



# NORTH DAKOTA STATE AND LOCAL INTELLIGENCE CENTER

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## Multi Factor Authentication

### **What is MFA?**

MFA, Multi-Factor Authentication, is a security process that requires users to provide more than one verification factor to access an account. Additional authentication factors significantly reduce a cybercriminals ability to access your account.

### **MFA v. 2FA**

MFA and 2FA are sometimes used interchangeably. 2FA, two-factor authentication, is a process in which the user must present two different forms of authentication. 2FA is a subset of MFA – MFA encompasses two or more factors depending on the system.

### **How does two factor authentication work?**

Two-factor authentication begins with a login attempt. After entering the first factor, a user's username and password, the system prompts the user for a second verification step. The second form of authentication can be a one-time passcode, push notification, or a biometric verification. Once the user successfully completes the second authentication, the system verifies both pieces of information and grants the user access to the system. By requiring two independent factors, if a threat actor steals one, such as a password, they still need the second authentication factor to gain access, making it much harder for them to gain unauthorized access.

### **Examples of MFA factors -**

- Something only you know: a password, PIN, or security question
- Something only you have: a code, a push notification, a physical card, or fob
- Something only you are: a fingerprint or facial recognition

Ideally, these factors should be unique to the user and only the user (i.e. no shared passwords, reused codes, etc.)

### **What is the benefit of MFA?**

MFA significantly reduces the risk of unauthorized access if a password is compromised.

### **Where should MFA be used?**

MFA should be used for all systems, applications, and accounts that handle or contain sensitive information. This can include email accounts, customer databases, healthcare portals, financial services, cloud storage, and even social media.