



## Staffing at State and Local Air Pollution Control Agencies

*AAPCA Survey Results – July/August 2023*

### Overview

In August 2023, the Association of Air Pollution Control Agencies<sup>1</sup> (AAPCA) completed a national survey of state and local air pollution control agencies about recent staffing levels and trends. Specifically, the survey sought data (as of July 1, 2023) regarding vacancy levels, staff experience, departures, and total staffing levels since 2018. AAPCA also collected perspectives on hiring challenges as well as some potential solutions for consideration.

### Why did AAPCA undertake this survey?

State and local agencies have indicated difficulties hiring and retaining a qualified, technical, and experienced workforce to meet the growing complexities of air pollution control work. These concerns have been underscored as air agencies face increased obligations under the federal Clean Air Act and prepare to implement multiple major new rulemakings,<sup>2</sup> including a tightened fine particulate matter (PM<sub>2.5</sub>) national ambient air quality standard (NAAQS),<sup>3</sup> methane standards for the oil and natural gas sector,<sup>4</sup> and greenhouse gas (GHG) standards for power plants.<sup>5</sup>

AAPCA's survey is intended to capture a national, data-driven snapshot of air agency staffing levels and trends.

### Survey Period and Responses

AAPCA's survey was distributed nationally to state and local air agencies on July 18, 2023, and was open for responses for a total of 43 days, through August 31, 2023. A total of 47 agencies provided responses, including 15 state programs and 32 local programs. Across all responding state and local agencies, data as of July 1, 2023, indicate:

- A vacancy rate of just over 12 percent;
- Nearly 21 percent of staff with two or less years of experience with the agency;
- About 41 percent of staff with 10 or more years of experience with the agency;
- Just above 22 percent of staff with 20 or more years of experience with the agency; and,
- More than 7 percent of staff with 30 or more years of experience with the agency.

---

<sup>1</sup> AAPCA is a national, non-profit, consensus-driven organization focused on assisting state and local air quality agencies and personnel with implementation and technical issues associated with the federal Clean Air Act. Created in 2012, AAPCA represents 51 state and local air pollution control agencies, and senior officials from 21 state environmental agencies currently sit on the AAPCA Board of Directors. AAPCA is housed in Lexington, Kentucky as an affiliate of [The Council of State Governments](#). More about AAPCA is at: [www.cleanairact.org](http://www.cleanairact.org).

<sup>2</sup> U.S. EPA's Office of Air and Radiation lists 92 short- and long-term regulatory actions in the *Spring 2023 Unified Agenda of Regulatory and Deregulatory Actions*.

<sup>3</sup> "Reconsideration of the National Ambient Air Quality Standards for Particulate Matter" ([RIN 2060-AV52](#)).

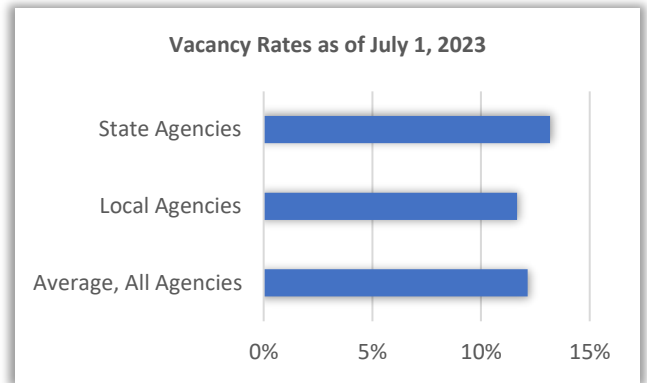
<sup>4</sup> "New Source Performance Standards and Emission Guidelines for Crude Oil and Natural Gas Facilities: Climate Review" ([RIN 2060-AV16](#)).

<sup>5</sup> "NSPS for GHG Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired EGUs; Emission Guidelines for GHG Emissions From Existing Fossil Fuel-Fired EGUs; and Repeal of the ACE Rule" ([RIN 2060-AV09](#)).

## AIR AGENCY VACANCY RATE (as of July 1, 2023)

### Summary findings:

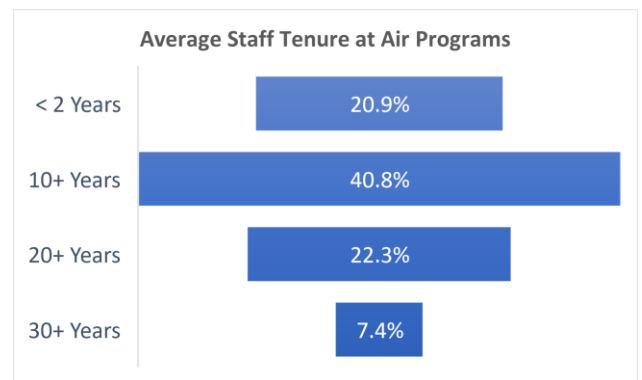
- The average vacancy rate across state air agencies was 13.2 percent, ranging from 5 percent to 23 percent at the time of survey.
- At 11.7 percent, the average vacancy rate across local air agency programs was slightly less, ranging from 0 to 50 percent at the time of survey.
- Across all agencies, the vacancy rate was 12.2 percent on average.



## STAFF EXPERIENCE AT AIR AGENCIES

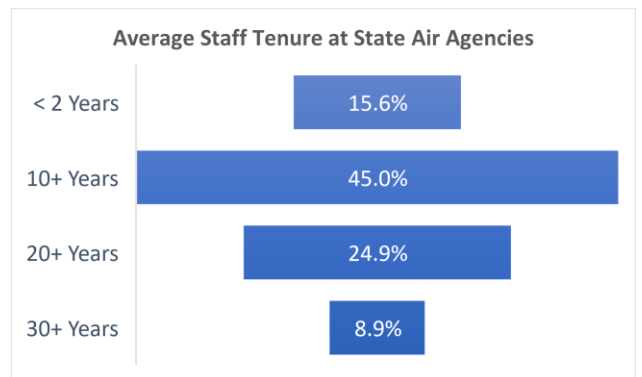
### Summary findings:

- An average of 20.9 percent of state and local air agency staff have two years or less of experience.
- Among all responding state and local air agencies, 40.8 percent of staff have more than 10 years of experience.
- On average, 22.3 percent of state and local air agency staff have more than 20 years of experience.
- An average of 7.4 percent of employees at air agencies have more than 30 years of experience.



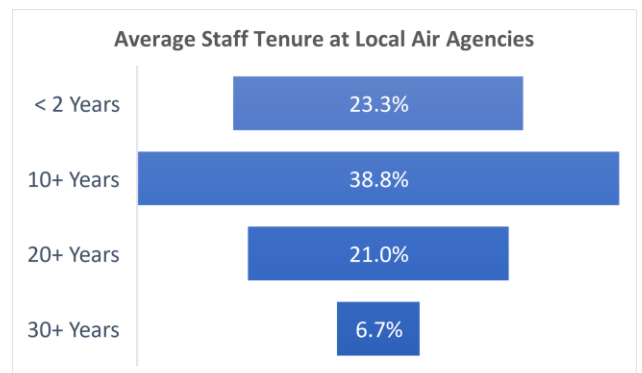
### State air agency findings:

- On average, responding state agencies indicated that 15.6 percent of employees have less than two years of experience.
- An average of 45 percent of employees have more than 10 years of experience.
- State air agency responses indicated that 24.9 percent of employees on average have more than 20 years of experience.
- On average, 8.9 percent of state air agency staff have more than 30 years of experience.

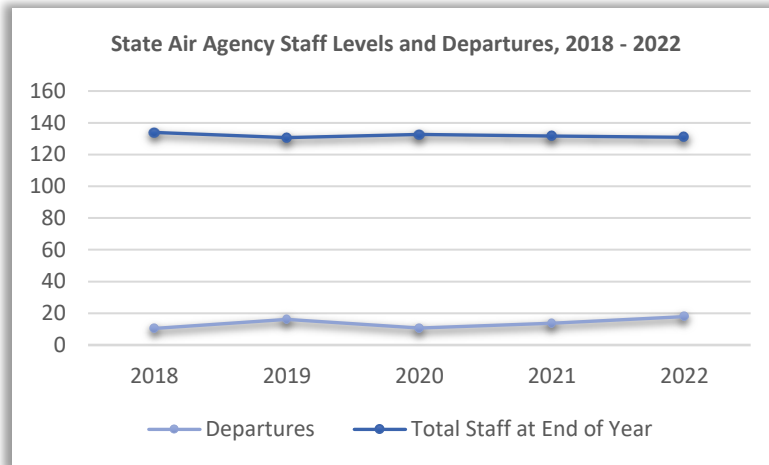


### Local air agency findings:

- On average, local air agencies that responded had 23.3 percent of staff with less than two years of experience.
- An average of 38.8 percent of employees at local air agencies have over 10 years of experience.
- At local air agencies, an average of 21 percent of staff have more than 20 years of experience.
- Local air agencies have an average of 6.7 percent of employees with more than 30 years of experience.

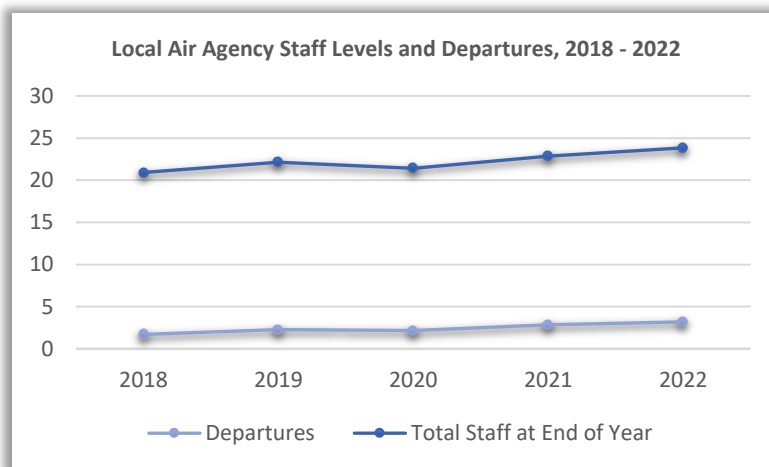


## AIR AGENCY STAFFING LEVELS & DEPARTURES



### State air agency findings:

- From 2018 through 2022, state air agencies averaged about 132 employees working in air pollution control, with a slight downward trend in staff level over those five years.
- State air agency programs averaged nearly 14 departures per year from 2018 through 2022, moving from an average of about 10 departures in 2018 to nearly 18 departures in 2022.
- As of July 1, 2023, state air programs have seen more than 11 departures on average this year, with staff levels at an average of 125 employees.
- When asked about a decrease or increase in overall positions over the past five years, 33 percent of state respondents noted staff levels had increased while 67 percent indicated flat (27 percent) or decreasing (40 percent) levels.



### Local air agency findings:

- From 2018 through 2022, local air programs averaged about 20 employees working in air pollution control, with stable, slightly increased staffing levels over those five years.
- Local air agencies averaged two departures per year from 2018 through 2022, and the average number of departures has increased from less than two per year in 2018 to more than three in 2022.
- As of July 1, 2023, local air programs have averaged two departures this year, with staff levels just above 20 employees on average.
- When asked about a decrease or increase in overall positions over the past five years, 31 percent of local air agency respondents noted staff levels had increased while 69 percent indicated flat (50 percent) or decreasing (19 percent) levels.

## KEY CHALLENGES AND WORKING TOWARD SOLUTIONS

When listing top difficulties to filling open positions, responding air agencies near-unanimously indicated two key challenges: starting salary and qualified applicants. These top issues are likely intertwined with broader public sector trends, particularly when comparing compensation levels with the private sector, which tend to be higher. Importantly, the complex work of air pollution control requires staff with technical backgrounds like engineering and chemistry, thus lower salaries at air agencies may have a potentially compounding effect on receiving interest from qualified applicants.

One respondent noted that new staff have less air quality experience than new employee hires five years ago, anecdotally supporting response data about concerns with staff air quality experience. On average, 20.9 percent of air agency program staff have less than two years of experience. Further contributing to this concern may be the nearly 30 percent of employees at or near retirement, with survey responses showing, on average, 22.3 percent of staff with 20-plus years of experience and another 7.4 percent with more than 30 years.

Air agencies also pointed to potential flexibilities that could be helpful in hiring qualified staff. Being able to provide telework was most often referenced as a benefit that allowed air agencies to be more competitive for applicants, though not every state or local program has the option. Some agencies also noted that inflexible hiring procedures have proven detrimental during the applicant review process, from overall slow or elongated processes to lack of flexibility when negotiating with leading candidates. Further challenges to hiring included lack of competitive cost of living adjustments, decreased staffing levels that have increased per-employee workloads and being able to retain trained staff.

When referencing additional solutions to hiring qualified staff, multiple respondents listed internship or partner programs with local universities and/or high schools as an effective strategy toward building a successful candidate pool. Agencies also noted efforts to improve job advertising methods/locations (i.e., online job boards, career fairs) as well as emphasize public sector benefits (i.e., pensions, paid holidays, vacation/sick leave) when seeking to fill positions. In terms of retaining employees, some agencies highlighted concentrating on staff development and recent raises as important to maintaining a qualified workforce.

Overall, state and local air agencies will be responsible for implementing critical federal Clean Air Act programs over the next several years. Understanding the current workforce, challenges to building and retaining qualified staff, and some potential solutions can assist air programs as they plan, hire, and develop technical staff to meet these needs.