



IMPLEMENTING EXECUTIVE ORDER 50 (2019)

BIENNIAL REPORT

Jeff Thamkittikasem
Director of the Mayor's Office of Operations
Acting Algorithms Management and Policy Officer

WELCOME!

This is the first ever biennial report on progress of the work of the Algorithms Management and Policy Officer (AMPO). In this report, we'll give some background on the AMPO and Executive Order 50 (EO 50), share some major updates on policy and compliance, and provide insight into the expected work for 2021 and beyond.

As a relatively new function in our City's government, the work to implement EO 50 is under constant development. We are happy to report on several substantial accomplishments in the year since EO 50 was signed, and are just as excited to think about what's to come. We hope this report serves as a stepping stone for ongoing discussion around algorithms management in New York City, and that it supports thoughtful collaboration between the AMPO, City agencies, and public stakeholders.

This report is divided into three main sections. First, we provide some of the background on EO 50, and share some terminology important to the EO and the AMPO work. Second, we share key milestones accomplished in the past year. Finally, we look ahead to our next steps.

INTRODUCTION

[Executive Order 50 \(EO 50\)](#), signed by Mayor Bill de Blasio in November 2019, established the new position of Algorithms Management and Policy Officer (AMPO). This role—the first such role in a US city—represents an important effort to foster the innovative, fair, responsible, and transparent use of algorithmic tools and systems and related technologies by City agencies.

EO 50 lays out a series of requirements and responsibilities for the AMPO to develop and implement, which can be organized under the following categories:

- **Policies:** developing the policies and protocols to govern responsible agency usage of algorithmic tools
- **Best Practices:** centralizing resources and research about developing, deploying, and assessing algorithmic tools for agencies
- **Public Engagement and Education:** developing educational materials about algorithmic tools and creating channels for feedback from groups and communities about tools in use

To support carrying out these duties, the AMPO relies on two committees: a Steering Committee composed of representatives of City agencies with relevant expertise, who advise the AMPO on policy and associated issues, and an Advisory Committee composed of external appointees who channel public comment and feedback to the AMPO.

What is an Algorithmic Tool?

An algorithmic tool is a partially or fully automated computerized system that uses an algorithm or series of algorithms to turn data (“input”) into a result (“output”) to be used to make a prediction, determine a course of action, or otherwise influence decision-making. Examples of algorithmic tools include, but are not limited to risk scoring instruments, categorization or grouping algorithms, and optimization models. Often such tools incorporate artificial intelligence (AI) or machine learning (ML) techniques.

While the language above sets out the definition of an algorithmic tool generally, we apply additional criteria for the purposes of EO 50 to further specify which systems are subject to the EO’s requirements. In particular, to qualify as an algorithmic tool for EO 50 purposes, a system must:

- Be derived from complex data analysis approaches, or routinely employ complex data analysis approaches to operate;
- Support agency decision-making; and
- Have a material public effect.

Generally, tools or systems that perform basic administrative tasks (like word processing, basic mathematic calculators, and report generation) do not count as algorithmic tools. Additionally, EO 50 policies exclude systems that may be heavily driven by complex analytical techniques, but are in development (i.e. not ready for actual use), or that are far removed from any direct impact upon the public.

To help agencies and the public better understand the meaning of the term “algorithmic tool,” the AMPO policies, published on the [AMPO website](#), include an “Identification and Prioritization Framework,” which explains and provides examples for the criteria that a given computerized system must meet to be considered an “algorithmic tool” for EO 50 purposes.

Algorithmic Tool or ADS?

You may have heard of the term “automated decision system” in various contexts having a definition that sounds pretty similar to the definition of “algorithmic tool” given above. In fact, although EO 50 and the AMPO policies use the term algorithmic tool, the two terms can be considered interchangeable in the context of EO 50 work.

KEY MILESTONES

The past twelve months have been a busy and productive time for ongoing efforts to develop and implement the City’s new framework for algorithmic tools management. Below are the major updates on EO 50 implementation:

- In September 2020, we published our introductory **AMPO Policies** on a new [AMPO website](#). These policies lay out the governing principles of EO 50 work; enumerate the tasks and responsibilities of the AMPO, supporting committees, and agencies; and set the stage for future policy development. Importantly, these policies also include what is referred to as the **Identification and Prioritization Framework (IPF)**. The IPF sets forth the criteria that agencies use to determine whether a given computerized system counts as an algorithmic tool for the purposes of EO 50. It then goes on to provide criteria to classify algorithmic tools to determine what additional policies or actions may be applicable.
- Also in September 2020, we launched the first ever **agency compliance reporting** process to build out the City’s first **list of algorithmic tools** meeting IPF criteria. Beginning this year, City agencies will undergo a yearly exercise to identify algorithmic tools in use and report information about those to the AMPO, who will make information from those reports publicly available. The 2020 compliance reporting process is underway at the time of this report’s submission, with **public reporting in mid-January 2021**.
- We held our first conversations with experts and stakeholders from academia, private industry, and other governments to begin thinking about the eventual shape and value for **best practices** in algorithmic tools management for City agencies.

- We held three **public events** in 2020, including a Beta Bagels ‘Introduction to the AMPO’ session with BetaNYC in February, a panel at the School of Data in March, and a session with Civic Hall in September to provide updates on AMPO work. At all events, we spoke to large audiences representing **dozens of public, private, and non-governmental organizations** about EO 50 requirements, ongoing AMPO work, expected future developments, and ways for the public to provide feedback.
- The AMPO team convened **Steering Committee** meetings to advise the overall direction of AMPO work, to raise relevant topics, and provide feedback on AMPO policies.
- We’ve spoken with stakeholders to identify potential advisors for the **Advisory Committee** who will provide valuable insights into algorithms management from their respective fields, and serve as a conduit for public commentary.

Managing COVID-19

The powerfully disruptive impact of the COVID-19 pandemic, and the City’s massive response efforts, have had an effect on the timing for EO 50 implementation. The Mayor’s Office of Operations (“Operations”) has been, and continues to be deeply integrated in pandemic response and recovery. While these efforts have caused delays, the Operations team supporting EO 50 work continues to push forward in implementing the relevant requirements to help ensure fair and responsible use of algorithmic tools by City agencies through web-based convening of City stakeholders and virtual public events.

NEXT STEPS

As 2020 comes to a close and we adjust to the limitations posed by the ongoing pandemic, we look forward to an ambitious year to continue the important work of EO 50 implementation. Below are some of our critical next steps in the process.

- Throughout 2021, we plan to develop and expand upon AMPO **policies**, focusing particularly on the required policies around **requests for information, complaint resolution, and assessment**.

- In January 2021, we'll publish the first ever **list of high-priority algorithmic tools** stemming from the current 2020 agency compliance reporting process. Following publication, we'll conduct an agency feedback exercise to learn how the compliance reporting process worked on the agency side, and to identify improvements to make the process easier for agencies to complete and help ensure that public-facing information is sufficiently accessible and usable.
- As part of the 2021 agency compliance reporting process we expect to **add further algorithmic tools to the public list** by January 2022, by ensuring that high-priority tools have been identified and reported, evaluating and as necessary revising our high-priority criteria, and by looking to expand reporting to lower-priority tools.
- We'll continue stakeholder engagement to learn more about **existing best practices** and to define the form that such practices can take to best support City agencies.
- Over the course of 2021, we'll hold **at least five public events**, focusing on audiences outside of the civic tech community, particularly groups or populations with low familiarity with the use of algorithmic tools in government. We'll also focus on developing robust **public education materials** to enable baseline understanding of the topic and AMPO work.
- We'll **engage our Advisory Committee** to both support public engagement and learn about topical issues, research, and other developments.
- Working with agencies we'll begin **implementing new policies**, particularly for assessment of identified algorithmic tools.

To stay current on AMPO policies and events, or to contact the AMPO team, go to nyc.gov/AMPO.