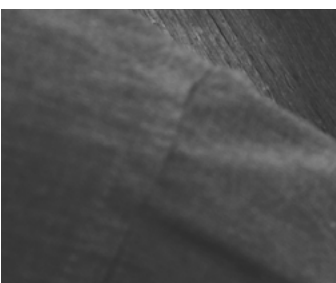
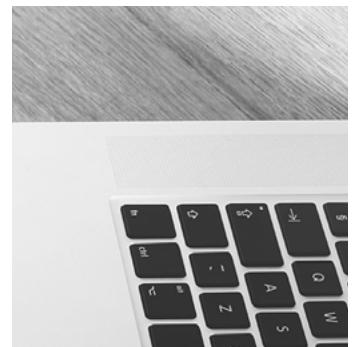
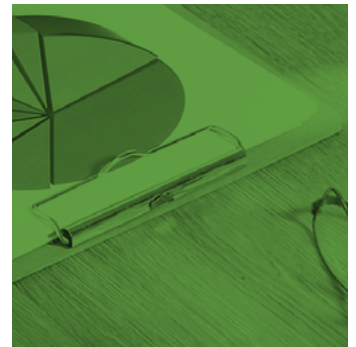
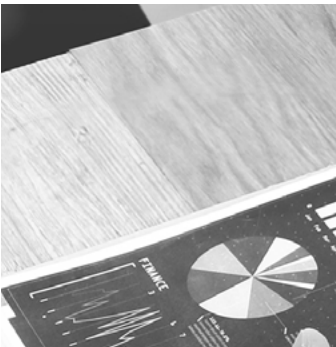
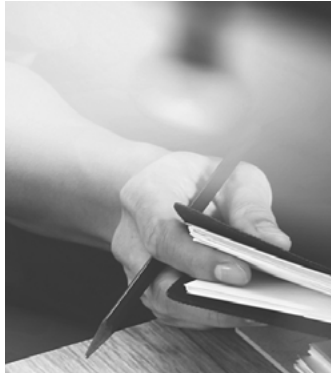


AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

ANNUAL REPORT

OCTOBER 1, 2017 – SEPTEMBER 30, 2018



AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

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Hello AIRA Community,

Another year has flown by, and we at AIRA are excited to share with you all of the accomplishments and progress that have been made in advancing immunization information systems (IIS). Collaboration is the cornerstone behind all of AIRA's

work; we couldn't do any of it without the support and engagement of the IIS community. I want to sincerely express my gratitude to those who have gotten involved with AIRA at any level — your work makes our entire community stronger. For those new to our community, I encourage you to get involved in any way you can — there is still so much to do!

Sincerely,
Rebecca Coyle
AIRA Executive Director



Dear AIRA Community,

As president of AIRA's board of directors during the 2018 fiscal year, I am extremely proud of the many accomplishments that are outlined in this annual report. AIRA's extraordinary staff, the dedicated participation of membership, and AIRA's funders

are responsible for supporting and advancing the IIS community. Future advances for IIS depend on continued active engagement of the organization's membership to meet both challenges and opportunities that the ever-changing landscape presents. Your continued representation and advocacy are needed!

Kim Salisbury-Keith, MBA
AIRA President 2017-2018
Rhode Island Department of Health

AIRA's Vision, Mission, and Purpose

VISION

To facilitate the sharing and use of immunization information by all partners and ensure that immunization information systems are fully supported and represented.

MISSION

To promote and support the use of immunization information to ensure healthy communities.

PURPOSE

To support and promote the development, implementation, and interoperability of immunization information systems through partnerships, peer and professional education/training, and resource development.



info@immregistries.org



1155 F Street NW, Suite 1050
Washington, DC 20004



202.552.0208

Supporting the mission and vision of AIRA through a strong organizational structure

AIRA is more than just its dedicated staff and board members. Many of AIRA's initiatives are created and carried out by members who participate on AIRA steering committees and workgroups. AIRA also employs the services of consultants with expertise in technical writing, facilitation, and project management to ensure the success of its guidance documents and initiatives. This combination of staffing, volunteers, and consultants enables AIRA to support the needs of the organization and the IIS community.



AIRA offers [membership](#) to immunization information systems, IIS implementers, and not-for-profit organizations that share and support its mission. AIRA's Partnership Program offers an opportunity for individuals and entities who support AIRA to work together to address health issues affecting the nation.

AIRA membership provides opportunities to:



Build strong
partnerships



Advocate for IIS funding
through legislation, policy
development, and public
information



Share knowledge
across the IIS
community



Develop and promote
IIS standards

In 2017–2018, AIRA
had **499 members**
representing:



"AIRA plays a meaningful role in facilitating projects for the greater IIS community. Colorado's IIS is stronger because of guidance put forth by AIRA and our staff have greatly benefitted from participating in AIRA's events."

— Heather Roth,
Colorado Department
of Public Health &
Environment

CHALLENGES

IIS are important tools in the public health system and exist to improve and protect the nation's health from vaccine-preventable diseases. Yet, despite their importance and necessity, IIS face persistent challenges including:

Competing Standardization Priorities Funding Policy Technology Limitations

SOLUTIONS

These persistent problems threaten to cripple the very existence of IIS. AIRA strives to overcome these challenges through:



Collaboration
Uniting IIS in the development of standards and best practices



Measurement & Improvement
Assessing IIS adherence to standards and providing technical assistance to help IIS programs improve



Support
Providing ongoing education, technical assistance, and advocacy



Shared Services
Identifying services that can benefit all IIS for one price

Through these resources and initiatives, AIRA seeks to reduce variability among IIS, promote shared knowledge, and increase the efficiency of IIS operations.

OVERCOMING OBSTACLES TOGETHER



OPPORTUNITIES FOR AIRA MEMBERS TO GET INVOLVED:

- Join a committee or workgroup
- Volunteer as a subject matter expert
- Write an article for *SnapShots*
- Present at the National Meeting
- Attend an educational webinar
- Participate in the Measurement and Improvement Initiative

Representing
IIS interests
and influencing
national
priorities

AIRA strives to be a champion for IIS and follows the process described below to best represent IIS interests and serve as the voice of the IIS community.

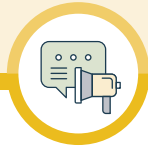
MONITOR

With an overarching view of the IIS landscape, AIRA identifies issues and trends that have the potential to impact IIS.



ENGAGE

AIRA gathers feedback from participating members and stakeholders on key issues.



SHARE

AIRA elevates IIS needs and concerns to a national stage, speaking as the collective voice for the IIS community.



AIRA actively engages partners to provide guidance on IIS policy and strategy through attendance and participation at stakeholder meetings across the country. AIRA staff and volunteers attended countless meetings with over 65 unique partners in 2018. Some of the key stakeholder meetings AIRA attended are presented below.

Supporting
IIS workforce
development
through training
and education

AIRA serves as the leading authority in education and training for the IIS community. This is accomplished in a large part thanks to the efforts of AIRA's [Education Steering Committee \(ESC\)](#), which provides leadership and input to the organization about the current training needs and priorities of the IIS community. Over the past year, AIRA provided the following educational and training opportunities:

- 10** **Discovery Session** webinars were held for the IIS community.
- 4** **Webinars** were hosted by the **Education Steering Committee**.
- 2** **Webinars** were offered to introduce a **New Educational Tool or Resource**.
- 4** **Issues** of the **SnapShots** newsletter were published, highlighting the progress, best practices, and accomplishments of IIS across the country.
- 12** **Issues of AIRA's Monthly Update** were published to inform the community about the latest happenings and activities within AIRA.
- 5** **Town Hall meetings** were held to discuss important issues to the IIS community.
- 2** **In-Person Regional Workshops** were held in the Midwest and Northeast regions.
- 1** **AIRA National Meeting** was held in Salt Lake City, Utah, for IIS, immunization programs, and partners to come together to share new ideas and innovative strategies.

"Loved it! It is great to see how other states are dealing with common issues."

— Anonymous attendee
from the Cincinnati, Ohio,
Regional Workshop
Evaluation

AIRA's quarterly
SnapShots newsletter
is distributed to
1,240
individuals interested
in IIS.

AIRA's educational and
training opportunities,
including Discovery Sessions,
Educational Webinars, Town
Hall meetings, Regional
Workshops, and the AIRA 2018
National Meeting reached

1,552
INDIVIDUALS!

The [AIRA National Meeting](#) is an annual gathering of the IIS community. AIRA's sixth annual national meeting was held in Salt Lake City, Utah, in August 2018 and featured a strong global focus. Key highlights include:

390 ATTENDEES

representing
5 out of 7
continents
and more than
140 unique
organizations



A live **AIRA gameshow**
that included an IIS/EHR
"Love Connection" skit



A **keynote** presentation from
Scott Burris, JD, that applied a moral
framework to immunizations

35 breakout sessions
and **105 presentations**
on a variety of topics

A record
16 sponsors that
supported the meeting



Multiple opportunities to
build connections within the
IIS community through networking,
roundtables, and small-group discussions



"I am so happy with it.
Never found a meeting
like this."

— Anonymous attendee, AIRA
2018 National Meeting
Evaluation

Since 2012,
AIRA has seen a
53% INCREASE
in the number of
National Meeting
attendees.

2018 AIRA AWARD WINNERS

CENTERS OF EXCELLENCE

Innovative Approaches to
Increasing or Demonstrating
Value of IIS

1ST PLACE:

Minnesota
Department of Health



LIFETIME ACHIEVEMENT AWARD

Belinda Baker



34% of
people at the 2018
AIRA National Meeting
had never attended an
AIRA meeting before.

ADVANCING IIS AWARDS

Michigan Care
Improvement Registry

Minnesota Department
of Health

Oregon Immunization Program

Washington State
Department of Health



VOLUNTEER SERVICE AWARD RECIPIENTS

Jane Lammers

Noam Artz



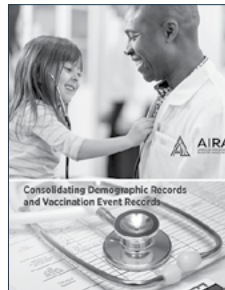
AIRA employs the following process when developing best-practice or educational guidance documents:



AIRA developed a variety of guides during the 2017–18 fiscal year to support IIS readiness and performance, including:

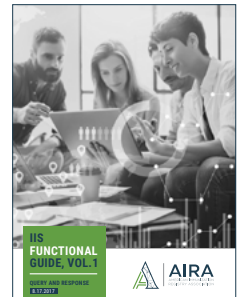
MIROW – Consolidating Demographic Records and Vaccination Event Records offers best practice recommendations in implementing and sustaining the consolidating records functionality.

2,608 41 **MIROW**



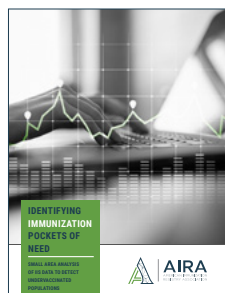
Functional Guide on Query Response defines the capabilities and requirements on select aspects of query and response that an IIS will need in order to enable business functions.

580 17 **SISC**



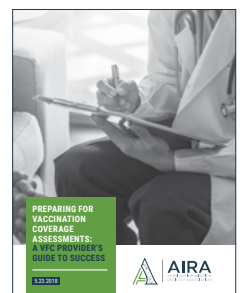
Identifying Immunization Pockets of Need Using Small Area Analysis explores how to use small area analysis to find pockets of need and provides strategies for responding to those areas.

462 14 **ASC**



Preparing for Vaccination Coverage Assessments: A VFC Provider's Guide to Success provides recommendations on how to best utilize IIS reports to improve data quality prior to running a vaccination coverage rate assessment.

458 35



Hours to develop



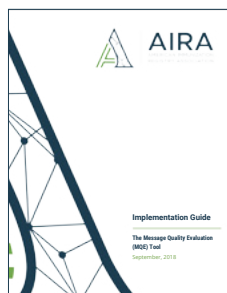
Number of people involved in development



Workgroup responsible

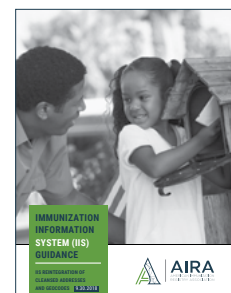
Message Quality Evaluation (MQE) Tool documents provide an overview of the MQE tool and the functional requirements, implementation guidance, user guidance, testing guidance, and more.

 450  32  JDI



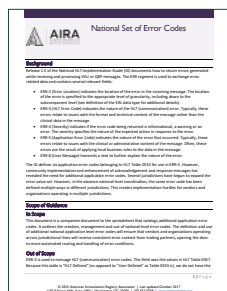
IIS Reintegration of Cleansed Addresses and Geocodes provides a more in-depth exploration of address cleansing for IIS programs and offers guidance for reintegrating validated and standardized addresses and geocodes back into IIS.

 310  28  JDI



The National Error Code Set Guidance and Compiled Error Codes documents outline the creation, management and use of national-level error codes as well as catalog additional application error codes.

 45  10  SISC



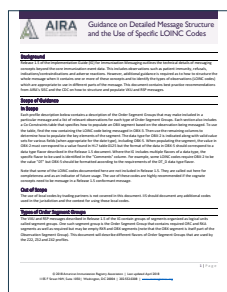
Guidance on Unit of Sale/Unit of Use Lot Numbers clarifies the process and sets expectations for management of varied vaccine lot numbers.

 40  15  SISC



Guidance on Detailed Message Structure and the Use of Specific LOINC Codes contains best practice recommendations on how to structure and populate VXU and RSP messages using specific LOINC codes to include observations such as patient immunity, refusals, indications/contraindications, and adverse reactions.

 30  10  SISC



“The quality and quantity of guidance and educational materials over the 7 years I have been in this role has improved significantly—which we have used to improve our IIS. Thank you.”

— Nancy McConnell, AIRA Education Survey



Hours to develop

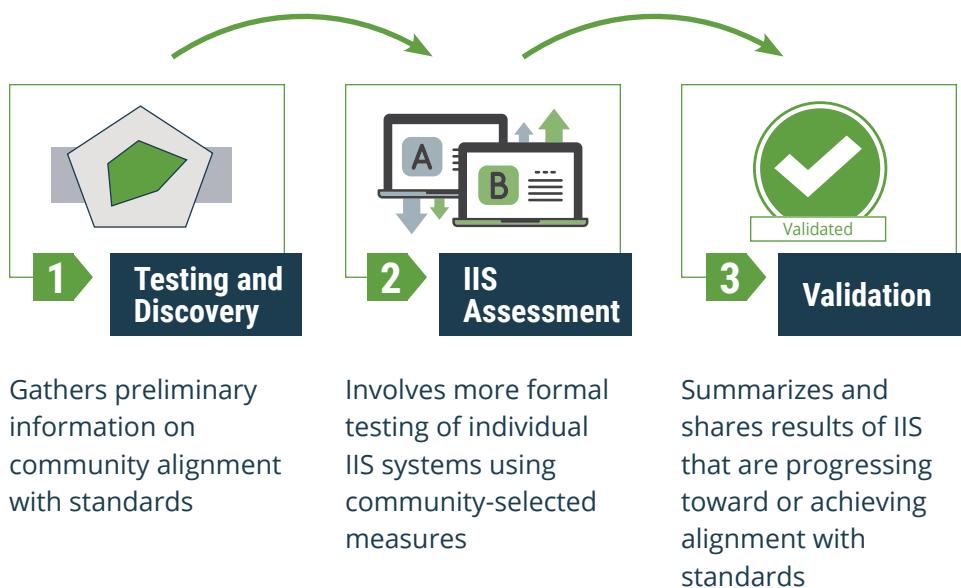


Number of people involved in development



Workgroup responsible

AIRA's [Measurement and Improvement Initiative](#) aims to assess and increase the level of alignment between IIS and the community's interoperability standards. The project connects AIRA testing processes with IIS preproduction systems and shares results through the Aggregate Analysis Reporting Tool (AART). This initiative follows a three-step process:






"Participating in Measurement & Improvement has given us a way to help push forward enhancements to our IIS. Not only has the AART tool helped us identify exactly where we were off standard, but it provides us with a third-party perspective to show our leadership exactly where we should focus our limited funding."

— Jenne McKibben, *ALERT IIS Director, Oregon Immunization Program*

This process is overseen by the Measurement for Assessment and Certification Advisory Workgroup (MACAW). MACAW recommends processes and measures to the AIRA board for review and approval once they have been vetted and accepted by the IIS community. Participation in this initiative is completely voluntary. Currently, more than two thirds of the community's IIS are participating.

AIRA has completed the testing and discovery, IIS assessment, and validation phases for three specific areas of IIS functionality:

-  Message Transport
-  HL7 Submission and Acknowledgement
-  HL7 Query and Response

AIRA remeasures each of the content areas every quarter and is developing test cases to measure IIS clinical decision support capabilities.



Measurement Area	Highlights	Since the initial baseline measurement, the following progress has been seen in each assessment measurement area:	
Message Transport	<p>Number of IIS Measured</p>	<p>55%</p>	<p>55% of IIS measured have a fully compliant WSDL (meet 3 of 3 measures), which represents a 131% increase since baseline.</p> <p>22 of the IIS measured meet the security fault measure, which represents a 340% increase since baseline.</p>
HL7 Submission and Acknowledgement	<p>Number of IIS Measured</p>	<p>80%</p>	<p>80% of all VXU measures are fully met, representing an 8% increase since baseline.</p> <p>27% of all ACK measures are fully met, representing a 600% increase since baseline.</p>
HL7 Query and Response	<p>Number of IIS Measured</p>	<p>68%</p>	<p>68% of IIS measured meet the evaluation and forecast capability measure, which represents a 64% increase since baseline.</p> <p>32% of all IIS measured meet the patient not found conformance measure, representing a 283% increase since baseline.</p>

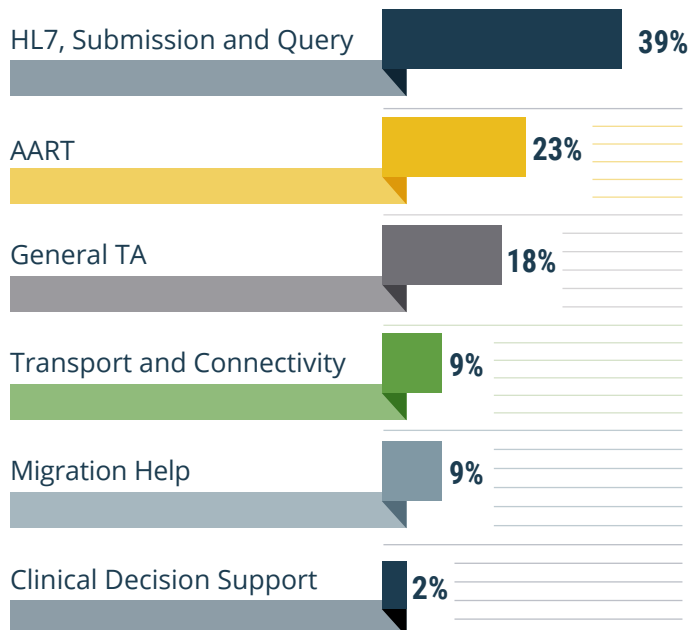
58 of the 64 IIS jurisdictions have the technological capability to participate in the Measurement and Improvement Initiative.

AIRA provides specialized [technical assistance \(TA\)](#) and support to its members through a variety of methods, including email responses, phone calls, online training videos, and in-person visits. AIRA publishes its TA responses in a “Frequently Asked Questions” format on the AIRA website. During the 2018 fiscal year, AIRA received a total of 183 requests for technical assistance. With these requests, AIRA provided TA to **46 unique IIS jurisdictions** and **19 unique partners**.

Number of TA requests by year



Topic of TA request



“We always receive a timely and educated answer to our questions from AIRA experts.”

— Anonymous – Information or Technical Assistance Request Evaluation, 2018

AIRA provided TA to **72% of the IIS jurisdictions.**

Satisfaction with quality AND completeness of TA response

87%
Very Satisfied
13%
Somewhat Satisfied



94%
Very Likely
6%
Somewhat Likely

Likelihood to request TA again

During the 2018 AIRA National Meeting, AIRA staff met with **30 IIS jurisdictions** to provide targeted technical assistance. The purpose of these brief meetings was to provide feedback and education on the findings from the Measurement and Improvement Initiative, answer questions, and assist states in prioritizing their jurisdiction-specific recommendations. Feedback from the participants on these sessions was overwhelmingly positive.

Supporting
cost-effective
initiatives
and joint
development

AIRA supports the development of collaborative tools and technologies that can be implemented in multiple IIS programs. To date, AIRA has coordinated the creation of two shared service projects: an address cleansing and geocoding service and a message quality evaluation (MQE) tool. A description of both projects and their implementation to date is provided below.

Address Cleansing

The need for uniform, valid addresses is an issue that plagues every IIS. The [JDI Advisory Workgroup](#) recognized this need and embarked on a project to identify and roll out a service to provide address cleansing functionality. After a thorough review of the available service offerings and a successful pilot, SmartyStreets was selected as the preferred vendor. SmartyStreets provides address standardization, validation, and geocoding for submitted addresses. AIRA purchased a three-year, unlimited license with SmartyStreets and made it available to all AIRA member IIS programs beginning in June 2017.

"We have definitely benefited from address cleansing already through reduced returns on our reminder/recall postcards."

— Josh Yates, Alabama
Immunization Registry,
ImmPRINT

Jointly developed
projects increase
efficiency, improve
data quality, and
bring value to IIS.

135,924,722
addresses have
been **submitted**
and **cleansed**.

16
IIS have signed up
and are able to use
SmartyStreets.

AIRA published an
**Implementation
Guidance** document
that describes
how an IIS can use
and integrate the
SmartyStreets service
into its organization.

AIRA published a
second document that
provides guidance on
reintegrating validated
and standardized
addresses and
geocodes back
into IIS.

AIRA hosts a **monthly
user group** to discuss
and troubleshoot
implementation of
SmartyStreets. This
user group is made
up of **40 participants**,
representing **18 IIS
jurisdictions**.

Since
Community
Rollout

Message Quality Evaluation (MQE) Tool

For its second project, the JDI Advisory Workgroup continued to focus on data quality within IIS. A group of IIS came together and worked collaboratively to develop a tool to assess data quality. The tool is open source, which means its software is available for everyone to use — and at no cost. The purpose of the MQE tool is to assist sites in consistently evaluating and improving the data coming into their IIS.

KEY FEATURES of the MQE tool:



It can be used as a **stand-alone tool**, or it can be **integrated into an IIS** to automate evaluation and report generation.



It allows users to **easily generate a series of reports** that describe the **quality** of incoming immunization data.



It **quickly identifies problems** in existing data feeds to **facilitate onboarding** new submitters.



It is available as an **open-source application**. As such, all IIS are welcome to use it and/or be part of the ongoing evolution of the tool.



Many resources are available that support the **implementation, ongoing development, and governance** of the tool.

“The MQE Tool will provide our Data Exchange team a faster, more efficient way to evaluate test data during onboarding.”

— Eric Dansby, California’s Data Exchange Unit Chief

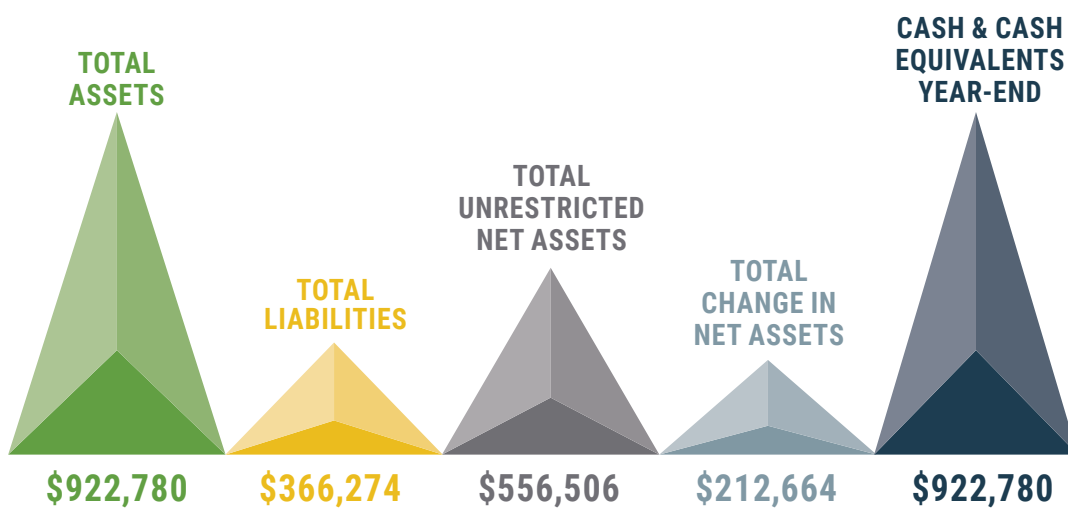
This is the first instance in which the continued development of a shared tool is being run entirely by volunteers from the IIS community who are contributing their time and resources.

Since Community Launch:

The ongoing development of the MQE tool has transitioned to a group of interested individuals who were previously involved in the tool’s development. The MQE Project Team is comprised of more than a dozen jurisdictions and community partners. The group meets monthly to learn about the tool’s evolution and to suggest relevant functionality. Michigan has deployed a part of the MQE tool in its data quality process. The goal over the next year is to assist other jurisdictions in implementing the tool as well.

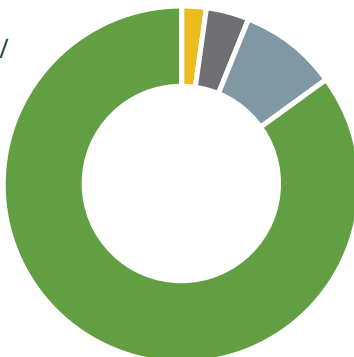
The financial information provided below summarizes AIRA's financial position as of September 30, 2018.

2018 Overview



2018 Income by Type

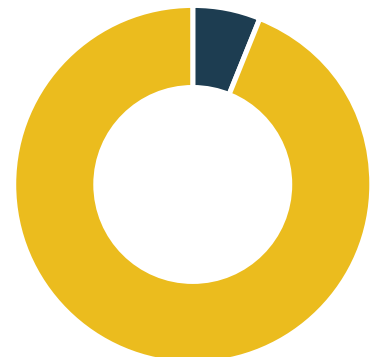
- **87%** Cooperative Agreements/
Federal Funding
- **9%** National Meeting
- **3%** Other
- **1%** Membership
Dues



TOTAL INCOME:
\$3,015,687

2018 Expenditures by Function

- **97%** Program Service
- **3%** Administration



TOTAL EXPENDITURES:
\$2,803,023

Thank You to Volunteers!

AIRA is a membership-based organization that values the voluntary and collaborative interaction of all its members. AIRA would like to sincerely thank those who volunteered. Without their time, input, and effort, AIRA would be unable to achieve its mission and vision. AIRA largely credits its success to the collaboration of its members.

Overall, **69%**
of IIS jurisdictions volunteered their time and talents with AIRA.



44%

of IIS jurisdictions
contributed to one of the
AIRA resources developed
this past year.



39%

of IIS jurisdictions presented on
an educational webinar, wrote an
article for *SnapShots*, or presented
at the AIRA 2018 National Meeting.



44%

of IIS jurisdictions regularly
attended an AIRA committee or
workgroup meeting this past year.



25% of IIS jurisdictions participated in an AIRA shared service
(such as address cleansing or MQE tool).

Partner Collaborators:

- Accuvax
- Atlantic Management Center, Inc (AMCI)
- Bay Health
- Bill and Melinda Gates Foundation
- Centers for Disease Control and Prevention (CDC)
- Countermind
- Docket.Care
- Downstate University
- DXC Technology
- Envision Technology Partners, Inc.
- Epic Systems Corporation
- HLN Consulting, LLC
- Kaiser Permanente Southern California
- Merck
- National Institute of Standards and Technology (NIST)
- Northrop Grumman
- Qvera
- Pfizer
- Public Health Informatics Institute (PHII)
- Salkowitz Associates, LLC
- Sanofi Pasteur
- Seqirus
- Software Partners
- Spectrum Health
- Strategic Solutions Group
- Scientific Technologies Corporation (STC)
- Trey Industries, Inc.
- Yakima Valley Farm Workers