



Indoor Air Quality – Center of Excellence



# Mission Statement

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Serve as the authoritative center for studies, testing, education, and analysis of Indoor Air Quality (IAQ) in the State of Florida. Dedicated to ensuring the well-being of our communities by providing reliable and comprehensive information about IAQ through technology, rigorous research, and analysis.

# Center of Excellence Pillars

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## RESEARCH

- IAQ
- Pathogen behavior
- Impact studies
- Environmental Justice

## EDUCATION

- Proactive
- Age specific
- Free of charge
- Best practices
- Purpose driven
- Curriculum

## COMMUNITY ENGAGEMENT

- Federal
- City State Local
- Education
- Commercial
- Residential

## PROFESIONAL DEVELOPEMENT

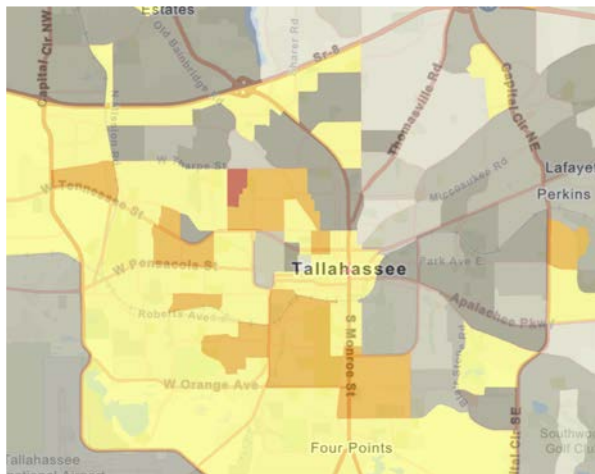
- Curriculum development
- Alignment with career paths
- Certifications

## TECHNOLOGY

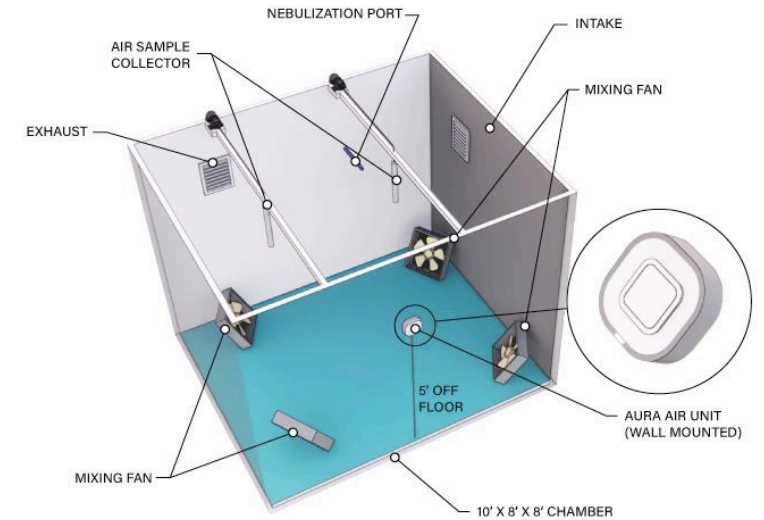
- Centralized Air Quality Hub at FAMU.
- Best in class monitoring and purification technologies.

# Scientific Research

- State of the art facilities at FAMU
- Accredited faculty and staff
- Specialized air quality research
- Technology evaluation – Hardware and Software
- Geospatial expertise



Published at (GMT -12:00)	Dominant Pollutant	Co2	Voc	Temperature	Pm10	Pm2.5	AQI	Co	Humidity
2022-05-01T12:10:18.972Z	VOC	636	784	77	27	14	150	0.8	55.2
2022-05-01T12:20:50.220Z	VOC	663	912	77	16	6	150	0.8	55.8
2022-05-01T12:31:16.495Z	VOC	671	946	77	25	12	150	1.6	55.9
2022-05-01T12:41:46.689Z	VOC	668	969	77	16	6	150	1.6	56.3
2022-05-01T12:52:13.888Z	VOC	689	1035	77	24	9	150	0.8	56.5
2022-05-01T13:02:42.997Z	VOC	695	1060	77	26	13	150	1.6	56.7
2022-05-01T13:13:11.492Z	VOC	702	1099	77	18	5	150	1.6	56.6
2022-05-01T13:23:39.916Z	VOC	691	1096	77	26	14	150	1.6	56.7
2022-05-01T13:34:08.678Z	VOC	687	1122	76	19	5	150	1.6	56.6
2022-05-01T13:44:37.427Z	VOC	699	1115	77	15	4	150	1.6	57.3
2022-05-01T13:55:06.038Z	VOC	704	1175	77	19	4	150	0.8	57.2
2022-05-01T14:05:34.685Z	VOC	696	1171	76	16	6	150	0.8	57.1
2022-05-01T14:16:03.756Z	VOC	683	1174	76	19	6	150	0.8	57.4
2022-05-01T14:26:32.012Z	VOC	693	1192	76	16	5	150	1.6	57.6
2022-05-01T14:37:00.742Z	VOC	692	1192	76	19	8	150	1.6	57.6
2022-05-01T14:47:29.449Z	VOC	694	1219	76	20	6	156	1.6	57.7
2022-05-01T14:57:58.067Z	VOC	686	1206	76	22	7	150	1.6	58
2022-05-01T15:08:26.855Z	VOC	683	1227	76	19	6	171	1.6	57.8
2022-05-01T15:18:57.821Z	VOC	680	1234	76	22	7	195	0.8	58
2022-05-01T15:29:24.236Z	VOC	664	1220	76	19	6	157	0.8	57.4
2022-05-01T15:39:52.900Z	VOC	663	1241	76	18	6	200	1.6	57.4



# Education

The FAMU IAQ – COE is committed to providing resources and educational programs to inform the Florida community at large of the importance of air quality.

- Community focused education
- Train the trainer model
- Online resources



# Community Engagement

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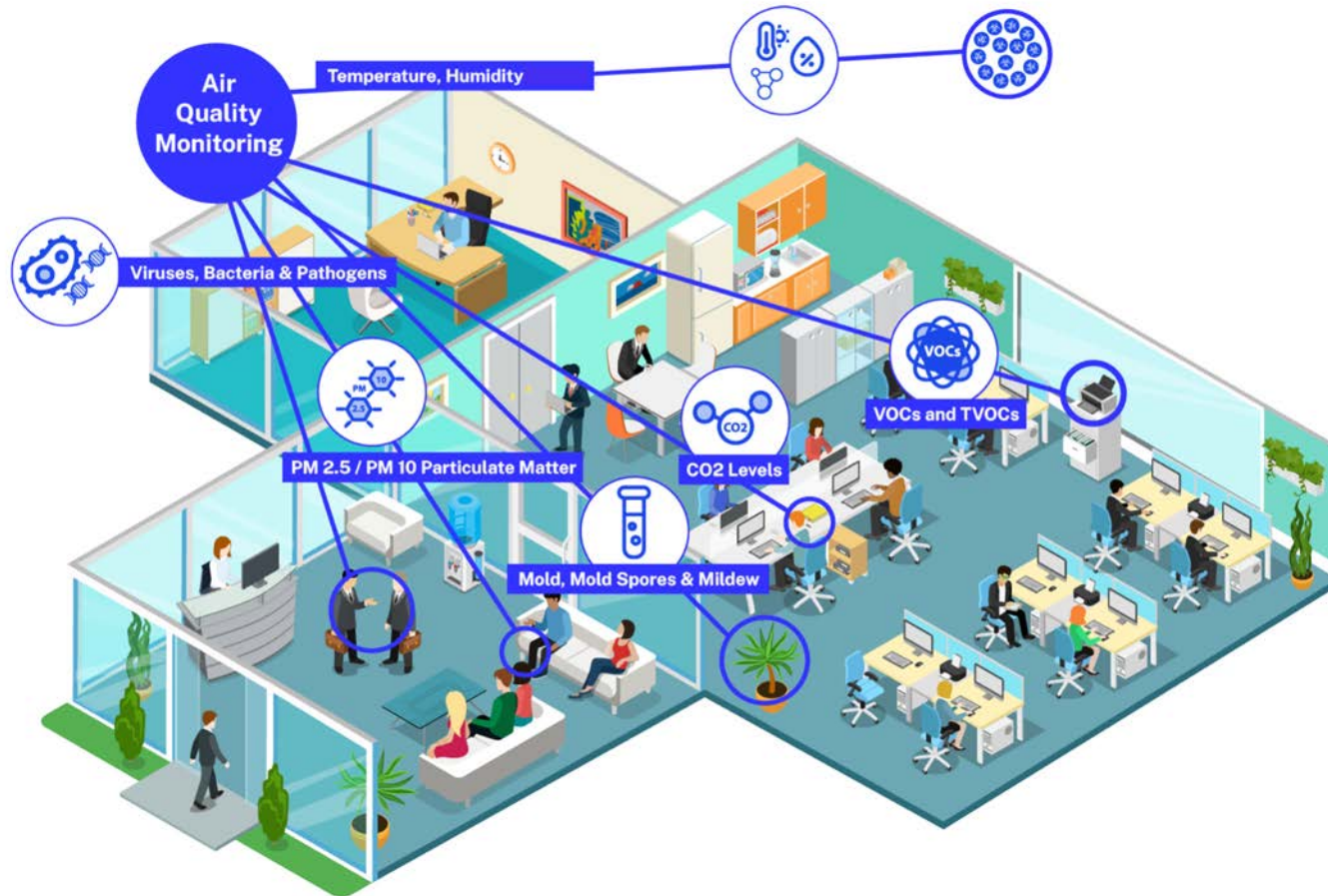
- Statewide Sensor deployment
- Data gathering and analysis
- Purifier deployment
- Remove financial barriers
- Continuing education



# Air Quality Monitoring



# Air Quality Monitoring



Particulate Matter Levels: (PM) 0.5, 1, 2.5, 5, And 10



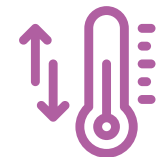
Total Volatile Organic Compounds (TVOCs)



Carbon Dioxide Levels (CO<sub>2</sub>)



Humidity Levels

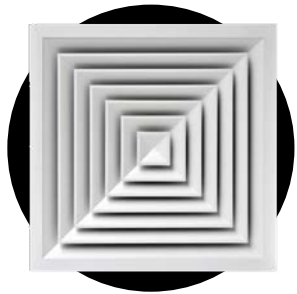


Ambient Temperature



# Air Quality Improvement

## For Improving Indoor Air Quality And Indoor Environments



### HVAC Ventilation

**Increase air exchanges (6 per hour), the amount of fresh air introduced indoors, and exhaust spent air.**



### HVAC Filtration

**Improve HVAC air filtration with MERV 13 or MERV 8 Filters.**



### Portable Air Cleaners

**Use portable air cleaners in rooms for increased filtration.**



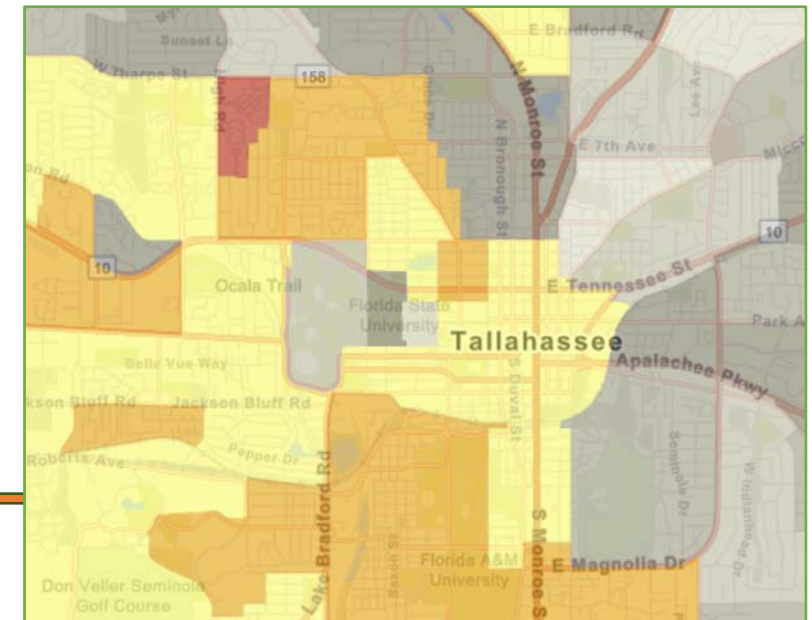
### Cleaning Protocols

**Improve cleaning protocols for heightened disinfection and sanitization standards.**

# Data Analysis

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- Leverage spatial component of the sensor network
  - Physical address
- Perform spatial analysis to identify and rank communities at risk
  - Data available in EPA Environmental Justice (EJ) Mapper
- Prioritize outreach and mitigation strategies based on EJ concepts



# Plan for Indoor Air Quality Improvement

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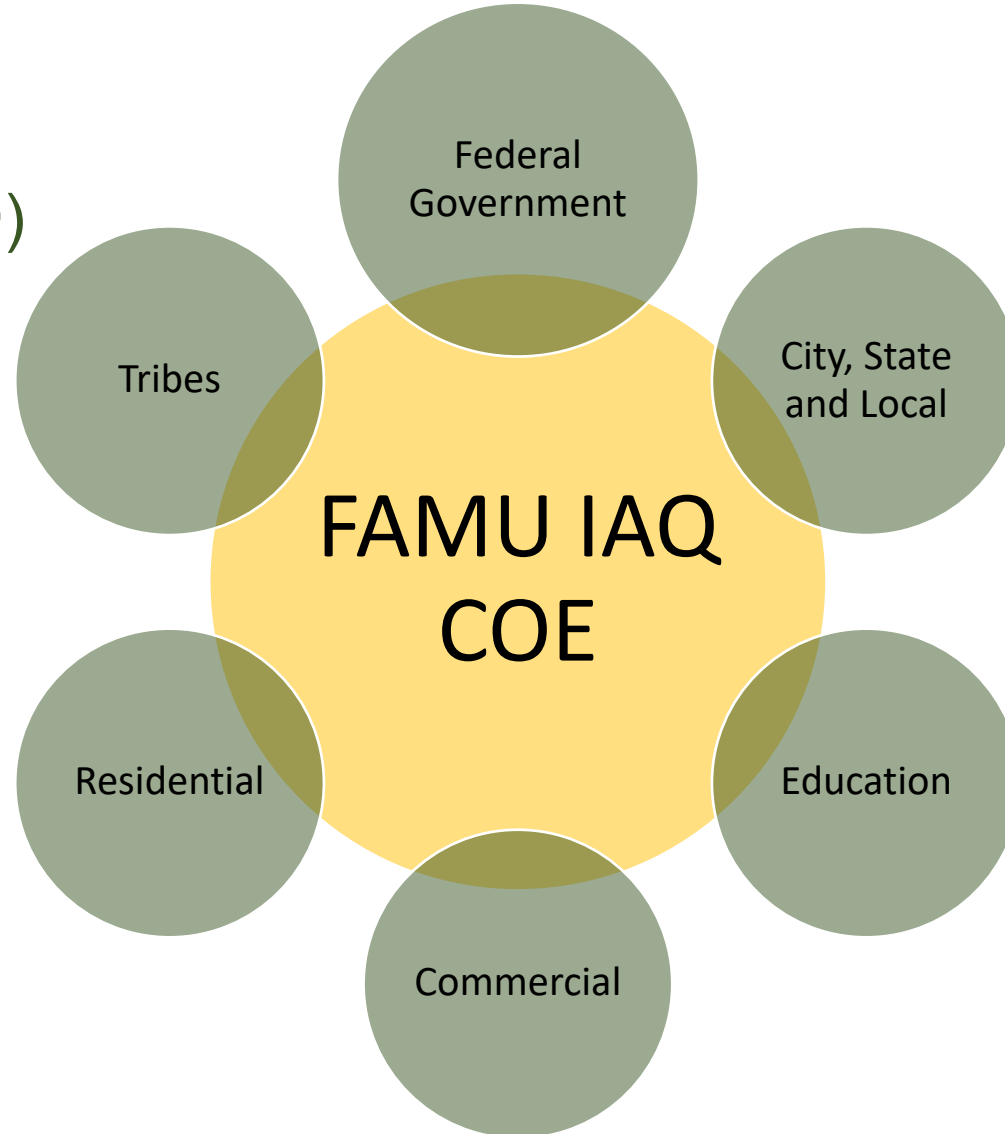
- Establish sensor network
- Continuously capture and analyze data
- Create and deliver action plans to improve IAQ
- Implement a predictive services model
- Implement an alert framework based on predictive services
- Continuously measure and report on improvement and success

# Stakeholders and Participants

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## Potential Participants

- Federal Government
- City State Local (SLED)
- Education
- Commercial
- Residential



# Points of Contact

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# FLORIDA A&M UNIVERSITY

Founded in 1887 as the State Normal College for Colored Students, Florida Agricultural and Mechanical University (FAMU) is the only historically state supported educational facility for African Americans in Florida. It has always been co-educational. In 1890, the second Morrill Act was passed. This enabled the school to become the Black Land Grant College for the State of Florida. In 1891, the college was moved from its original location west of town to its present location which was once the site of "Highwood," Territorial Governor W.P. Duval's slave plantation. The site is one of the highest hills in Tallahassee. The school was known as Florida A&M College from 1909 until 1953 when it attained university status.