop/server applications; redundant backup services; virus protection and updates; disaster recovery~~ planning; project review and planning; network infrastructure planning and support; active directory migration; exchange mail services; and cross county imaging document management support with workflow.

The IT Department develops and maintains an integrated website, maintains a virtual server environment, provides maintenance and support to the county's Financial System, the court system, Sheriff's records system, and voice over internet protocol (VOIP) phone system.

Additionally, the IT Department provides some of the above services to other governmental agencies and component units through service level agreements (SLA).

### Strategic Plan Impact

- ✓ **Internal Service**  
Information Technology provides technology support to all County Departments.
- ✓ **Intergovernmental Cooperation**  
Information Technology has entered into several cooperative agreements with other units of government within Jackson County to provide information technology support at a reduced cost for those agencies.
- ✓ **Safe Community**



Information Technology provides support to the Sheriff's Department as well as other local area Police and Fire agencies including maintaining system uptime for delivery of services to the community.

## Accomplishments

- ✓ IT Staff successfully closed 7,663 Technical Support Tickets
  - Increased productivity in closing 1,632 more tickets in last budget year
- ✓ IT received and processed an additional 7,646 Technical Support Tickets
  - Increased in productivity by 1,542 more tickets from last budget year
- ✓ IT Web Development staff successfully implemented and assisted with onboarding and continued administration of the Civic Plus Performance Management Module
- ✓ Migrated JCDot operations onto Mitel Systems which are congruent with majority of the County's Telephone Communications Systems.
- ✓ Deployed additional 75 new Computers for PC Replacement Program
- ✓ Upgraded 47 computers to Windows 10 Operating system
- ✓ All IT Staff Completed LEIN Training as required
- ✓ Upgraded OnBase Document Imaging system from Version 13 to Version 17
- ✓ Aided with resolution to procure enhancements to OnBase at the Prosecuting Attorney's Office through the implementation of LEAP.
- ✓ Implemented Security Surveillance Systems at the Department on Aging and the Animal Shelter
- ✓ Provided mobile computing solutions to the following departments so they may increase their levels of services and reach more citizens by not being tethered to the office:
  - WIC/Health Department, Environmental Health, JCDot, Animal shelter, District Court.
- ✓ Implemented enhanced Mobile Device Management solution providing more opportunity for Jackson County employees to take computing devices in the field to provide services to the community.
- ✓ Successfully Partnered with Leading Edge Technology Partners to devise and implement a full infrastructure refresh solution for Jackson County.
- ✓ Attendance of Advanced Training in the following completed:
  - HPO – High Performing Organizations
  - OnBase Systems Administration (2<sup>nd</sup> Employee)
  - SQL Database Administration – Provisioning SQL Databases
- ✓ Reviewed and updated several existing outdated Service Level Agreements with Region II, and Jackson County ISD.
- ✓ Continued updated maintenance/repair or replacement on UPS/Routers/Switching Devices around the county for continuity of services.
- ✓ Fulfilled installation of Parks Point of Sales Systems and Remote Golf Ball Dispenser system
- ✓ Automated and updated many background internal IT Processes with Group Policy, Systems and security that were unnoticed to the end user but improved business processes and reduced time and labor.



## Budget Adjustments

No significant budget adjustments in 2021.



Strategic Outcomes							
<u>Indicator</u>	2018	2019	2020	2021	2022	2023	2024
<p>The Information Technology Department is in the progress of collaborating with all county agencies to review and determine meaningful key performance indicators that will can be accurately represented in this strategic outcomes section the next budget year.</p> <p>Key Performance Measures will be aligned with the vision for the county in providing services to the community at large. The desired strategic outcome for both the Information Technology Department and GIS Department will be to provide superior services and support either indirectly or Directly to the citizens and taxpayers of Jackson County.</p>							



This page intentionally left blank.



# Geographic Information Systems

---

## Activities

Promote, educate, & integrate the prevalent usage of GIS to allow increased productivity through accurate & informed decision making. Provide the general public, private sector & associated governmental agencies access to enhanced GIS services & products that will assist them in meeting their business needs. Efficiently create & maintain an enterprise based GIS which accurately & comprehensively represents all relevant County geographic data & information through workflow driven development of GIS data & applications.

## Strategic Plan Impact

### ✓ **Safe Community**

GIS is responsible for the creation and on-going maintenance for the Central Dispatch 911 system maps and address information. GIS provides support to local law enforcement with the location of sex offenders in relation to local schools.

### ✓ **Economic Development**

GIS supports economic development efforts to attract and retain business in the community through mapping. Partnerships between the GIS staff and the local Jackson Realtor's Association, the Enterprise Group, and the Land Bank facilitate the economic development process.

### ✓ **Healthy Community**

GIS provides public health mapping and spatial analysis. They assist with infectious disease surveillance, outbreak investigation, and planning and response activities.

### ✓ **Recreational & Cultural Opportunities**

GIS uses mapping to inform the public about recreational areas and activities within Jackson County.

## Accomplishments

- ✓ GIS was able to close 837 tickets for 2018 and 84 so far in 2019.
- ✓ There were 4661 parcels edited in 2018 and 2060 parcels edited so far in 2019.
- ✓ Serve as the administrator of the Jackson County Street Naming and Addressing Ordinance and serve as the Chair to the Committee that meets monthly. The following is a list of responsibilities.
  - Worked with the townships and committee to identify issues with existing addresses and street names and identify corrections needed.



- Manage the GIS end to Central Dispatch making/testing changes and updates to common name file as needed. Research and fix issues with addresses affecting the accurate dispatch of police and fire.
  - 194 new addresses issued in 2018
  - 40 new addresses issued in 2019 to date
  - 3013 address points edited in 2018
  - 1019 address points edited in 2019 to date
  - 10741 road centerline edits in 2018
  - 1604 road centerline edits in 2019 to date
- 
- ✓ Worked with New World and ESRI to correct a locator issue with Central Dispatch and an issue with half addresses. It took three weeks to correct this issue as the GIS engines used by New World are so far out of date and not supported by ESRI anymore. The version of software in use by New World is no longer available for ESRI and a version was finally located and provided to us by New World. Installed software but current licensing is not compatible for the outdated version of software. ESRI was finally able to provide a license file and work with us to get it installed and working correctly.
  - ✓ Started preparation of configuring all information needed for New World update
  - ✓ Supported the Sheriff's department with automated weekly overdose point and heat maps
  - ✓ Started a wide range of process improvements and data cleaning for JCDOT's GIS users to help them produce high quality maps at a rapid pace.
  - ✓ Continuous GIS software support for users in JCDOT, Equalization, Region2, and participating townships.
  - ✓ Maintaining high quality, timely responses to map and data requests for internal and external customers.
  - ✓ Trainings completed.
    - Network dataset and associated geoprocessing tools (*Network Analyst Extension*)
    - Topology
    - Geocoding
    - Georeferencing
    - Improved map layout/aesthetics skills
    - Three-day training course in ArcGIS API for JavaScript completed Feb. 2019
  - ✓ JCDOT Road Map
    - 2019 Road Map
    - Front/Back MXDs that can quickly be reformatted to print new road map year after year
    - Created python script to generate a Road Index list for the JCDOT printed map
  - ✓ Road Dataset improvements.
    - Attribute overhaul to match state of Michigan framework classification
    - Centerline/bad geometry corrections to match aerial imagery (and their true location)
  - ✓ Snow Plow App / Road Network Dataset & Geoprocessing Tools
    - Helped to create network dataset and model to change points to lines for the web app
    - Learned geoprocessing tools that we will also be able to apply to other applications in the future
  - ✓ Zoning





- County wide zoning file created from individual townships and villages
- Generic zoning code field added for use in future web apps
  
- ✓ Parcel Fabric
  - Started the process to learn how to edit and how the back end of the Parcel Fabric works for redundancy of knowledge/act as a backup and to make improvements/fixes to the data
- ✓ Park data restructure and Story Map
  - Restructured data from multiple sources into single geodatabase for ease of use
  - Park data updated to match current amenities/features of the park
  - Remade static pdf maps of individual parks to show updated data
  - In process of creating a ESRI Story Map of parks for public application
- ✓ GPS Unit/Software Updates
  - Trimble and ArcPad software updated on desktop and Geo7x Trimble Unit for GIS and JCDOT
- ✓ Python Scripting
  - Created script to aid in the formatting of addresses and roads for geocoding
- ✓ Remonumentation of Section Corners
  - Updated PLSS Cadastral Corner GIS data based on data provided by surveyors participating in the process (*backlog of data from 2014*)
- ✓ Documentation
  - GPS/Software updates
  - Road attribute key (shows how to best make use of the road file)
  - Creating a road index
- ✓ Update Documentation
  - JCDOT County Map for publishing
  - GPS/Software updates
  - Road attribute key (*shows how to best make use of the road file*)
  - Creating a road index test/production environment
- ✓ Created new virtual test/production environment
  - Using latest versions of Microsoft IIS and ArcGIS Server
  - Installed and configured new ArcGIS Server 10.6 (Hansel)
  - Installed and configured new Portal Server (Gretel)
  - Installed and configured new GeoEvent Server
  - Set up security certificates for all servers
  - Tested and optimized
- ✓ Created online application for tracking snow plow activity
  - Created an enterprise geodatabase with latest version of Esri ArcCatalog
  - Created a data transfer process using Motorola TRBONet software
  - Created a program using Python and ArcPy to clean and process incoming data and export to live map layers
  - Created Road Network using Network Analyst for Snow Plow app script





- Created a web-based application for viewing data using ArcGIS Online, Web Appbuilder for ArcGIS
- ✓ Created a new online tax parcel viewing application using latest version of ArcGIS API for JavaScript v3.28, ArcGIS Server 10.6.
  - Created and published an updated basemap using latest county road network
  - Published services on ArcGIS Server to display dynamic parcel data
  - Updated functionality for visualizing data, creating custom pdf exports, creating mailing labels within buffer zones

## **Budget Adjustments**

No significant budget adjustments in 2021.



# Information Technology



## Strategic Outcomes

<u>Indicator</u>	2018	2019	2020	2021	2022	2023	2024
Geographic Information Systems (GIS) is a division of the Information Technology Department, is in the progress of undertaking a Strategic Plan that will identify meaningful key performance indicators that can be accurately represented in this strategic outcomes section the next budget year.							