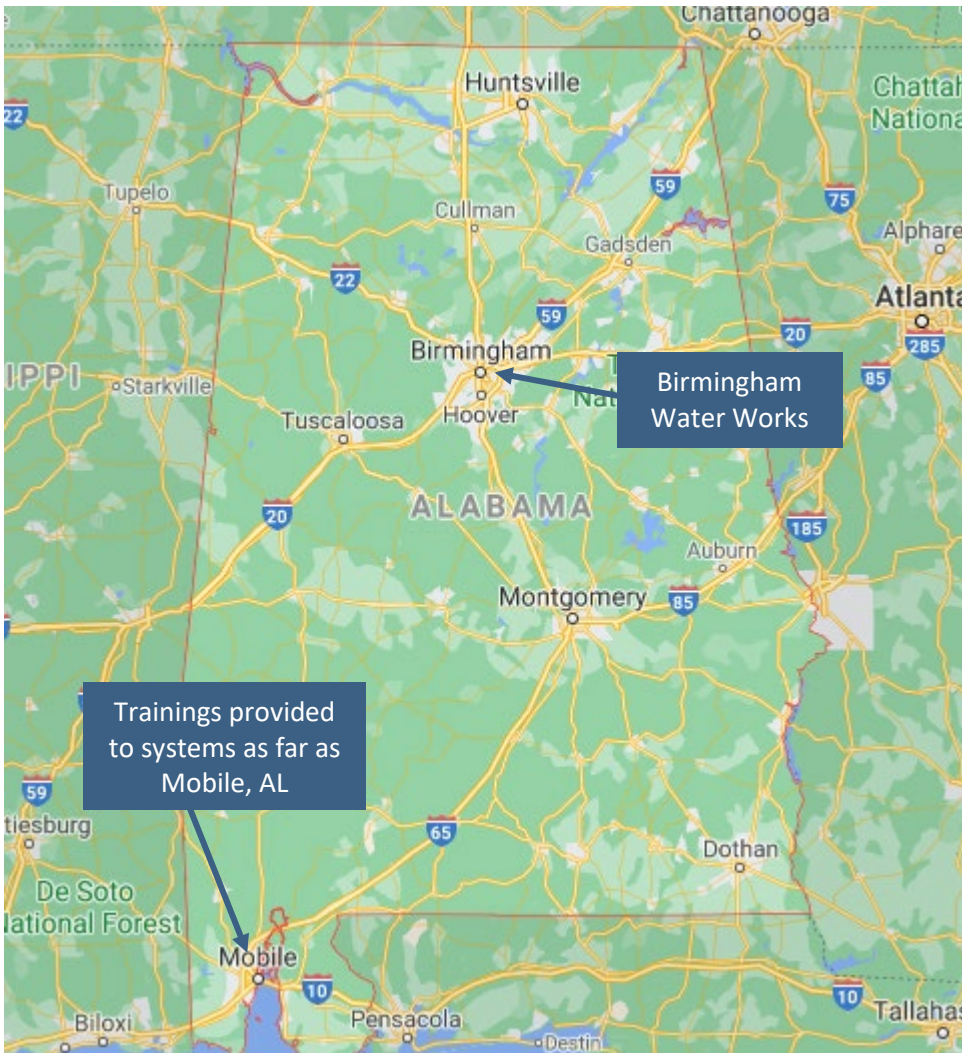


# BIRMINGHAM WATER WORKS

## TRAINING PROGRAM

*A Water System Partnerships Case Study*



### HIGHLIGHTS

#### Challenge Statement:

Birmingham had to contract with external trainers to conduct trainings, which resulted in high training costs. There also was a shortage of Grade IV operators across Alabama, and small water systems had difficulties accessing affordable trainings for their operators.

#### Partnership Features:

The training program that Birmingham established is an example of an Informal Cooperation partnership. Birmingham now invites other water systems in Alabama to participate in their internal trainings and provides external trainings for them as well. These trainings make Birmingham and staff from other systems more knowledgeable and prepared to operate water systems.

#### Primary Benefits:

Birmingham reduced training costs while increasing employee retention and career growth opportunities by moving trainings in-house and offering low-cost trainings to other systems. Other water systems now have access to trainings that were not available before.

#### Accomplishments:

Birmingham became an industry leader in providing water system trainings in Alabama and have increased the pool of Grade IV operators in the state through their top ranked training program. External water system operators benefit from their various trainings.

## ***Expanding the Birmingham Water Works Training Program***

### Background

Birmingham Water Works (Birmingham) is a single surface water system with four treatment plants that delivers water to over 585,000 people in five counties in Alabama. In 2008, Birmingham saw a need for a leadership training program specific to their water system. Management also realized that Birmingham would benefit if all trainings for water system staff were provided in-house, rather than continuing with expensive external trainers. A robust, internal training program

could reduce training costs and the trainings would be tailored to the water system's specific staff needs. Increased training opportunities resulted in higher staff retention and career growth, which reduced hiring costs and created a more knowledgeable staff.

### Critical Drivers

Critical factors that inspired Birmingham to evaluate their training program and consider partnerships opportunities were:

- ◆ **Reduce Water System Spending:** Instead of contracting with external trainers, Birmingham hired five full-time staff members to provide trainings, which reduced the overall training costs.
- ◆ **Shortage of Grade IV Operators:** Birmingham created "Grade I-IV Prep Classes" to train operators for the certification exam. These classes were then offered to other water systems which resulted in an increased Grade IV operator pool in Alabama.
- ◆ **Improve Current Trainings:** By extending the trainings to outside systems, Birmingham created extra revenue that was used to expand their training offerings. This increase in training opportunities benefited their staff and staff at outside water systems.
- ◆ **Improve Relationships with Consecutive Systems:** Providing trainings to their consecutive systems allowed Birmingham to improve their understanding of consecutive operations and improve communication and overall relations with consecutive systems.
- ◆ **Build Other Relationships:** Through these trainings, Birmingham increased outreach and developed relationships with other neighboring water systems.

The critical drivers for external systems to participate in the training program were:

- ◆ **Improve Access to Trainings:** Having improved and increased training options for operators and water system owners helped other systems build capacity and improve their ability to provide safe affordable drinking water in Alabama. Birmingham was able to tailor trainings to a water system's type and needs to help consecutive systems, neighboring water systems, and a network of water systems across the state.
- ◆ **At Cost Trainings:** Any revenue generated from Birmingham's trainings was reinvested back into the training program to improve both internal and external trainings. This allowed Birmingham to provide trainings at cost, so water systems were able to afford more trainings for their staff.
- ◆ **Build Relationships:** Through these trainings, neighboring systems have built relationships with Birmingham and can utilize Birmingham as a resource in the future.

## *Water System Partnerships as a Solution*

Public water systems across the country face a variety of challenges, including technical, managerial, and financial capacity issues. Water system partnerships refer to a range of collaborative activities in which systems can pool resources, expertise, and experience. Bringing systems together through partnerships can help reduce noncompliance issues, risks to public health, and redundant workloads. Water system



**BIRMINGHAM  
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### *TYPES OF PARTNERSHIPS*

#### **Informal Cooperation:**

Coordination with other water systems, but without contractual obligations. Informal partnerships may consist of partners sharing equipment and creating mutual aid agreements for emergency response management.

#### **Contractual Assistance:**

Setup a contract with another water system or service provider where the contract and service ultimately remain under the water system's control. This type of partnership may include a system purchasing water from another system or contracting out operations and management to another water system.

#### **Joint Power Agency:**

Creation of a new entity designed to serve the water systems that form it. These partnered water systems may share system management, operators, or source water.

#### **Ownership Transfer:**

Merger or mutual transfer of an existing entity or creation of a new entity. This type of relationship may be represented by one water system being acquired by another, or by being connected to another water system physically, financially, and managerially.

partnerships are informal or formal relationships that help water systems identify opportunities to leverage benefits that would be difficult to achieve independently.

Birmingham realized that increasing internal trainings and offering trainings to other systems would benefit everyone involved. By growing Birmingham's training program, they improved training access and quality across the state.

## Building Blocks of Partnership

In **2008**, Birmingham started an internal leadership training system, providing a variety of leadership programs for all levels of staff. Programs included:

- ◆ **Ready to Lead:** A one-year program for new supervisors, which helped prepare staff for management roles.
- ◆ **STAR:** A program for high performers, that helped strong candidates take necessary steps towards promotion. These trainings provided staff with the skills they needed to seize opportunities when positions became available.
- ◆ **GO:** A program that develops team leadership skills, preparing staff to feel comfortable delegating and coaching other employees.

The leadership program was so successful that Birmingham management discussed the benefits of increasing internal trainings with their Board of Directors. The Board understood that holding regular internal trainings benefited the future development of the water system. Birmingham hired full-time training staff and started adding new trainings.

After realizing that Birmingham was often required to do extra sampling due to water quality issues at consecutive systems, in **2009**, they invited their 12 consecutive systems to participate in their internal trainings. During annual meetings the water systems were able to discuss common concerns, improve communication, and Birmingham could provide their consecutive systems resources, such as informational videos.

Next, Birmingham opened trainings to small systems in the area. Nearby systems could either attend Birmingham's scheduled trainings at their facilities or Birmingham would travel to another system to provide the training. Birmingham has travelled as far as 250 miles to Mobile, Alabama to provide these on-site trainings. Expanding training offerings to outside audiences allowed Birmingham trainers and the other systems to tailor trainings. This was often a more cost-effective option than transporting multiple staff members to Birmingham for scheduled trainings.

Due to these successful outreach efforts, Birmingham was able to increase their training revenue to invest in current trainings and broaden their offerings. Their trainings grew to include safety, Grade I-IV operator certification, communication skills, leadership, management, and many other topics.

In **2017**, Birmingham revamped and expanded their leadership program to include a new employee self-leadership training. Increasing the leadership program has improved Birmingham's employee retention rates and career growth. Birmingham continues to provide a variety of trainings to Birmingham staff as well as neighboring systems.

## BIRMINGHAM TRAINING TIMELINE

2008

- Began Leadership Training
- Hired Full-Time Training Staff
- Expanded Internal Training Programs

2009

- Opened Trainings to Consecutive and Small Systems
- Travelled to External Systems for Trainings
- Increased Outreach
- Expanded Training Opportunities

2010

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2016

- Continued to Offer a Variety of Trainings to Internal and External Staff

2017

- Expanded Leadership Programs
- Began Internship Training Programs

## AWARD WINNING TRAININGS

Since **2013**, Birmingham has received Training Magazine awards every year. **2021** marked the third year in a row they ranked among the top 10 training programs (out of 125 awardees).

For more information about these awards, please visit their [website](#).



## Best Practices and Successful Strategies

### Key Strategies

Birmingham was able to develop a successful training program, in part, due to these key strategies:

- ◆ **Existing Structure:** One of the reasons Birmingham’s training offerings were able to grow was because of the strong foundation of their internal training program. They were able to capitalize on their existing structure and staff to build the program and pass that benefit to surrounding water systems.
- ◆ **Outreach:** Birmingham attended the Alabama-Mississippi American Water Works Association conference where they set up a booth to provide information to other systems about their training offerings. They also hosted a meeting for water systems and technical assistance providers to discuss the Lead and Copper Rule; nearly 100 people attended. In addition to attending events, Birmingham also uses quarterly brochures and emails to share information about the program.
- ◆ **Management and Board:** The Birmingham Board agreed with management that switching from external trainers to internal trainers would benefit the long-term success of Birmingham. The Board recognized the benefits of enhancing local communities as well as investing in their own staff.

### Funding

One of the biggest obstacles to increasing internal and external trainings was funding the program. To secure funding, staff convinced management and the Board of the long-term sustainability and financial benefit to Birmingham and its community.

These key points convinced the Board to invest in Birmingham’s training program:

- ◆ **Cost Savings:** Hiring full-time training staff eliminated the need to contract with external trainers. Internal trainings could be tailored to Birmingham’s system, which eliminated the need for supplemental system-specific trainings.
- ◆ **Need for Diverse Trainings:** Hiring internal training staff allowed the system to develop training offerings for all staff, not just operators. Trainers were able to provide trainings on topics such as safety, certification, leadership, and communications for a variety of roles across the water system.
- ◆ **Recognition:** Birmingham received recognition and awards for their training program and is viewed as a leader. Success and recognition can help convince management or a Board to continue investing in the program.
- ◆ **Future Relationships:** Birmingham is now seen as a resource to partnering systems and has earned the trust of many of the small water systems they support. These relationships are beneficial for future partnership opportunities including contractual assistance or ownership transfer.

## Partnership Benefits

Through its partnerships, Birmingham has been able to offer more diverse and effective trainings to their own staff and staff at other systems. They have also seen improvements in staff skills, higher employee retention, and career growth amongst staff. Through their certification training offerings, Birmingham has helped fill the gap of Grade IV operators in Alabama.

### INVESTING IN FUTURE OPERATORS

Birmingham has three internship training programs for college and high school students: “Ambassadors in Training,” “Water Apprenticeship Program” and “Young Water Ambassadors”. Interns prepare for working at a water system by completing training and on the job tasks before they graduate. Following graduation, college students are hired by Birmingham or another system. This program has increased the pool of Grade IV operators in Alabama.

For more information, please visit Birmingham’s [Student Employment Opportunities website](#).



Birmingham provides trainings at cost, which enables access to trainings that had previously not been available to its consecutive and neighboring water systems. These trainings increase their staff's knowledge and expertise on a range of topics and improve the systems' resilience and compliance.

## ***Learning from the Birmingham Partnership***

Birmingham found that key actions early in the partnerships process created the conditions necessary for success.

### **Building on Strengths**

Birmingham utilized tools and resources in-house to create a successful training program that could be tailored and offered to other systems. Internal staff and supervisors are more knowledgeable about the water system, so they can provide more tailored training to staff across departments. If other large systems duplicate this method in their states, it could be beneficial to the water industry as a whole. Large systems can examine their own strengths such as lab analysis, technical expertise, or consumer relations, and determine how to create partnerships or programs that can be mutually beneficial to the hosting and receiving systems.

### **Taking Action**

The training program developed by Birmingham is an example of coordinated efforts that helped multiple water systems address present and potential challenges. Key benefits of the partnership included high quality trainings for internal and external staff, more knowledgeable water system staff across Alabama, and a larger Grade IV operator pool. Successful partnerships require time, planning, and resources but these efforts are rewarded by significant benefits to water systems and the communities they serve.

### ***INTERESTED IN LEARNING MORE ABOUT WATER SYSTEM PARTNERSHIPS?***

Water system partnerships can help systems overcome challenges including aging infrastructure, compliance challenges, and limited technical and managerial capabilities. Partnerships provide opportunities to collaborate on compliance solutions, and operations and maintenance activities, which increase capacity and enable systems to provide safe water to their communities.

To learn more about water system partnerships like Birmingham, visit the EPA's Water System Partnerships website: <https://www.epa.gov/dwcapacity/water-system-partnerships>.

### **RESOURCES**

To learn more about Birmingham's Training Program and water system partnerships, follow these links to online resources:

- [Birmingham Website](#)
- [Birmingham External Trainings](#)
- [EPA Water System Partnerships Website](#)

