Office of the Chief Information Officer Directive: IT 5.01	Published: 02/2020
Chapter: Data Management	Last Review: 02/2024
Subject: **Data Processing Integrity and Validation**	

1 DIRECTIVE

1.01 Controls must be in place for any process that results in the creation, manipulation, transmission or storage of data to maintain the integrity of the data against accidental, intentional or malicious alteration, damage or loss.

1.02 Controls must also be in place to detect any loss of data integrity at the time it occurs so that prompt action may be taken to recover the data.

2 PURPOSE

2.01 The purpose of this Directive is to ensure that controls are in effect to protect data from possible data integrity threats and to allow timely detection of data integrity failures. Whenever data is created, stored, processed or transmitted, it must remain complete and correct throughout the entire processing cycle.

3 SCOPE

3.01 This directive applies to all employees involved in the manipulation, transmission, processing and storage of data.

4 RESPONSIBILITY

4.01 All employees are responsible to maintain the integrity of data during its preparation, processing, transmission and storage. When they prepare specifications for these processes, employees are responsible for identifying the safeguards that must be included in the processes.

5 DEFINITIONS

5.01 **"Data integrity"** refers to the validity of data. Data is valid if it is accurate, timely and complete. Data may be not valid due to:

- Errors made during data entry
- Transmission errors introduced when data is sent across a network from one computer to another or to a file server
- Hardware failures such as damaged data media, disk crashes, power failures or system failures resulting in data damage
- Application software bugs
- Environmental disasters, such as fire, water damage, power surges, etc.
- Intentional alteration for personal gain or malicious intent

6 RELATED DIRECTIVE(S)

OCIO IT 5.03 – Management of Third Party Services
OCIO IT 8.01 – Physical and Infrastructure Security
OCIO IT 8.02 – Systems Security
OCIO IT 9.04 – Application Security Controls