Bulldogs Go Green

Submitted by:

Natchez Adams School District

Superintendent Zandra McDonald-Green

Natchez, MS



LEA Information: Location, & Demographics



Natchez-Adams School District is the largest school system in the Miss-Lou metro area. As a Tier 1 district in an economically disadvantaged area, we have seven 50/60-year-old buildings to maintain with a very limited budget.

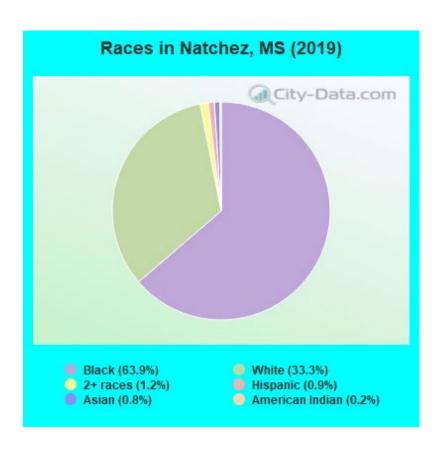


Representing a unique blend of diverse students and qualifying to receive 100% free and reduced lunch. We are an innovative, inspiring, and unified, student-focused learning community, which motivates and empowers all students to succeed. Our mission, our promise is to nurture, engage, educate, inspire, and prepare students to learn and lead in a global society as confident, competent, and productive citizens.



NASD is classified as a Title I non-profit public school district, serving the public good of the city of Natchez/Adams County in the state of Mississippi and serves more than 3,000 students in 7 schools offering several specialized programs. NASD is divided into elementary, middle, high school and early college learning communities. With over 600 employees district-wide, NASD is the largest employer in the county. The district has a graduation rate of 89.64% and seeks to continue to increase that number.

LEA Information Demographics



- Since its founding in 1991, the school district has had a long history of partnering with the local community to execute large capital projects of this nature. In fact, a major renovation of the high school's main building, which was more than 50 years old, was recently completed. So, we are confident in our ability to successfully manage this capital improvement project and to maintain the improvements in the future.
- As of 2019, according to demographic data reported by city_data.com the city of Natchez had a population of 14,615, of which, approximately 64% was African-American. For 2019, the median household income was \$26,860 (compared with \$45,792 for the state) and the estimated per capita income was \$19,307. This represents approximately 18% lower median income for this area, compared with the State of Mississippi. The percentage of all residents in Natchez living in poverty in 2019 was 34.5%, but for African-Americans, the percentage was 39.0%.

Training & Coaching

Training Opportunities

- ► Team Leads & Team Member Trainings
 - ► 15 hours per month, Team Leads and Team Members watched the CLASS Energy Trainings.
 - The schedule for each team was given to the Administrative Assistant. She filed the schedule in the CLASS Energy accountability file drawer.
 - Team members were also required to sign in for each training session.
 - ► The sign-in forms were also filed in the CLASS Energy accountability file drawer.

Coaching

- ► Team Leads & Team Support Coaching Sessions
 - The Team Leads and Grant Support Team Members met with our national mentor:
 - Professional facilitators shared innovative measures to the groups.
 - These strategies were taken back to the Team Members and implemented (when applicable).
 - These two groups (Team Leads & Team Support Group): met monthly.
 - Agenda constructed & guided the meetings:
 - Each Team Lead would report the progress of their energy measures;
 - Tasks completed by Team Members,
 - Steps for ensuring continued implementation of energy efficiency measures.

Energy Teams

Team A

- ► Team Lead:
 - ► Tarvis Tennessee (IT Director)
- Team Members:
- ▶ 1. Chris Dunbar
- ➤ 2. Robert Bradford (Adams County-Emergency Management Director)

Team B

- Team Lead:
 - Robert Johnson: (HVAC Manager)
- Team Members:
- ▶ 1. George Minor
- 2. Michelle Brooks
- 3. Avis McIntyre

Energy Teams

Team C

- Team Lead:
 - ► Eric Dunham (Lead Custodian)
- Team Members:
- ▶ 1. Abigail Smith
- 2. David Morrison
- ▶ 3. Stephanie Franklin
- 4. Quantina Hawkins
- ▶ 5. Sherry Bernard

Team D

- Team Lead:
 - Melvin Davis: (Chief of Security)
- Team Members:
- ▶ 1. Henry Davis
- 2. Debra Fuller
- > 3. Stephanie Franklin

Grant Support Team

- Grant Manager & Accountability Support Team Members
 - Timothy Byrd (Business Director)
 - Aquetta Butler (Accountability Director)
 - ▶ Diane Smith (Administrative Assistant)

- This team was responsible for the following:
- 1. Tracking the utility costs for each plant/school site.
- 2. Developing the staff training schedule.
- 3. Creating the agenda, sign-in, and assembling training materials.
- 4. Tracking time for each staff member.
- Submitting Time Sheets for staff payment/s.

Grant Support Team

- Grant Manager & Accountability Support Team Members
 - Timothy Byrd (Business Director)
 - Aquetta Butler (Accountability Director)
 - ► Diane Smith (Administrative Assistant)

- This team was responsible for the following:
- 1. Keeping documentation of the energy measures implemented and executed by the Team Members.
 - a. Filing the Weekly Checklists that the Team Leads were required to submit:
 - b. The Weekly Checklists supported the energy efficiency tasks the staff completed at their school site and/or physical plant.
- 2. Scheduling Team Lead meetings: monthly meetings.

Progress Made During Phase 2 & Associated Impacts

Three (3) Elementary Schools

Proposed Upgrade	Progress Made		
Restroom upgrades	Upgrades are currently being made to the elementary schools. • Anticipated completion date: July 2024.		
Replace all exit doors	This renovation is dependent upon the approval of our ARP ESSER Revision #2 approval by the Mississippi Department of Education (MDE).		

Three (3) Elementary Schools

Proposed Upgrades	Progress Made
Place Air Purifiers in each classroom, office, and other areas of the building where stakeholders may visit.	Air purifiers were placed in all classrooms, offices, and other areas of the building where stakeholders may visit.
Change to HEPA Air filters	 This was completed: HEPA filters were placed in all areas that require a filter for filtration of air particles. Custodians are required to track the following: When the filters are changed; Area that the filter was changed (Classroom A, B, & C)

Summary of <u>Facilities</u> Addressed in the Plan

Location 1:

McLaurin Elementary School

- Built in 1953, comprising 107,350 sq ft. This is certainly one of the oldest buildings, and one of the largest in our district and is in desperate need of renovations due to very poor indoor air quality.
- Based on the building's age, the use of toxic materials in construction, old and often inoperable doors that cannot be shut completely as well as the close proximity to the highway there are lots of toxic fumes creating an unhealthy environment.

Location 2:

Morgantown Elementary School

Formerly Morgantown Middle School:
Built in 1959, comprising 96,805 sq ft.
This building has structural issues that impact our ability to open windows in several areas therefore impacting the air quality in these areas. There are certain areas of the building which contain asbestos, and students and staff are not permitted in these rooms. Additionally, because of the age of the building, several of the gas lines have had to be replaced.



Summary of <u>Facilities</u> Addressed in the Plan

- Susie B West Elementary School: (Location Three)
 - ▶ Built in 1960, comprising 46,009 sq ft.
- Susie B West Elementary School is a public school located in Natchez, MS, which is in a remote town setting. The student population of Susie B West Elementary School is 345 and the school serves K-5.
 - At Susie B West Elementary School, 8% of students scored at or above the proficient level for math, and 17% scored at or above that level for reading.
 - ► The school's minority student enrollment is 92%.
 - ▶ The student-teacher ratio is 12:1, which is better than that of the district.
 - ► The student population is made up of 53% female students and 47% male students.
 - The school enrolls 100% economically disadvantaged students.
 - There are 28 equivalent full-time teachers and 1 full-time school counselor.

Morgantown Elementary School

- Upgrade restrooms:
 - ► Toilet Light Motion Sensor
 - Motion Sensory Sinks
 - Motion Sensing LED Lights
- Replace all exit doors.
- Place Air Purifiers in each classroom, office, and other areas with stakeholders.
- Change the type of Air Filters: Change to HEPA.
 - Develop & Implement a system of changing air filters;
 - ▶ Track the system for changing the air filters.

Gilmer McLaurin Elementary School

- Upgrade restrooms:
 - Toilet Light Motion Sensor
 - Motion Sensory Sinks
 - Motion Sensing <u>LED</u> Lights
- Replace all exit doors.
- Place Air Purifiers in each classroom, office, and other areas with stakeholders.
- Change the type of Air Filters: Change to HEPA.
 - Develop & Implement a system of changing air filters;
 - Track the system for changing the air filters.

SB West Elementary School

- Upgrade restrooms:
 - ► Toilet Light Motion Sensor
 - Motion Sensory Sinks
 - Motion Sensing <u>LED</u> Lights
- Replace all exit doors.
- Place Air Purifiers in each classroom, office, and other areas with stakeholders.
- Change the type of Air Filters: Change to HEPA.
 - Develop & Implement a system of changing air filters;
 - Track the system for changing the air filters.

Natchez Middle School

- Upgrade restrooms:
 - ► Toilet Light Motion Sensor
 - Motion Sensory Sinks
 - Motion Sensing <u>LED</u> Lights
- Replace all exit doors.
- Place Air Purifiers in each classroom, office, and other areas with stakeholders.
- Change the type of Air Filters: Change to HEPA.
 - Develop & Implement a system of changing air filters;
 - ▶ Track the system for changing the air filters.

Goal	Metrics	Strategy	Action	Lead	Timeline
To upgrade restrooms to include motion sensory equipment: the goal is to decrease the utility costs 15%, monthly.	Install motion sensory restroom equipment in all student & staff restrooms, decrease utility costs as indicated by energy bills	Motion sensory equipment will be installed in the bathrooms for the three (3) elementary schools. • 100% upgrade	Installation of the equipment is currently transpiring anticipated completion date: July 2024.	Facilities Manager,& Superintendent	07/31/2024
To installation of LED Lights to conserve energy and decrease by 15% per/month	Electricity use- kwh/year,	Upgrade and/ convert 100% of the LEA's buildings to LED lighting.	Identify buildings which do not have LED lighting.	Facilities Manager,& Superintendent	12/31/2024

Goal	Metrics	Strategy	Action	Lead	Timeline
To replace all exit doors at the three (3) elementary schools to improve access control and energy conservation by 100%.	Doors at the schools are more than 50 years old; parts to fix and/or repair the doors are no longer made by a manufacturer, install new doors in all schools and see a decrease in energy consumption.	Using ARP ESSER construction allocation, funds will be used to replace all exterior doors. • 100% of the doors at the three schools will be replaced. • Access Control equipment will also be installed after door replacement.	 Buildings have been identified; Quotes have been obtained for the costs of replacing the doors; Amount to fund the construction has been calculated. Request for funding from the ARP ESSER allocation has been requested. 	Facilities Manager,& Superintendent	 12/31/2024 Request for funding from the ARP ESSER allocation has been requested. Awaiting approval from the Mississippi Department of Education (MDE)
To install HEPA air purifiers in all schools, and LEA buildings to improve air quality in all buildings	Monitoring for carbon dioxide, carbon monoxide, particulate concentrations, and other environmental air quality conditions.	Install HEPA air purifiers in all schools, and LEA buildings. • 100% of the LEA's building will have purifiers placed in all areas.	 Install HEPA air purifiers in all schools, and LEA buildings. 100% of the LEA's building will have purifiers placed in all areas. 	Facilities Manager,& Superintendent	05/2023

Next Steps for Proposed Building Upgrades

Natchez Early College

- Upgrade restrooms:
 - Toilet Light Motion Sensor
 - Motion Sensory Sinks
 - Motion Sensing <u>LED</u> Lights
- Replace all exit doors.
- Place Air Purifiers in each classroom, office, and other areas with stakeholders.
- Change the type of Air Filters: Change to HEPA.
 - Develop & Implement a system of changing air filters;
 - ► Track the system for changing the air filters.

Natchez High School

- Upgrade restrooms:
 - ▶ Toilet Light Motion Sensor
 - Motion Sensory Sinks
 - Motion Sensing LED Lights
- Replace all exit doors.
- Place Air Purifiers in each classroom, office, and other areas with stakeholders.
- Change the type of Air Filters: Change to HEPA.
 - Develop & Implement a system of changing air filters;
 - ► Track the system for changing the air filters.

Next Step for Proposed Building Upgrades

Performing Arts Center

- Renovate the building:
- Upgrade the Theatre section of the building.
- Upgrade restrooms:
 - Toilet Light Motion Sensor
 - Motion Sensory Sinks
 - Motion Sensing <u>LED</u> Lights
- Replace all exit doors.
- Place Air Purifiers in each Performing Arts Classroom, office, and auditorium.
- Change the type of Air Filters: Change to HEPA.
 - Develop & Implement a system of changing air filters;
 - Track the system for changing the air filters.

Gilmer McLaurin School: Comparison of utility costs 12/2022 12/2023 \$6,571 \$5,562 per/month per/month

Summary of <u>Impacts</u> or <u>Learning Curves</u>

- Learning Curves
 - ► Heating & Cooling Systems must be monitored daily.
 - ► Having a major system that controls the system seems to have the most positive impact.
 - ➤ Constant regulation and oversight, of the temperatures (heat & cooling), seem to have the greater impact on the utility cost.

Summary of Next Steps for Implementation

- Replacement of Exit Doors
 - Funding for this is anticipated to come from the ARP ESSER Construction allocation.
 - A request for a revision to the original ARP ESER application has been submitted to MDE
 - We are anxiously awaiting approval of the revision.
 - ▶ USDOE has given LEA's an extension for construction:
 - Obligation of the allocation must be completed by September 30, 2024.
 - Liquidation date has been extended until January 2026.
 - ▶ The contract must be entered into by September 30, 2024.
 - Solar Panels
 - District representatives are currently in conversation with a vendor about the installation of Solar Panels.
 - ▶ This will be a cost saving measure for the LEA because the panels will be installed at no cost.
 - Potential for a lease income for the LEA's land in which the panels are placed.
 - LEA will also receive an energy credit on our electrical utility bill.