HB1012: Technical Debt Details
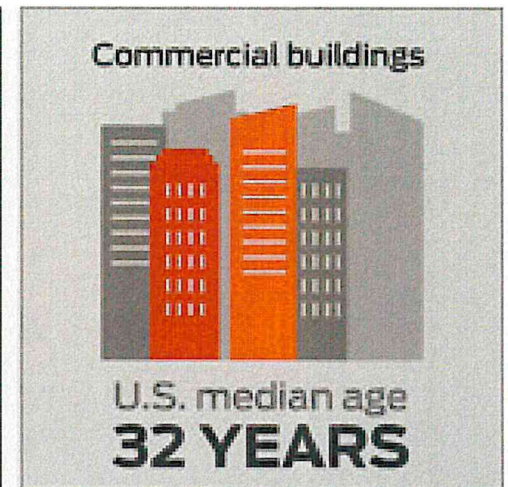
Sara Stolt | Deputy Commissioner, ND HHS
February 14, 2024

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Deferred Maintenance

- Deferred maintenance is when maintenance tasks are delayed or postponed.

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Deferred Technology Maintenance

Deferred maintenance on technology is when necessary maintenance tasks are delayed or neglected, which can lead to equipment failure and increased costs.
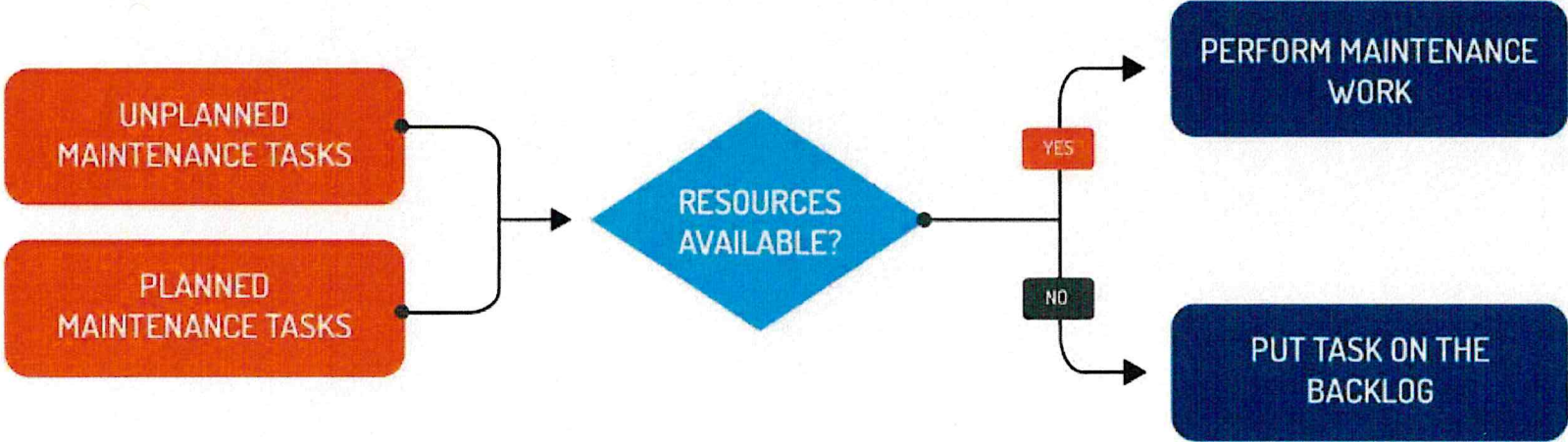
Causes

- **Budget constraints**: Lack of funds can prevent lifecycle planning and investments

- **Resource limitations**: Not enough staff or parts to address issues as they arise

- **Competing priorities**: Other tasks or projects take precedence

Effects

- **Equipment deterioration**: Small issues escalate into bigger problems

- **Unexpected breakdowns**: Equipment fails without warning

- **Higher maintenance costs**: It costs more to fix problems that have been deferred

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Deferred maintenance

Deferred maintenance is the deliberate delay of planned and unplanned maintenance activities on assets or facilities that should have been addressed immediately. If not handled properly, this results in a maintenance backlog that accumulates over time.

```
UNPLANNED
MAINTENANCE TASKS ──┐
                    ├──►  RESOURCES     ──YES──►  PERFORM MAINTENANCE
PLANNED             │     AVAILABLE?                     WORK
MAINTENANCE TASKS ──┘                   ──NO───►  PUT TASK ON THE
                                                   BACKLOG
```

25-27 Executive Budget – Technology Debt / Mainframe

IT – Existing		Total	General	Federal	Special
Retire Economic Assistance Legacy Systems on Mainframe – SIIF	Human Services	2,000,000		1,000,000	1,000,000
Retire Electronic Health Record Legacy System Data Extraction & Migration on Mainframe – SIIF	Behavioral Health	1,000,000			1,000,000
Retire Medicaid Legacy Systems on Mainframe - SIIF	Medical Services	2,000,000		1,500,000	500,000
Retire Technical debt remediation, including mainframe and legacy systems - SIIF	Business Operations	10,000,000		5,000,000	5,000,000
IT - Existing Total		15,000,000		7,500,000	7,500,000

What is included?

- Between 27-30 applications (technology tools)

- Updated/New versions of software that are dependent on outdated technology on the mainframe to complete processes

- Not just referencing the mainframe but we need to look at newer systems/technologies and ensure that ongoing maintenance and support is addressed timely

- Hundreds of processes and workflows that run through the mainframe (hooks into the mainframe) and new systems and technologies that were built to depend on the mainframe

Goals

- To **eliminate** dependency on the mainframe (hardware) as quickly as possible

- Migrate the **data**, that is to be retained, to a new data storage tool

- Move the new **business capabilities** to a new platform or to merge to existing **supported solutions**

- Eliminate **unnecessary processes** that were dependent on **unsupported applications**

- Build **new processes** that are required for supported applications

Cost of Doing Nothing

Increasing Costs to Maintain (Workforce and Financial Risks)

Vendor sourcing costs are increasing

Software costs are steadily increasing

Decreasing in-house knowledge on the applications and integrations

Inability to Cost Effectively Deliver on New(er) Capabilities (Efficiency)

Multi-Factor Authentication

Stakeholder and Employee Expectations

Cybersecurity Risks

As support options decrease, cyber-risk increases

What is the cost of a breach?

Software solutions will become unsupported

Lead to inability to continue to utilize them or even the ability to extract needed data from them.
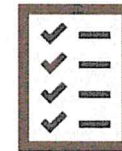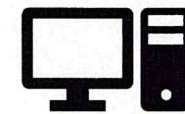
Process that Drives Cost

Business Analysis – Understand what the process is driving and what it's connected to.

Data migration and Data Storage

Project planning and implementation

Hardware / Software

Contact Information

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