

Miami-Dade County Public Schools



Internal Audit Report

Audit of District-Issued Instructional Mobile Devices



With the profound increase in the number of Instructional Mobile Devices (IMDs) required and in use since the onset of the COVID-19 pandemic, significant improvements are needed in the management of IMDs.

March 2022

THE SCHOOL BOARD OF MIAMI-DADE COUNTY, FLORIDA

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Miami-Dade County Public Schools

giving our students the world

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February 24, 2022

The Honorable Chair and Members of The School Board of Miami-Dade County, Florida
Members of the School Board Audit and Budget Advisory Committee
Dr. Jose L. Dotres, Superintendent of Schools

Ladies and Gentlemen:

We have performed the Audit of District-Issued Instructional Mobile Devices (IMDs) in accordance with the 2021-2022 Fiscal Year Audit Plan.

At the onset of the COVID-19 pandemic, from February through early June 2020, M-DCPS purchased and/or distributed in excess of 100,000 IMDs to enable the District to continue its core mission and completion of the school year through virtual instruction. With the profound increase in the number of IMDs required and in use, we found that attention is now needed for improvement in processes and controls over the distribution, tracking, collection, and disposal of IMDs.

We would like to thank management for the cooperation and courtesies extended to our staff during this audit.

Sincerely,

Jon Goodman, CPA, CFE
Chief Auditor

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<i>Executive Summary</i>

We performed this audit in accordance with the approved Fiscal Year 2021-2022 Audit Plan. The objectives were to review applicable processes, procedures, and controls associated with the distribution, tracking, collection, and disposal of Instructional Mobile Devices (IMDs) in order to assess their adequacy and make recommendations for improved efficiency, effectiveness and safeguarding of the assets. IMDs include laptops, tablets, and convertible devices used by students and teachers and required for virtual instruction.

In early 2020, the world was confronted with the Coronavirus/COVID-19 outbreak, which was officially declared a pandemic by the World Health Organization on March 11, 2020. Miami-Dade County Public Schools, along with most other school districts in Florida and nationally, was confronted with the sudden need to deliver IMDs to enable internet access/connectivity to over a quarter million students in order to provide educational resources and remote instruction during the world-wide lockdown caused by the COVID-19 pandemic.

On March 13, 2020, the Superintendent of Schools invoked School Board Policy 8420, declaring a district-wide emergency and the closure of all schools, effective March 16, 2020. From February through the end of the School Year in early June 2020, the District purchased and/or distributed in excess of 100,000 IMDs required for the completion of the School Year through virtual instruction. In addition, during the early stages of the health crisis, the Administration was forced to address numerous other serious challenges. These included assessing and supplying hotspots to students without home internet services; providing lunch/food service to students and the public under this new reality; receiving, accounting for and properly expending pandemic-related grant funds deriving from the Federal government; and working with various health agencies to establish controls and metrics to inform Board policy and District procedures relating to the pandemic.

With the occurrence of the COVID-19 pandemic, and the resulting profound increase in the number of IMDs required and in use, we found that the Administration now needs to better develop and improve its controls associated with the distribution, tracking, collection and disposal of Instructional Mobile Devices. The concept of all students having access to a IMD for virtual instruction and otherwise is also likely to continue post pandemic.

Going forward, it is imperative that the District has a system in place to comprehensively manage, track and monitor its mobile devices. Enhanced controls and procedures must include and pertain to the complete inventory of IMDs, regardless of funding source, program or department.

The audit resulted in four findings and nine corresponding recommendations. Management's responses to the findings (and recommendations) are included on pages 11 through 19 following each individual finding, and in memorandum format as received by our office starting on page 20. We have also included a glossary of technical terms and acronyms on page 10.

<i>Internal Controls</i>

The chart below summarizes our overall assessment of internal controls applicable to the audit process.

INTERNAL CONTROLS RATING			
CRITERIA	SATISFACTORY	NEEDS IMPROVEMENT	INADEQUATE
Process Controls		X	
Policy & Procedures Compliance		X	
Effect		X	
Information Risk		X	
External Risk		X	

INTERNAL CONTROLS LEGEND			
CRITERIA	SATISFACTORY	NEEDS IMPROVEMENT	INADEQUATE
Process Controls	Effective	Opportunities exist for improvement	Non-existent or unreliable
Policy & Procedures Compliance	In compliance	Non-compliance issues exist	Non-compliance issues are pervasive, significant, or have severe consequences
Effect	Not likely to impact operations or program outcomes	Impact on outcomes contained	Negative impact on outcomes
Information Risk	Information systems are reliable	Information systems are mostly secure but can be improved	Information systems produce incomplete or inaccurate data which may cause inappropriate decisions.
External Risk	None or low	Potential for damage	Severe risk of damage

<i>Background</i>

In January of 2020, the World Health Organization (WHO) declared a public health emergency of international concern. In February, the disease was officially named COVID-19, commonly known now as Coronavirus disease 2019.

The week of March 9, 2020, culminated with District actions to proactively address the impact of COVID-19 and Florida's Governor declaring a state of emergency. That same week, the WHO formally announced COVID-19 as having reached pandemic status. Realizing that school closures appeared inevitable, the District surveyed parents to help determine the home-based technology needs of students. On March 13, 2020, the Superintendent of Schools invoked School Board Policy 8420, declaring a district-wide emergency and the closure of all schools, effective March 16, 2020.

Miami-Dade County Public Schools, along with most other school districts in Florida and nationally, was confronted with the sudden need to deliver IMDs to enable internet access/connectivity to over a quarter million students in order to provide educational resources and remote instruction during the world-wide lockdown caused by the COVID-19 pandemic. Instructional Mobile Devices include laptops, tablets and convertible devices used by students and teachers and required for virtual instruction.

Approximately 14,000 devices had already been distributed as of February 2020 (prior to the pandemic) as part of routine device loans to students. Through June 30, 2020, four months into the pandemic, the District procured and/or distributed an additional 100,000 IMDs.

However, there were both successes and pitfalls relative to the distribution, management, and recovery of IMDs. Adding to the overall difficulty was the limited on-hand device inventory at the onset of the pandemic coupled with the sudden need to procure additional devices for every student that required one.

The worldwide supply chain phenomenon, compounded by a strong and simultaneous global demand for devices and related repair parts, created a backlog for the procurement of both.

According to the Administration, prior to March 2020, procurement and delivery of instructional devices varied depending on an array of factors. For large orders, about one month would elapse between Purchase Order (PO) issuance and delivery to the service provider for District customization and preparation of IMDs.

After the start of the pandemic and throughout 2020, orders were placed to purchase more devices. An order was placed in July of 2020, and the first batch from this order arrived three months later in October. Additional IMDs were ordered in September of 2020 which were received about one week later. (This order was an emergency purchase procured outside of existing bid agreements). A separate purchase issued in early November began delivery in January 2021. However, a large portion of these devices

were diverted for testing and general distribution. An order to replace diverted devices was issued in March 2021 and delivered in May.

In addition to IMDs, students without home internet service were supplied with a mobile hotspot which provided wireless connectivity. According to the Administration, and as of October 2021, the 1Million project had provided nearly 15,000 hotspots. The hotspots were provided at no cost to the student or the District.¹

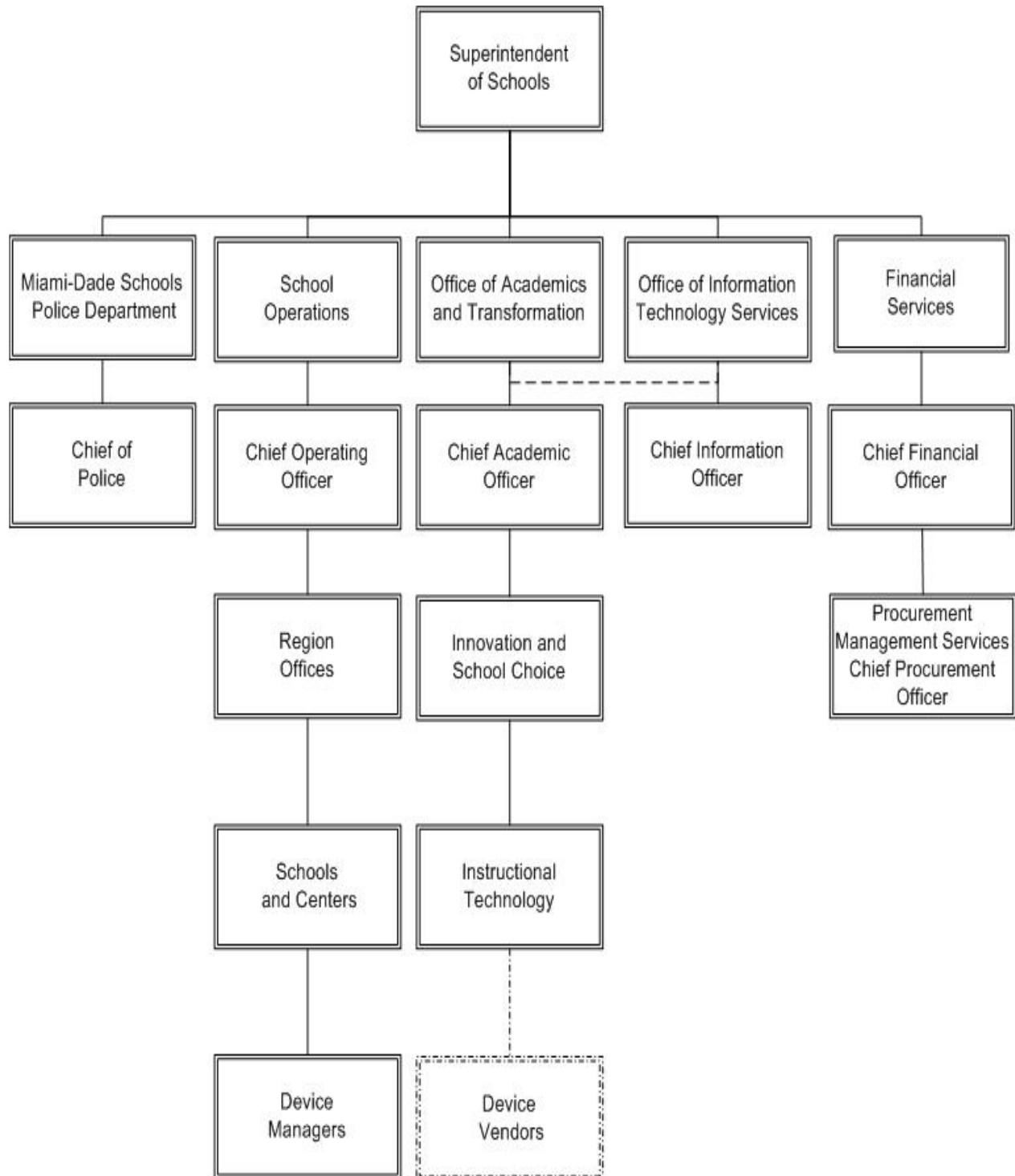
The following table lists the chronological order of events and actions taken to mitigate the pandemic's impact, and the task of distributing IMDs to students throughout the county.

¹ The 1Million Project Foundation launched in 2017 with a mission to help one million students who do not have reliable Internet access at home reach their full potential by giving them mobile devices and free high-speed Internet access.

Instructional Mobile Devices – Event Timeline	
January 2020	M-DCPS begins monitoring a respiratory virus affecting parts of China.
January 10	The Centers for Disease Control (CDC) published on its website information about the developing novel corona virus deriving from Wuhan, China.
January 20	The CDC confirmed the first U.S. laboratory-confirmed case of COVID-19 in the U.S. from samples taken on January 18 in Washington state.
January 22	The World Health Organization (WHO) International Health Regulation Emergency Committee met to discuss cases and decided to not declare the novel coronavirus a Public Health Emergency of International Concern. The Committee decided instead to monitor the situation and reconvene in 10 days.
January 31	WHO reconvened and declared the coronavirus outbreak a Public Health Emergency of International concern.
February 11	WHO announced the official name for the disease causing the outbreak: COVID-19.
Week of March 9	Emergency preparedness mobile device survey sent to parents. The Florida Governor issues Emergency Order-20-52 - State of Emergency declared due to COVID-19.
March 11	The WHO declared COVID-19 a pandemic.
March 13	The Superintendent invoked School Board Policy 8420 and declared an emergency closure of all schools effective Monday, March 16. The District began device distribution.
March 16	Distance learning begins.
March 20	End of device distributions at school locations.
March 28	Six (6) high schools throughout the district began to serve as distribution sites.
Week of April 13	Community involvement specialists began going door-to-door delivering devices and hot spots to those students in schools with low attendance rates.
May 18	Collection of devices from graduating seniors and students withdrawing from M-DCPS commences.
June 3	Announcement: M-DCPS students, with the exception of graduating seniors, were allowed to keep their District-issued devices over the summer.
June 4	The District had purchased and/or distributed in excess of 100,000 IMDs required for virtual instruction.
August 6	ATMS began supporting device transfer requests between locations - Devices are no longer permanently assigned to a specific location.
August 31	First day of schooling for the 2020-2021 school year (100% remote learning).

The management and distribution of IMDs is primarily the responsibility of the District's Department of Instructional Technology. Leadership from that department works collaboratively with the Office of Information Technology Services, as well as Procurement Management Services and School Operations.

Organizational Chart



<i>Objectives, Scope, and Methodology</i>
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We performed this audit in accordance with the approved 2021-2022 Fiscal Year Audit Plan. The objectives were to review applicable processes, procedures, and controls associated with Instructional Mobile Device distribution, tracking, collection and disposal in order to assess adequacy and make recommendations for improved efficiency, effectiveness, and safeguarding of District assets.

The scope of the audit was primarily from January 2020 to December 2021.

We performed the following procedures to satisfy our objectives:

- Surveyed and/or interviewed device managers, teachers, students, school and District-level administration, principals, assistant principals, vendors, and other school districts.
- Test counted a statistically valid sample of 384 IMDs and visited 199 locations throughout the county to confirm their physical location.
- Reviewed related Request for Proposal (RFP) and vendor contracts.
- Followed-up on prior findings and recommendations issued in the OMCA's September 2016 report: ***Audit of Security Controls – Certain District-Issued Mobile Devices.***
- Analyzed IMD inventory data tracked in ATMS.
- Attended an IMD online training session.

We reviewed applicable policies, procedures, standards, and best practices, including:

- M-DCPS 2011 and 2017 Network Security Standards (NSS)
- National Institute of Standards and Technology (NIST) Special Publication 800-53 - Revision 5 (September 2020)
- Asset Tracking Management System (ATMS) user guide
- Various M-DCPS School Board Policies, District forms, and Weekly Briefings
- Device procurement data
- M-DCPS Manual of Property Control Procedures
- M-DCPS Mobile Device Agreements

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards (GAGAS) issued by the Comptroller General of the United States of America Government Accountability Office (GAO).

Those standards require that we plan and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives.

We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Glossary of Technical Terms and Acronyms

The following definitions are provided for abbreviations and acronyms used in this report:

ATMS	Asset Tracking Management System
DSP	Designated Site Person (used interchangeably with Device Manager throughout this report)
IMD	Instructional Mobile Device (laptop or tablet)
ITS	Information Technology Services - Central District IT facility
NIST	National Institute of Standards and Technology – A federal organization charged with developing Information Technology security standards and guidelines for governmental information systems
RFP	Request for Proposal
WB	Weekly Briefings - the District's centralized information distribution tool

<i>Findings, Conclusions, and Recommendations</i>
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1. Improvements Needed in Tracking and Monitoring Instructional Mobile Devices

District Not Tracking and Monitoring All IMDs

The District currently uses the Asset Tracking Management System (ATMS) to track and monitor mobile devices from the Digital Convergence initiative.

As of July 22, 2021, ATMS indicated there were 220,000 Instructional Mobile Devices (IMDs) distributed to students and at various locations. However, other evidence obtained from ITS and other sources indicate that the District's processes result in not all devices being captured, tracked and monitored by ATMS, and that the District, in fact, has an inventory of laptops, mobile devices and convertible devices in excess of 300,000.

Data Concerning the Composition and Attributes of the District's IMD Inventory Is Lacking

Additionally, the ATMS system as currently configured and used by the District, does not readily track or provide certain attributes of the devices, such as:

- Age of the device
- Warranty provisions
- Complete device tracking history
- Funding source

Insufficient Knowledge and Training

In surveys and interviews with various stakeholders throughout the District, including teachers, device managers and administrators, we found a majority of said employees believed they were not adequately trained in the management, distribution and collection of IMDs. Other complaints by school sites regarding IMDs included the length of time to have devices repaired/replaced when needed and broken/obsolete devices remaining at schools for long periods of time.

Although most instructional mobile devices have a cost of less than \$1,000 and fall below the threshold required by School Board Policy 7450 and related statutory requirements for capitalizing and tracking, they are susceptible to theft due to their size and portability.

Absent an efficient and effective process and controls to comprehensively manage and track the District's complete mobile device inventory, the risk of theft, loss and abuse of the District's IMDs is increased; the procurement requirements as to type and quantity of devices are hindered; and associated operational issues at the school sites are more likely.

During the conduct of this audit, the Administration informed us it is in the process of developing a request for proposal (RFP) to acquire a new asset tracking management system to replace the existing system. As of January 2022, this RFP is in the final review stages and is expected to be released/published in February of 2022.

Responsible Departments:

**Instructional Technology
School Operations**

Recommendations:

- 1.1 With the profound increase in the number of IMDs utilized by students and teachers since the outset of the pandemic, it is imperative that the District has a system in place to comprehensively manage, track and monitor its mobile devices. Enhanced controls and procedures must include and pertain to the complete inventory of IMDs, regardless of funding source, program or department.**

Management's Response:

The responsible departments agree with the recommendation to enhance controls and procedures relative to mobile device management. To accomplish this task, a request for proposal (RFP) has been issued for an asset management system that will be licensed and managed by the District. The current system is limited in function and is managed by a third party. The new system will require, at a minimum, the following:

- *Mobile Device Management (MDM) Integration.*
- *Inventory Lifecycle Management: The platform must track the full lifecycle of devices. The platform must keep a detailed record of changes made to every device with advanced filtered reports. The platform must automatically track changes to ownership, location, hardware internals, funding sources, and other crucial asset data.*
- *Store Images or Other Files Associated with Assets: The platform must have the ability to attach files to assets such as photos of damage, a police report for a stolen device, or a related purchase order for an asset.*
- *Asset Check-in & Check-out Interface: The platform should have an intuitive scan interface that instantly assigns a student device during distribution or a location during collection while retaining detailed repair and ownership history that is maintained from initial assignment, during storage, and through device re-issuing.*
- *Device Collection and Detailed Device Storage: The platform must support detailed collection and instant storage assignment upon scanning, such as sequencing through numbered box slots that coordinate with a specified storage cart or facility.*

- *Classroom-level Inventory Distribution, Collection, and Auditing Tools for Teachers: The platform should integrate with the District's Student Information System (SIS) to roster data and allow teachers to view a list of students in their class and quickly distribute, collect, or conduct an audit of student-assigned devices. This should be done through the user interface (UI), a connected scanner, or by using a device's webcam.*
- *Fees & Fines Management: The platform must have a "fees feature" whereby repair/replacement fees can be linked to users, assets, and tickets. The platform should, at a minimum, log fees; record payments; and generate invoices. The platform should include fee management automations, including the ability to send triggered email alerts to parents, school staff, and students.*
- *Creation of Custom Reports and Filtering on Any Asset Field: The platform must allow for custom report creation and views using any asset field in the platform, including any custom field, and fields populated via an MDM integration.*
- *Inventory Audit Management Tools that Enable Creation of Dynamic Device Audit Schedules: Platform administrators must be able to create multiple audit policies with time flexibility based on any field including hardware type, location, funding source, etc.*
- *Transfer of Assets to Different Locations: The platform must have a mechanism to transfer assets from one location to another. The transfer process must allow for attachments to document the move. The platform must allow for both individual and bulk transfers, with limited authorized users with access to bulk transfers.*

Staff in Instructional Technology ensures that the devices procured by the department are added to the asset management system, inventoried annually, removed from inventory when obsoleted, and so forth. As to the recommendation to track all IMDs across the District, regardless of funding source, program, or department, the District will explore the feasibility of tracking all IMDs. Currently, the District only tracks capitalized equipment. More time is needed to consider this recommendation, which would involve multiple departments across functional areas.

1.2 Develop/update applicable policies, procedures and manuals that comprehensively address the management of the District's IMDs and ensure applicable staff are adequately trained.

Management's Response:

The responsible departments concur with the recommendation. The District currently provides all schools with guidance for the management of IMDs via the Digital Convergence website at digital.dadeschools.net. The site contains updated manuals and guides for school sites. These guides are being reviewed in collaboration with School Operations and will be updated to better provide program implementation guidance to administrators and the Designated Site Persons (DSP). Currently, training is provided annually to all new DSPs who are responsible for managing inventory at the school site and to any DSP/Administrator in need of a refresher.

There have been 16 asset management system professional development sessions between July 1, 2021, through the present. Additionally, DSPs are connected through Microsoft Teams and can seek support directly from Instructional Technology staff. A limited number of videos have been produced on the use of the ATMS.

Once the RFP for a new Asset Management System is approved by the School Board, Instructional Technology will coordinate with the vendor to provide novel on-demand instructional videos as well as implementation guides. Additionally, because of the recommendation made, mandatory annual training on the use of the District's Asset Management System will be required of all Principals and Assistant Principals.

1.3 Consider the points raised in this audit report and discussed throughout the conduct of this audit in the procurement of a new asset tracking management system.

Management's Response:

The responsible departments concur with the recommendation. As mentioned in the audit report, an RFP to acquire a new Asset Management System to replace the existing system has been released and the specifications required will address the points raised in this audit report. Funding will be required to sustain the new Asset Management System in perpetuity.

2. Unlocated and Unreturned Instructional Mobile Devices

We sampled 384 mobile devices of a population of 220,000 included in the aforementioned ATMS to verify their physical presence and location. ATMS is a proprietary, third-party system used by the District to track mobile devices. The sampling methodology employed was statistically valid using a confidence level of 95% and margin of error of plus or minus 5%. 199 schools and locations were visited. Locations were given a total of about five weeks to locate devices. We found 18 (4.7%) of the 384 mobile devices were unaccounted for, and 31(8.1%) were not returned by students when required.

Additionally, the District does not have an effective mechanism to electronically track lost or stolen mobile devices, particularly devices that are not within the M-DCPS network environment, such as a student's home. Currently, a combination of tracking tools and software client are utilized with limited effect.

The Mobile Devices RFP 16-058-MT issued in 2017 indicated that the District was interested in considering options for mobile device electronic tracking but was not committed to make a purchase through this mechanism. Ideally, the solution would feature the ability to locate a missing or stolen device and lock it remotely. The proposal would also include an option to deploy a solution to the 140,000 previously purchased mobile devices. While the RFP recommended that vendors provide a tracking mechanism, it did not require it.

Student Obligation Form:

This form is issued to students with an outstanding financial obligation for items such as unpaid school activities or clubs, returned checks, and lost or damaged textbooks. The Student Obligation form is also used to document devices that have not been returned or were lost by a student. Currently, this form requires that it be signed by a teacher and the student but does not require the signature of the parent or guardian.

Requiring a parent/guardian signature on the Student Obligation form may improve the collection/retrieval of unreturned devices and/or strengthen the enforceability of funds owed.

Responsible Departments:

**Instructional Technology
School Operations**

Recommendations:

- 2.1 To encourage students and their parents/guardians to return mobile devices, the District should consider consequences for not returning devices timely, unless there is a documentable financial hardship.**

Management's Response:

The responsible departments concur with the recommendation. The current procedure requires that a financial obligation be issued to a student that does not return a device. Currently, those financial obligations are managed and tracked internally by schools.

However, with the new RFP for an Asset Management System, a universal obligation tracker that is tied to a student profile and allows for the obligation to transfer from school to school is required.

The staff in the Division of Innovation and School Choice will work collaboratively with School Operations, the Miami-Dade Schools Police Department, and the Office of the Controller to document an appropriate consequence for not returning devices in a timely manner, unless there is a documentable financial hardship.

It should be noted that prior to launching the Digital Convergence initiative, staff in the Division of Innovation and School Choice met with staff in the School Board Attorney's Office to determine consequences for lost, stolen, or non-returned devices and were advised that student penalties should be consistent with those in Florida Statute for textbooks and that consequences that were more stringent could not be imposed. Consequences will need to be approved by the School Board and included in the Code of Student Conduct and/or Student Handbook. Consequences will also need to be included in all training courses, implementation guides, and in all student/parent agreements.

2.2 Future mobile device RFPs and contracts should consider requiring that a cost-effective electronic tracking mechanism for locating lost or stolen devices be proposed as part of the contract.

Management's Response:

A feature to allow for the electronic tracking of lost/stolen devices, such as Apple's Find My iPhone feature, has been considered by staff and has not been pursued in the past due to concerns regarding student privacy expressed by the School Board Attorney's Office. This feature will be revisited with the School Board Attorney's Office. If the concerns are no longer an issue, such an appliance/agent will also be considered by Information Technology Services.

2.3 The District should consider requiring a parent/guardian acknowledgement/signature on the Student Obligation form.

Management's Response:

The requirement of a parent/guardian acknowledgement/signature on the Student Obligation Form will be discussed with School Operations and, if appropriate, an updated form will be created and posted by the Federal and State Compliance Office. However, the new Asset Management System RFP not only requires that obligations be tracked, but that the system provide a notification mechanism when an obligation is issued against a student.

3. Adherence to Device Distribution Procedures Can Be Improved

The sudden and rapid distribution of District-issued instructional mobile devices under pandemic conditions made it difficult for all schools/locations to accurately adhere to established distribution procedures.

The most recent 2019-2020 Mobile Device Projects Implementation Guide states how to properly distribute instructional devices, along with detailing the forms to be completed, fees to be paid, collection of devices, and process for lost, stolen, broken, or transferred devices. Weekly Briefings sent throughout the pandemic also provided updates on repairs, collection of devices, inventory checks, and updating asset status in ATMS.

In our interviews with administrators and device managers regarding their roles with distributing devices, numerous indicated that they felt the need to rely on handwritten logs or spreadsheets to feel comfortable that the devices were properly tracked, although they may have also used ATMS.

Reliance on manual handwritten logs or spreadsheets in the distribution and tracking of IMDs increases the risk of errors and/or omissions in the District's inventory of IMDs.

Recommendation:

- 3.1 Provide mandatory training and/or directives to all Administrators and Device Managers on the proper way to distribute instructional devices and how to properly record the distributions in the ATMS system (or other centralized inventory system). This training and/or directive should be repeated as necessary, or at least annually, to ensure that all positions responsible for the management and tracking of devices are properly trained.**

Responsible Departments:

**Instructional Technology
School Operations**

Management's Response:

Refer to feedback provided in response to Finding 1.2

4. The Disposition of Instructional Mobile Devices is not Compliant with School Board Policy

We interviewed Instructional Technology staff, school Designated Site Persons (Device Managers) and District vendors to understand the instructional mobile devices disposition process.

We found that devices that have been identified as obsolete or damaged beyond economical repair are being disposed of utilizing a third-party. Although, this process addresses disposition needs, it is non-compliant with School Board Policy 7310 – Disposition of Surplus Property, which states, in pertinent part:

“Items approved for disposal as junk or salvage shall be assigned to Stores and Mail Distribution warehouse which will be the sole processor of disposal”.

In addition, we reviewed both the Agreement Form for Contracted Services for the vendor that is currently providing disposition services and the RFP 16-058 – MT Mobile Devices & Services which solicited services. Neither document mentions nor authorizes the recycling/disposition of instructional mobile devices by the vendor.

Noncompliance with School Board Policy 7310 increases the risk of fraud, waste and abuse in the disposition of District owned property, including IMDs.

Responsible Departments:

**Instructional Technology
Procurement Management Services**

Recommendations:

- 4.1 Instructional Mobile devices that are no longer useful or damaged beyond economical repair should be processed according to School Board Policy 7310 – Disposition of Surplus Property.**

Management’s Response:

The Department of Stores and Mail Distribution (SMD) is not involved in the disposition of surplus IMDs as the assets are not valued above the capitalization threshold utilized by SMD/property accounting for tracking/handling of property.

- 4.2 Consider updating Policy 7310 to provide for the disposition of property that is not managed by the Department of Stores & Mail Distribution when such disposition is performed via a properly approved contract.**

Management’s Response:

The responsible departments concur with the recommendation. As such, Policy 7310 is being updated to allow for the disposition of computing devices not managed by SMD (non-capitalized equipment that is not property controlled) via a properly approved contract in a method that is eco-friendly and ensures data security.

In alignment with School Board Policy 7460 – Conservation of Natural and Material Resources, the District’s stated goal of increasing waste diversion by 5 percent by 2026, and recommendations proffered by the Clean Energy 2030 Task Force, the School Board approved and awarded ITB-20-068-CM for the Recycling of Computing Devices at the December 15, 2021, Board meeting ([Item E-145](#)). The Division of Innovation & School Choice’s Instructional Technology department will be working directly with the contracted vendor to properly track and recycle obsolete assets or those beyond economical repair through a revenue-generating contract. Revenue will be utilized to subsidize repair costs of deployed assets.

Management's Response

MEMORANDUM

February 23, 2022

TO: Mr. Jon Goodman, Chief Auditor
Office of Management and Compliance Audits

FROM: Sylvia J. Diaz, Ed.D., Chief Academic Officer
Office of Academics and Transformation

**SUBJECT: RESPONSE TO THE AUDIT FINDINGS OF THE 2021 AUDIT OF
DISTRICT-ISSUED INSTRUCTIONAL MOBILE DEVICES**

Although the Office of Innovation & School Choice is largely in accord with the findings of this audit, it is important to provide some historical perspective regarding mobile device checkouts in the school district and to consider the special circumstances under which the office and the District were operating when confronted with the pandemic in March of 2020.

In 2014, the District launched Digital Convergence, an initiative to provide mobile devices to students for use at school and at home. While instructional mobile devices (IMD) were purchased for all schools, they were not purchased for all students; initially, student device checkout was limited to senior high school students and those attending a select group of elementary schools. As the years passed and the District gained experience with device checkout, the elementary school checkout program was largely phased out while some middle schools began device checkout based on instructional programs, grants and other initiatives. Consequently, prior to the COVID-19 pandemic and the resulting initial school closures, IMD checkout predominantly occurred at the senior high school level while most elementary, K-8, and middle schools did not check out devices to students and, therefore, had no experience with the process. These schools deployed carts of devices to classrooms for student use.

Procedures for device management and checkout were developed at the onset of Digital Convergence in 2014. The Instructional Technology department published guidelines on the Digital Convergence website. Guidelines were also communicated through meetings with school administrators and designated site persons (DSP) who handle device inventories at schools. Weekly briefings on device checkout, device collection, inventory, and student obligations relative to lost and stolen equipment were and continue to be disseminated annually. All mobile devices purchased through this initiative are tracked in the Asset Tracking and Management System (ATMS), and district staff provide annual training to staff at schools responsible for device management.

Staff that developed the procedures at the onset of the project never anticipated the unprecedented needs that would arise in March of 2020 as a result of the global pandemic. At that critical point, there was an immediate need to develop an emergency device deployment plan requiring all schools to check out devices to students and necessitating the transfer of devices among schools. Procedures were developed and

implemented, but it was soon obvious that the throughput rate was not adequate, and thus procedures had to be adapted quickly to meet the community demand for devices. Curbside and centralized distribution points were established, which were ideal for fast distribution but not optimal for inventory control. As a result of the curbside distributions, often with limited connectivity to allow for barcode entry of assets into the ATMS, staff improvised and captured data using spreadsheets and, at times, paper logs. Additionally, devices for curbside distributions were collected from different schools with available inventory and were checked out to students/parents district-wide. The Instructional Technology department spent countless months processing spreadsheets from schools and regions to capture checkouts, particularly from schools that were not fully aware of the procedures and simply did not have the time or sufficient resources (such as bar-code scanners) to implement the procedures due to the high demand for IMDs and the short amount of time provided to distribute them. Likewise, during the pandemic, adding devices to the ATMS that were not purchased by the Instructional Technology department became a necessity. All these procedures and technical modifications developed rapidly, often with little time to allow for proper training of staff.

While the District was not fully prepared for the immediate need to shift policies and procedures, in doing so, the District has learned valuable lessons and now has a clearer understanding of the issues around device distribution and the strategies that worked. As a result, the Instructional Technology department is now better prepared to shift to a rapid deployment model and has incorporated lessons learned as part of the contingency plan whenever procedures and policies are drafted and considered.

Below, you will find the responses to the findings of the *Audit of District-Issued Instructional Mobile Devices*. Improvements are needed in the process and controls over the distribution, tracking, collection, and disposal of IMDs, and as mentioned in the responses, many of those improvements are already underway.

1. Improvements Needed in Tracking and Monitoring Instructional Mobile Devices (IMDs)

1.1. With the profound increase in the number of IMDs utilized by students and teachers since the outset of the Pandemic, it is imperative that the district have a system in place to comprehensively manage, track and monitor its mobile devices. Enhanced controls and procedures must include and pertain to the complete inventory of IMDs, regardless of funding source, program or department.

The responsible departments agree with the recommendation to enhance controls and procedures relative to mobile device management. To accomplish this task, a request for proposal (RFP) has been issued for an asset management system that will be licensed and managed by the District. The current system is limited in function and is managed by a third party. The new system will require, at a minimum, the following:

- Mobile Device Management (MDM) Integration.
- Inventory Lifecycle Management: The platform must track the full lifecycle of devices. The platform must keep a detailed record of changes made to every device with advanced filtered reports. The platform must automatically track changes to ownership, location, hardware internals, funding sources, and other crucial asset data.
- Store Images or Other Files Associated with Assets: The platform must have the ability to attach files to assets such as photos of damage, a police report for a stolen device, or a related purchase order for an asset.
- Asset Check-in & Check-out Interface: The platform should have an intuitive scan interface that instantly assigns a student device during distribution or a location during collection while retaining detailed repair and ownership history that is maintained from initial assignment, during storage, and through device re-issuing.
- Device Collection and Detailed Device Storage: The platform must support detailed collection and instant storage assignment upon scanning, such as sequencing through numbered box slots that coordinate with a specified storage cart or facility.
- Classroom-level Inventory Distribution, Collection, and Auditing Tools for Teachers: The platform should integrate with the District's Student Information System (SIS) to roster data and allow teachers to view a list of students in their class and quickly distribute, collect, or conduct an audit of student-assigned devices. This should be done through the user interface (UI), a connected scanner, or by using a device's webcam.
- Fees & Fines Management: The platform must have a "fees feature" whereby repair/replacement fees can be linked to users, assets, and tickets. The platform should, at a minimum, log fees; record payments; and generate invoices. The platform should include fee management automations, including the ability to send triggered email alerts to parents, school staff, and students.
- Creation of Custom Reports and Filtering on Any Asset Field: The platform must allow for custom report creation and views using any asset field in the platform, including any custom field, and fields populated via an MDM integration.
- Inventory Audit Management Tools that Enable Creation of Dynamic Device Audit Schedules: Platform administrators must be able to create multiple audit policies with time flexibility based on any field including hardware type, location, funding source, etc.

- **Transfer of Assets to Different Locations:** The platform must have a mechanism to transfer assets from one location to another. The transfer process must allow for attachments to document the move. The platform must allow for both individual and bulk transfers, with limited authorized users with access to bulk transfers.

Staff in Instructional Technology ensures that the devices procured by the department are added to the asset management system, inventoried annually, removed from inventory when obsoleted, and so forth. As to the recommendation to track all IMDs across the District, regardless of funding source, program, or department, the District will explore the feasibility of tracking all IMDs. Currently, the District only tracks capitalized equipment. More time is needed to consider this recommendation, which would involve multiple departments across functional areas.

1.2. *Develop/update applicable policies, procedures and manuals that comprehensively address the management of the District's IMDs and ensure applicable staff are adequately trained.*

The responsible departments concur with the recommendation. The District currently provides all schools with guidance for the management of IMDs via the Digital Convergence website at digital.dadeschools.net. The site contains updated manuals and guides for school sites. These guides are being reviewed in collaboration with School Operations and will be updated to better provide program implementation guidance to administrators and the Designated Site Persons (DSP). Currently, training is provided annually to all new DSPs who are responsible for managing inventory at the school site and to any DSP/Administrator in need of a refresher. There have been 16 asset management system professional development sessions between July 1, 2021, through the present. Additionally, DSPs are connected through Microsoft Teams and can seek support directly from Instructional Technology staff. A limited number of videos have been produced on the use of the ATMS. Once the RFP for a new Asset Management System is approved by the School Board, Instructional Technology will coordinate with the vendor to provide novel on-demand instructional videos as well as implementation guides. Additionally, because of the recommendation made, mandatory annual training on the use of the District's Asset Management System will be required of all Principals and Assistant Principals.

1.3. *Consider the points raised in this audit report and discussed throughout the conduct of this audit in the procurement of a new asset tracking management system.*

The responsible departments concur with the recommendation. As mentioned in the audit report, an RFP to acquire a new Asset Management System to replace

the existing system has been released and the specifications required will address the points raised in this audit report. Funding will be required to sustain the new Asset Management System in perpetuity.

2. Unlocated and Unreturned Instructional Mobile Devices

2.1. *To encourage students and their parents/guardians to return mobile devices, the District should consider consequences for not returning devices timely, unless there is a documentable financial hardship.*

The responsible departments concur with the recommendation. The current procedure requires that a financial obligation be issued to a student that does not return a device. Currently, those financial obligations are managed and tracked internally by schools. However, with the new RFP for an Asset Management System, a universal obligation tracker that is tied to a student profile and allows for the obligation to transfer from school to school is required. The staff in the Division of Innovation and School Choice will work collaboratively with School Operations, the Miami-Dade Schools Police Department, and the Office of the Controller to document an appropriate consequence for not returning devices in a timely manner, unless there is a documentable financial hardship.

It should be noted that prior to launching the Digital Convergence initiative, staff in the Division of Innovation and School Choice met with staff in the School Board Attorney's Office to determine consequences for lost, stolen, or non-returned devices and were advised that student penalties should be consistent with those in Florida Statute for textbooks and that consequences that were more stringent could not be imposed. Consequences will need to be approved by the School Board and included in the Code of Student Conduct and/or Student Handbook. Consequences will also need to be included in all training courses, implementation guides, and in all student/parent agreements.

2.2. *Future mobile device RFPs and contracts should consider requiring that a cost-effective electronic tracking mechanism for locating lost or stolen devices be proposed as part of the contract.*

A feature to allow for the electronic tracking of lost/stolen devices, such as Apple's Find My iPhone feature, has been considered by staff and has not been pursued in the past due to concerns regarding student privacy expressed by the School Board Attorney's Office. This feature will be revisited with the School Board Attorney's Office. If the concerns are no longer an issue, such an appliance/agent will also be considered by Information Technology Services.

2.3. *The District should consider requiring a parent/guardian acknowledgement/signature on the Student Obligation form.*

The requirement of a parent/guardian acknowledgement/signature on the Student Obligation Form will be discussed with School Operations and, if appropriate, an updated form will be created and posted by the Federal and State Compliance Office. However, the new Asset Management System RFP not only requires that obligations be tracked, but that the system provide a notification mechanism when an obligation is issued against a student.

3. Adherence to Device Distribution Procedures Can be Improved

- 3.1. *Provide mandatory training and/or directives to all Administrators and Device Managers on the proper way to distribute instructional devices and how to properly record the distributions in the ATMS system (or other centralized inventory system). This training and/or directive should be repeated as necessary, or at least annually, to ensure that all positions responsible for the management and tracking of devices are properly trained.***

Refer to feedback provided in response to Finding 1.2

4. The Disposition of Instructional Mobile Devices is not Compliant with School Board Policy

- 4.1. *Instructional Mobile devices that are no longer useful or damaged beyond economical repair should be processed according to School Board Policy 7310 -Disposition of Surplus Property.***

The Department of Stores and Mail Distribution (SMD) is not involved in the disposition of surplus IMDs as the assets are not valued above the capitalization threshold utilized by SMD/property accounting for tracking/handling of property.

- 4.2. *Consider updating Policy 7310 to provide for the disposition of property that is not managed by the Department of Stores & Mail Distribution when such disposition is performed via a properly approved contract by the School Board.***

The responsible departments concur with the recommendation. As such, Policy 7310 is being updated to allow for the disposition of computing devices not managed by SMD (non-capitalized equipment that is not property controlled) via a properly approved contract in a method that is eco-friendly and ensures data security. In alignment with School Board Policy 7460 – Conservation of Natural and Material Resources, the District's stated goal of increasing waste diversion by 5 percent by 2026, and recommendations proffered by the Clean Energy 2030 Task Force, the School Board approved and awarded ITB-20-068-CM for the Recycling of Computing Devices at the December 15, 2021, Board meeting ([Item](#)

[E-145](#)). The Division of Innovation & School Choice's Instructional Technology department will be working directly with the contracted vendor to properly track and recycle obsolete assets or those beyond economical repair through a revenue-generating contract. Revenue will be utilized to subsidize repair costs of deployed assets.

Should you have any questions or need additional information, please contact me at 305 995-1451.

SJD:kh
M037

cc: Dr. Jose L. Dotres
Mr. Walter Harvey
Mr. Jose Bueno
Dr. John D. Pace
Mr. Ron Y. Steiger
Mr. Eugene P. Baker
Mr. Mario De Barros
Mr. Daniel Mateo
Ms. Daisy Naya
Mr. Luis Baluja

Anti-Discrimination Policy

The School Board of Miami-Dade County, Florida adheres to a policy of nondiscrimination in employment and educational programs/activities and strives affirmatively to provide equal opportunity for all as required by:

Title VI of the Civil Rights Act of 1964 - prohibits discrimination on the basis of race, color, religion, or national origin.

Title VII of the Civil Rights Act of 1964 as amended - prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

Title IX of the Education Amendments of 1972 - prohibits discrimination on the basis of gender. M-DCPS does not discriminate on the basis of sex in any education program or activity that it operates as required by Title IX. M-DCPS also does not discriminate on the basis of sex in admissions or employment.

Age Discrimination Act of 1975 - prohibits discrimination based on age in programs or activities.

Age Discrimination in Employment Act of 1967 (ADEA) as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40 years old.

The Equal Pay Act of 1963 as amended - prohibits gender discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

Section 504 of the Rehabilitation Act of 1973 - prohibits discrimination against the disabled.

Americans with Disabilities Act of 1990 (ADA) - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

The Family and Medical Leave Act of 1993 (FMLA) - requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to eligible employees for certain family and medical reasons.

The Pregnancy Discrimination Act of 1978 - prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

Florida Educational Equity Act (FEEA) - prohibits discrimination on the basis of race, gender, national origin, marital status, or handicap against a student or employee.

Florida Civil Rights Act of 1992 - secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

Title II of the Genetic Information Nondiscrimination Act of 2008 (GINA) - prohibits discrimination against employees or applicants because of genetic information.

Boy Scouts of America Equal Access Act of 2002 – No public school shall deny equal access to, or a fair opportunity for groups to meet on school premises or in school facilities before or after school hours, or discriminate against any group officially affiliated with Boy Scouts of America or any other youth or community group listed in Title 36 (as a patriotic society).

Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which stipulate categorical preferences for employment.

In Addition:

School Board Policies 1362, 3362, 4362, and 5517 - Prohibit harassment and/or discrimination against students, employees, or applicants on the basis of race, color, ethnic or national origin, religion, marital status, disability, genetic information, age, political beliefs, sexual orientation, sex/gender, gender identification, social and family background, linguistic preference, pregnancy, citizenship status, and any other legally prohibited basis. Retaliation for engaging in a protected activity is also prohibited.

For additional information about Title IX or any other discrimination/harassment concerns, contact the U.S. Department of Education Asst. Secretary for Civil Rights or:

Office of Civil Rights Compliance (CRC)
Executive Director/Title IX Coordinator
155 N.E. 15th Street, Suite P104E
Miami, Florida 33132

Phone: (305) 995-1580 TDD: (305) 995-2400

Email: crc@dadeschools.net Website: <https://hrdadeschools.net/civilrights>



Miami-Dade County Public Schools

Internal Audit Report

***Audit of District-Issued
Instructional Mobile Devices***

March 2022

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