

NYC

The New York City Artificial Intelligence Action Plan



October 2023

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Letter from the Mayor

My Fellow New Yorkers:

From my earliest days as mayor, I vowed that this administration would approach technology in a smart way and use it to deliver better services and opportunities for New York City. We've kept this promise by launching the nation's largest free municipal broadband program, expanding wireless infrastructure across historically underserved communities, and creating a digital one-stop shop to provide seamless access to government. This is what "Getting Stuff Done" for New Yorkers looks like.

Artificial intelligence (AI) is one of the most impactful technological advances of our time. While AI has the potential to improve services and processes across our government, we must also be mindful of its associated risks. With the release of our AI Action Plan, the first-of-its-kind for a major U.S. city, we are cementing our commitment to this emerging technology's responsible use, and ensuring we are deploying the right tools in the right ways.

The New York City AI Action Plan — produced by the Office of Technology and Innovation — represents the knowledge, expertise, and contributions of 50 city employees from 18 agencies, as well as the insights of industry, academia, and civil society. It illuminates the path forward, outlining seven new initiatives that emphasize approaches to policy, guidance, support, and resources that will help us responsibly harness the power of AI for good.

Almost two years into our administration, we remain energized by technology's potential to drive safety, opportunity, and efficiency across this great city. We know that New York's best days are ahead — and it is with that sense of optimism about our city's future that we present this report.



Eric Adams
Mayor

Letter from the CTO

My Fellow New Yorkers:

Across New York City government, artificial intelligence (AI) tools are inspiring paradigm shifts in how we serve New Yorkers. These transformational technologies are critical to efforts such as preventing the next public health outbreak, empowering business owners and entrepreneurs, and optimizing the use of city resources. And we've only scratched the surface on AI's massive potential impact on our city government, the nation's largest municipal workforce, and our eight million residents.

With more city agencies expected to embrace these tools in the near future, the New York City AI Action Plan provides a vital roadmap for productive and responsible use that also affirms New York City's status as a national and global leader in governing this emerging technology space. This landmark plan astutely recognizes that it's not enough to encourage agencies to deploy more AI-based solutions; we must also provide them with the framework and support to mitigate risks of misuse, inaccuracy, or bias and discrimination.

I look forward to this plan providing a strong foundation for successful and responsible city applications of these tools that improve the lives of New Yorkers in the years ahead.



Matthew C. Fraser
Chief Technology Officer

Introduction

Artificial intelligence (AI) is often described as a revolutionary technology that is rapidly changing the way we work, travel, conduct research, deliver healthcare, provide public services, and more. In particular, the emergence of ground-breaking generative AI tools over the last year has simultaneously sparked tremendous excitement, profound concern, and intense speculation about their potential far-reaching impacts on humanity.

Broadly defined, AI describes a wide variety of technologies that use data to make predictions, inferences, recommendations, rankings, or other decisions. While AI technologies have recently captured the public imagination by producing images and text on command, the reality is that they have existed for decades in diverse forms and uses. Indeed, these technologies have for many years impacted our lives and society, through now familiar and mundane tools that filter spam from our email, support our medical care, and optimize the use of energy in our homes and workplaces. And while the current moment has brought the promise and perils of AI into sharper focus, these technologies have long presented both wide-ranging opportunities and risks.

Today, governments across the world are grappling with these realities, working to harness the power of AI tools for public benefit, while governing them carefully to protect their people and values. As a global innovation leader, New York City must be at the forefront of these efforts.

AI technologies offer a wide range of opportunities to make government run better for New Yorkers. Prudent use of AI can improve operational efficiency, social equity, environmental sustainability, and more. At the same time, use of AI tools can pose a range of risks for individuals and communities – whether due to lack of appropriate governance, misuse, flawed design, or other factors. Absent appropriate oversight and governance, some uses of AI could lead not only to benign inaccuracies or unintended results, but also data privacy or cybersecurity vulnerabilities, negative environmental impacts, or even serious bias, disparate impacts, and active harms. Further, the complexity of many AI applications and the fact that their mechanics are not always visible or understandable pose unique transparency and accountability challenges, which are particularly pronounced for governments working in service to the public.

In recent years, New York City has grappled with the opportunities and challenges AI presents through pioneering efforts in the public reporting of algorithmic tools, foundational work to clarify opportunities and risks and assess the state of the local AI ecosystem, and diverse agency-level work to develop innovative AI solutions.¹

While this work represents significant progress, there is now a need to press forward with a holistic set of actions that will help the city harness the power of AI to benefit New Yorkers while protecting them from its

potential harms. To this end, the New York City AI Action Plan sets out priority initiatives for city government that speak to the urgency of our present moment and chart a clear course forward.

Photo: Michael Appleton, New York City Mayoral Photography Office



Foundational Efforts

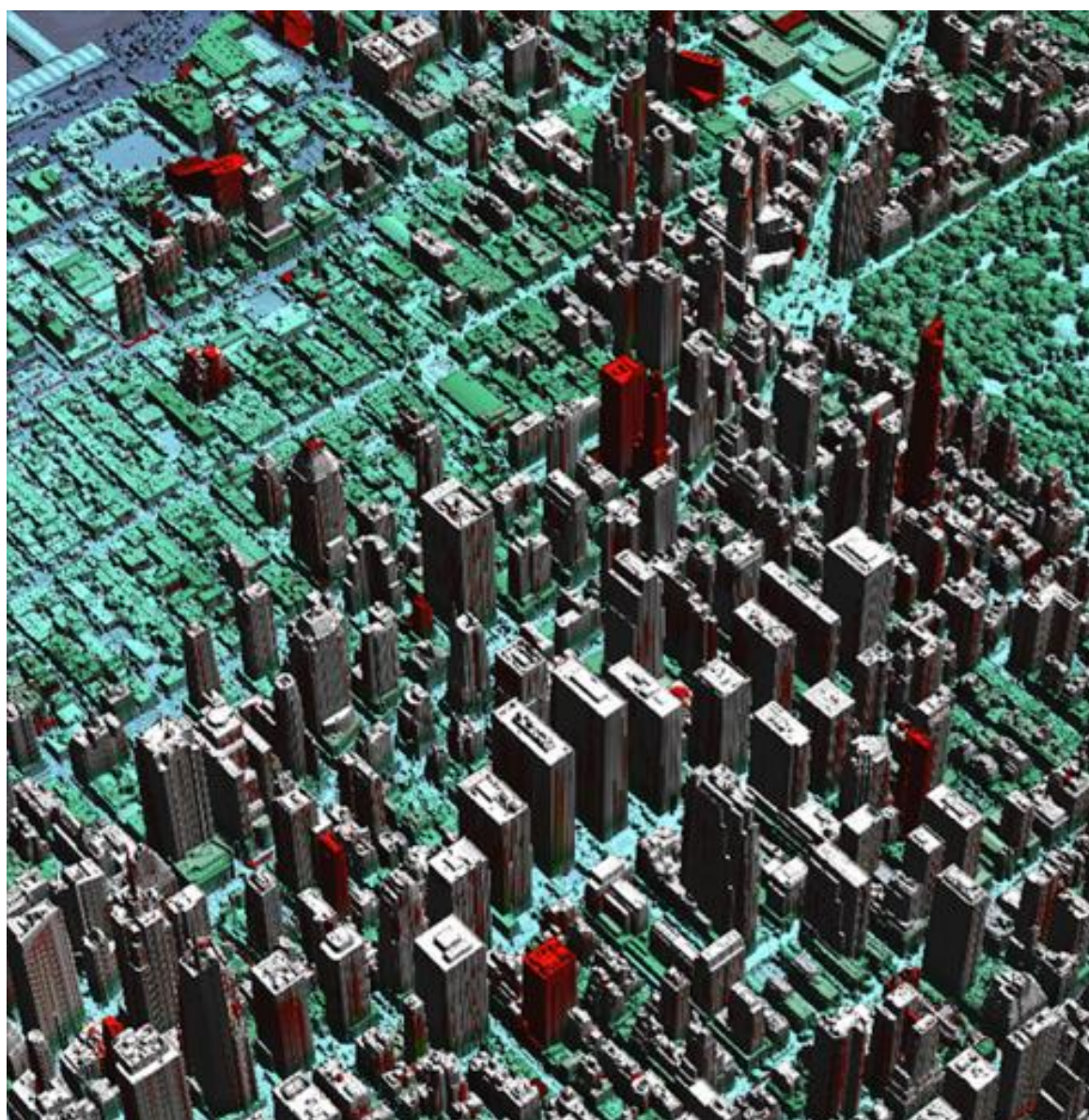
In recent years, the City of New York has been at the forefront of efforts to seize opportunities and mitigate risks presented by AI.

In 2020-21, the city worked with stakeholders across sectors to outline a novel framework for identifying algorithmic tools;² developed policies, organizational structures, and processes to support public reporting of these tools; and published the city's first-ever directory of tools. This work has continued since, and in 2023, the city completed its third year of public reporting.³

In 2021, the city embarked on a broad-based effort to define the meaning and wide-ranging implications of AI, understand the state of the local AI ecosystem, and surface key opportunities and challenges that AI presents for the city and its residents.

After engaging over fifty stakeholders – from government, industry, academia, and civil society – the city released two publications, an “AI Primer” intended to provide local decision-makers with an accurate and shared understanding of the technology and the issues it presents, and a broader AI Strategy that identified key areas for future city work.⁴

In addition to these more centrally-managed efforts, a number of city agencies have already begun to work with AI tools. Across diverse domains and use cases, from prioritizing properties for safety inspections to predicting the next public health threat, agency teams have deployed AI and learned important lessons about how to organize, resource, and manage this work.⁵



3D LiDAR-derived image of midtown Manhattan. This image shows change detection of new buildings highlighted in red, using 2010 and 2014 nDSM LiDAR data. Detected changes were used in a Department of Finance pilot program to identify property assessment changes. *Source: NYC Department of Finance*

Moving Forward with Action

In January 2022, Mayor Adams consolidated the city's technology and data teams into the Office of Technology & Innovation (OTI), led by the citywide Chief Technology Officer.⁶ This consolidation gives OTI new insight into existing technology practices and needs across city government, as well as new authority to set citywide policies and procedures.

In October 2022, OTI released a Strategic Plan that outlined the strategic priorities for the agency's work in the years ahead, as well as key initiatives toward realizing them. Among these is the goal to foster innovation via a set of efforts to "ensure that city government is poised to take full advantage of new technologies."⁷

This new structure and framework provide a strong grounding for the city to advance its work on AI. And OTI is poised to build on prior efforts to take bold action.

This Action Plan presents a set of concrete commitments, focused specifically on city government's AI use, that advance the city's capacity to leverage these powerful tools to benefit the public, and ensure we are doing so responsibly, with appropriate measures in place to mitigate varied risks.

AI technologies are dynamic and continually evolving. At the same time, AI regulation and broader best practices for governance are still in their infancy, and stakeholders are grappling with a complex set of policy questions while often struggling to keep up with the rate of technological change.

Nevertheless, efforts to establish frameworks through which governments and the private sector can introduce responsible practices for using AI are emerging across many levels of government. At the federal level, a number of agencies and offices have undertaken efforts to produce suggested policy or guidance for organizations to manage AI, most notably the Government Accountability Office (GAO) AI Accountability Framework, the National Institute for Standards and Technology (NIST) AI Risk Management Framework and the White House Office of Science and Technology Policy (OSTP) Blueprint for an AI Bill of Rights.⁸ Outside the U.S., the European Union is expected to pass the AI Act this year, which will establish Union-wide requirements for both private and public organizations related to the use and development of AI tools, based on tiered layers of risk.

As the technology develops further, and as governance measures and regulatory practices begin to emerge across the field, the city's efforts will need to be iterative and ongoing. Accordingly, this Plan incorporates steps to maintain and update the actions outlined as the landscape evolves.

A Note on Scope

AI has broad implications for the city and New Yorkers, including the varied impacts of private sector use of AI, as well as workforce and economic development concerns. While the efforts described in this Plan are focused on city government's use and governance of AI, the city recognizes the importance and impact of these other issues, and work is underway at a range of agencies and offices to address them.⁹

Likewise, broader efforts to enhance the quality and usability of city government data – a key foundation for AI use – are not in scope for this document but are being addressed through parallel efforts.¹⁰

Photo: Phil Kline, NYC & Co.



Engagement for this Plan

In preparing this AI Action Plan, the OTI team not only built upon insights from the more than fifty stakeholder interviews conducted toward the development of the NYC AI Strategy,¹¹ but also conducted a range of new interviews and workshops with stakeholders across sectors. This included more than fifty city staff members representing a wide range of roles from eighteen agencies and offices, as well as external experts from ten organizations. A full list of organizations engaged specifically for the development of the Action Plan is below. Ongoing input from stakeholders across sectors, and directly from New Yorkers is a key component of future efforts outlined in this Plan.



Photo: Benny Polatseck, New York City Mayoral Photography Office

City Stakeholders

- Administration of Children’s Services
- Commission on Human Rights
- Department of Buildings
- Department of Citywide Administrative Services
- Department of Consumer and Worker Protection
- Department of Education
- Department of Finance
- Department of Health and Human Services
- Department of Social Services
- Department of Transportation
- Fire Department of New York
- Mayor’s Office of Contract Services
- Mayor’s Office of Efficiency
- Mayor’s Office of Equity
- Mayor’s Office for People with Disabilities

- Mayor’s Office of Risk and Compliance
- New York City Police Department
- Office of Technology and Innovation

External Stakeholders

- AI for the People
- Columbia University Data Science Institute
- Data & Society
- Institute for Advanced Study
- National Institute of Standards and Technology
- NY Tech Alliance
- NYU Center for Responsible AI
- Tech:NYC
- The GovLab
- University of Virginia

What is Artificial Intelligence (AI)?

Because a wide variety of technologies and approaches may be considered AI, the city currently defines AI broadly as “an umbrella term without precise boundaries, that encompasses a range of technologies and techniques of varying sophistication that are used to, among other tasks, make predictions, inferences, recommendations, rankings, or other decisions with data, and that includes topics such as machine learning, deep learning, supervised learning, unsupervised learning, reinforcement learning, statistical inference, statistical regression, statistical classification, ranking, clustering, and expert systems.”¹²

The term “AI” can include, for example, such diverse tools as:

- Machine learning algorithms, such as those that recommend viewing options on streaming platforms, that predict consumer demand for goods and services, or that model the risk of a disease outbreak in a community;
- Computer vision technologies, such as those that match identities based on fingerprint or iris scans, that detect objects in images to enable better search and accessibility, that enforce cash-free tolling, or that count pedestrians in a public space;
- Natural language processing applications, such as those that auto-populate search results, provide predictive text in messaging apps, provide dynamic customer support with chatbots, or translate text into another language.

These examples show just how wide the array of AI technologies is. As this Plan outlines below, additional work is needed to create a shared understanding about what AI is and the role it plays in city government. Using a broad definition allows the city to maintain an appropriately wide lens to account for the range of both opportunities and risks that AI technologies present. It also highlights the complexity of the topic, the quick-changing nature of these technological developments, and the efforts required for this work to be meaningful across applications.

The NYC AI Action Plan

The NYC AI Action Plan introduces seven new initiatives, each comprised of a set of phased actions the city will undertake toward harnessing the power of AI to deliver positive outcomes for New Yorkers, while carefully mitigating the risks these technologies present. Actions in each initiative are organized into immediate- and medium-term timeframes and include specific timelines for implementation.

Across these initiatives, there is an emphasis on providing more centralized policy, guidance, support, and resources for city agencies, to help ensure that appropriate governance measures are in place across city government, that agencies are better equipped to advance their AI efforts, and that the city is working efficiently, collaboratively, and with accountability to the public. Collaborative engagement is broadly a key theme across all seven initiatives. This includes bringing in expertise from the rich local community of experts present in New York City – from academia, industry, civil society, community organizations, and organized labor, engaging with our counterparts at all levels of government, and speaking directly with New Yorkers to hear their ideas, understand their concerns, and account for their experience with AI across communities.



*Photo: Michael Appleton, New York City
Mayoral Photography Office*

Summary of Initiatives and Actions

01 Design and Implement a Robust Governance Framework

1. Establish a City AI Steering Committee
2. Establish Guiding Principles and Definitions
3. Provide Preliminary Use Guidance on Emerging Tools
4. Create a Typology of AI Projects
5. Expand Public AI Reporting
6. Develop an AI Risk Assessment and Project Review Process
7. Publish an Initial Set of AI Policies and Guidance Documents
8. Pursue Ongoing Monitoring to Review AI Tools in Operation

02 Build External Relationships

1. Create an Agenda for External Engagement
2. Establish an External Advisory Network
3. Use AI Advisory Network to Solicit Targeted Input on the City's Efforts
4. Explore Opportunities for Structured Partnerships with External Groups
5. Support Information Sharing Across Governments

03 Foster Public Engagement

1. Hold Introductory Public Listening Sessions
2. Establish Plans to integrate Public Input on Citywide Actions
3. Explore Public Education Resources and Partnerships
4. Create Guidance for Agencies on AI Public Engagement
5. Design and Build a Public-Facing Website

04 Build AI Knowledge and Skills in City Government

1. Explore and Pursue Opportunities to Foster Information Sharing Across Agencies and Teams
2. Identify High-Priority Agency Skills Needs
3. Assess the Landscape of Internal and External Resources to Support AI Knowledge-Building Efforts
4. Launch Initial Knowledge-Building Efforts
5. Explore Opportunities to Bring AI Talent into City Government for Limited-Term Projects
6. Centrally Track and Share Emerging Tools, Use Cases, and Considerations
7. Encourage Alignment on AI Skills and Duties

05 Support AI Implementation

1. Identify Opportunities for In-House Tool Development
2. Develop Example Project Lifecycles and Identify Bottlenecks
3. Define OTI and Agency Roles in Support of Projects
4. Scale, Reuse, and Repurpose Identified In-House Projects
5. Provide Implementation Support, Tracking, and Risk Analysis

06 Enable Streamlined and Responsible AI Acquisition

1. Conduct an Agency Needs Assessment
2. Establish a Directory of Procured AI Tools and Guidance on Appropriate Use
3. Support AI Piloting
4. Develop AI-Specific Procurement Standards, Terms, or Guidance
5. Explore Creating New Contracts to Support Agency Needs

07 Ensure Action Plan Measures are Maintained and Updated, and Report Annually on the City's Progress

1. Institute and Implement Processes for Refreshing Key Aspects of the City's Plan on an Ongoing Basis
2. Publish an Annual AI Progress Report



Initiative 01

Design and Implement a Robust Governance Framework

Objective

Establish a holistic, adaptable framework for AI governance that acknowledges the risks of AI, including bias and disparate impact, and which will help ensure the responsible use of AI tools consistent with values of reliability, transparency, accountability, fairness and non-discrimination, privacy, cybersecurity, and sustainability, among others defined through the implementation of this Action Plan.

Target Outcomes

- Clear principles and definitions guide city government's AI use and governance.
- Agencies are engaged to help define procedures that both address their needs and ensure responsible use of AI.
- Agencies are supported by centralized AI policy, guidance, and processes that address risks.
- The public is well-informed about city AI use.

Initiative 01 - Actions

Immediate Actions – projects start within 1 year

1.1 Establish a City AI Steering Committee

Establish an AI Steering Committee, composed of representatives of OTI divisions and other city agencies, to bring stakeholders from across city government together to provide input toward and oversight of AI activities. OTI will develop a charter for the Steering Committee to codify the scope, guiding principles and membership, and how the committee will operate and interact with city AI projects.

Complete within 3 months

1.2 Establish Guiding Principles and Definitions

Set goals and guiding principles for the responsible use of AI across agencies and define key terms for the city's governance work. These efforts may draw lessons from frameworks that have been developed at the national and international level.¹³

Complete within 3 months

1.3 Provide Preliminary Use Guidance on Emerging Tools

In alignment with the guiding principles and goals described above, provide agencies with immediate-term guidance on the uses and risks of emerging forms of AI, focusing first on generative AI tools – in particular, large language models and other related technologies.

Complete within 3 months

1.4 Create a Typology of AI Projects

Using the city's existing public reporting of algorithmic tools,¹⁴ as well as additional research, create a typology of AI projects to reflect the variety of technologies and uses that may fall under the umbrella term of "AI" for New York City. The resulting typology can be used to inform governance efforts, clarify agency support needs, and enhance public engagement and understanding.

Complete within 6 months

1.5 Expand Public AI Reporting

Provide agencies with enhanced AI reporting guidelines, building on reporting currently conducted under Local Law 35 of 2022,¹⁵ to increase public awareness of AI initiatives citywide. This may include broadening the scope of reporting, adding reporting requirements related to models and performance, and establishing guidelines for explainability. Additionally, make resulting reports readily accessible to the public through the Open Data platform.

Initiate within 6 months, then ongoing

1.6 Develop an AI Risk Assessment and Project Review Process

Begin to develop an AI Risk Assessment and Project Review Process to enable the analysis of existing and proposed AI projects that addresses major considerations of AI risk, including reliability, fairness, bias, accountability, transparency, data privacy, cybersecurity, and sustainability. After creating a preliminary assessment model and process, OTI will update both on an ongoing basis as policies, guidance, and use cases develop. These steps will be designed to pair with existing citywide privacy and cybersecurity policies and procedures.

Initiate within 12 months, then ongoing

Medium-Term Actions – projects start within 1–2 years

1.7 Publish an Initial Set of AI Policies and Guidance Documents

In consultation with the Steering Committee, create an initial set of policies and guidance documents to support responsible AI use. Policies and guidance may draw from existing standards frameworks, such as the National Institute for Standards and Technology (NIST) AI Risk Management Framework¹⁶ or the Government Accountability Office (GAO) AI Accountability Framework.¹⁷ OTI will prioritize and incrementally publish individual policies and guidance documents where practical. *Particular steps related to procurement of AI tools by the city are outlined below in item 2.3.*

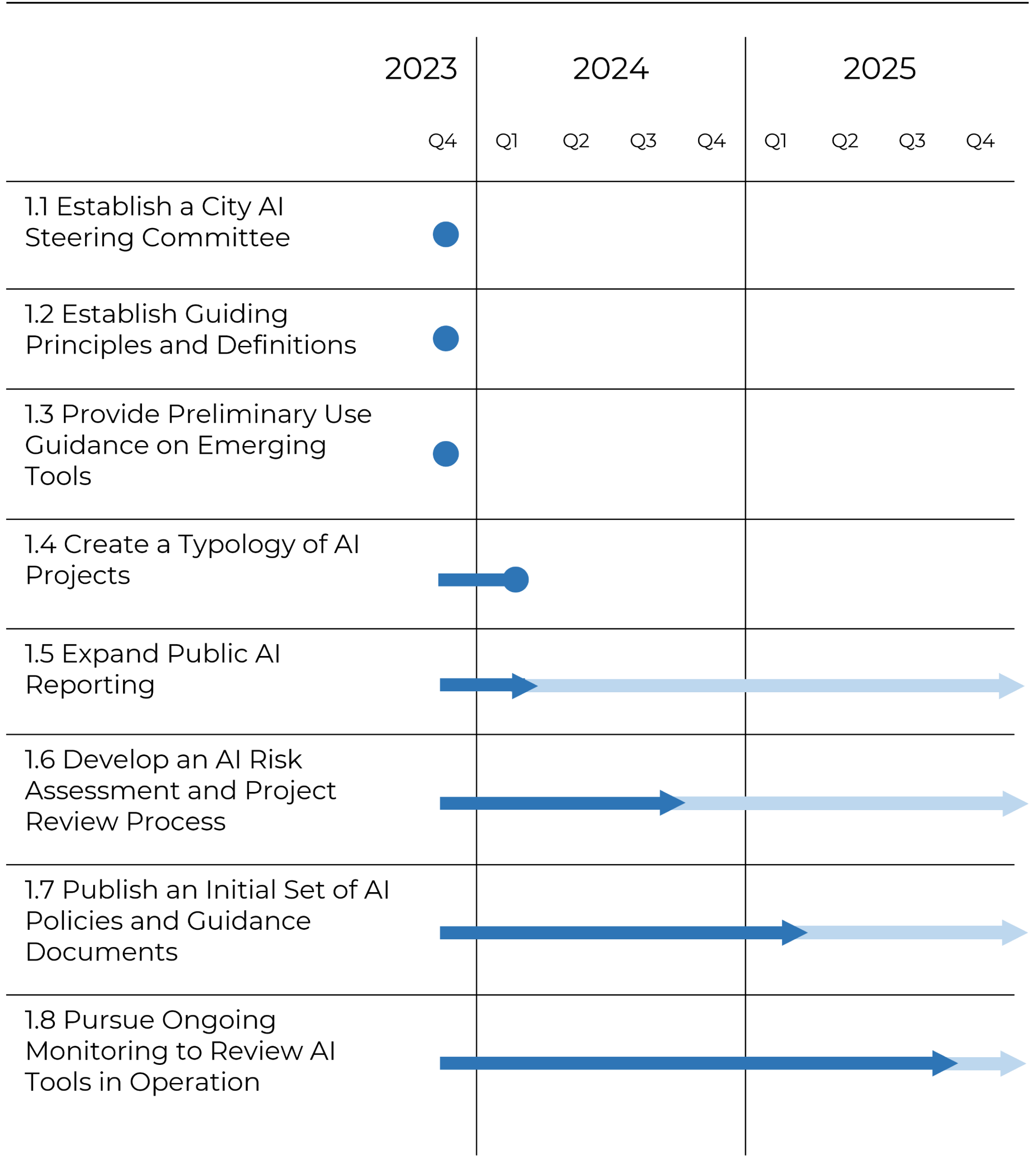
Initiate within 18 months, then ongoing

1.8 Pursue Ongoing Monitoring to Review AI Tools in Operation

Review AI tools in accordance with the outlined Project Review Process, including at different stages of the project lifecycle, as relevant. This may involve utilizing metrics to evaluate the impact of AI solutions and help to ensure that they are operating consistent with the city's guiding principles for AI. Reviews conducted after a solution is implemented will assess the tool's effectiveness at fulfilling its stated goals, protecting against drift or shifting objectives, and facilitating project improvement.

Initiate within 24 months, then ongoing

Initiative 01 - Timeline



■ indicates action is in the "initiate or complete" phase
 ■ indicates action is in the "ongoing" phase
 ○ indicates the action will be completed by the date shown
 ▷ indicates the action continues beyond the date shown



Initiative 02

Build External Relationships

Objective

Foster feedback and consultation with stakeholders across sectors around both the opportunities and challenges posed by AI and the work of supporting responsible AI use across city government. Support information sharing to ensure the city's efforts reflect best practices in the field and to align policy across levels of government.

Target Outcomes

- Experts from a variety of backgrounds provide timely perspective and guidance on city government's AI efforts.
- NYC develops productive relationships with partners across academia, industry, civil society, community organizations, and organized labor and leverages opportunities for collaboration.
- City government works in alignment with efforts across levels of government, and productively shares information with peers.

Initiative 02 - Actions

Immediate Actions – projects start within 1 year

2.1 Create an Agenda for External Engagement

In consultation with the Steering Committee, create an agenda for external engagement on the city's efforts, focused on the coming year, which identifies priority topics and projects, and needed expertise.

Complete within 3 months

2.2 Establish an External Advisory Network

Establish an Advisory Network of individuals to support the city's work on a consultative basis, to include stakeholders from, for example, academia, industry, civil society, community organizations, and organized labor. OTI will take steps to formalize relationships with an initial group to serve needs identified in the external engagement agenda. The Advisory Network will be updated over time as the city's needs and Advisor availabilities evolve.

Initiate within 3 months, then ongoing

2.3 Use AI Advisory Network to Solicit Targeted Input on the City's Efforts

Use the AI Advisory Network on a consultative basis to obtain input on the city's work, guided by priorities identified in the engagement agenda.

Initiate within 12 months, then ongoing

2.4 Explore Opportunities for Structured Partnerships with External Groups

Explore opportunities to create more structured partnerships with outside organizations that serve the city's goals. These might include, for example, research partnerships with local students or academic researchers, or public education and engagement partnerships with local community organizations.

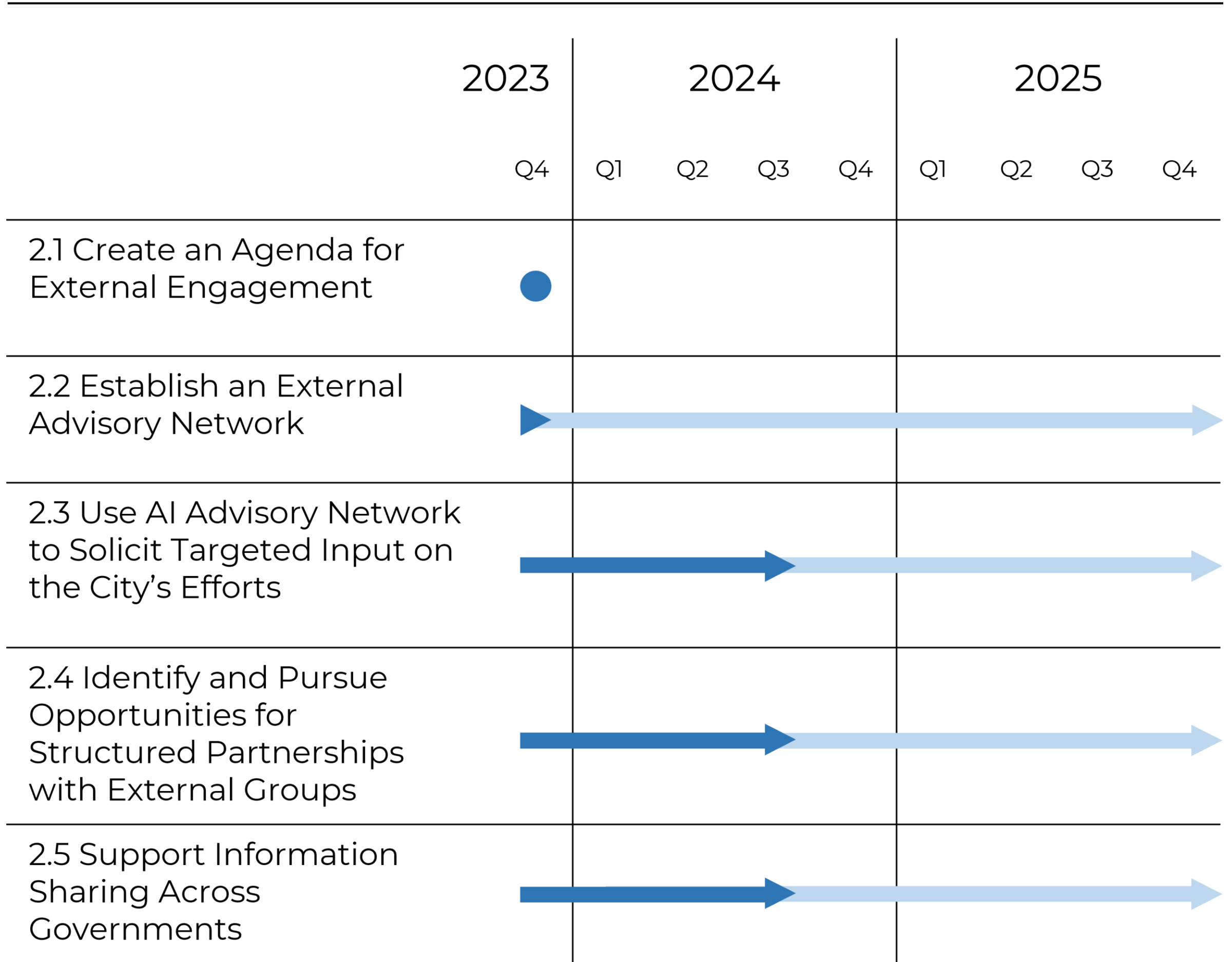
Initiate within 12 months, then ongoing

2.5 Support Information Sharing Across Governments

Build relationships across State, Federal, and local governments, to support the ongoing exchange of information and best practices related to a wide range of AI subjects of interest to the city, and reduce the likelihood of policy and regulatory conflicts across jurisdictions.

Initiate within 12 months, then ongoing

Initiative 02 - Timeline



- indicates action is in the "initiate or complete" phase
- ▬ indicates action is in the "ongoing" phase
- indicates the action will be completed by the date shown
- ▶ indicates the action continues beyond the date shown



Initiative 03

Foster Public Engagement

Objective

Educate and empower the public, communicating openly about the city's progress and supporting a range of mechanisms for public input. In order to best serve the public, foster trust, and support responsible use of AI, city government efforts must be grounded in the expertise, needs, and experience of New Yorkers. Public education on AI is a critical foundation for meaningful and equitable engagement.

Target Outcomes

- New Yorkers are well-informed about AI and the city's efforts and accomplishments and are empowered to participate.
- City stakeholders have an increased awareness of residents' interests and concerns related to AI, and of the impacts of its use for diverse populations.

Initiative 03 - Actions

Immediate Actions – projects start within 1 year

3.1 Hold Introductory Public Listening Sessions

Hold a set of introductory public listening sessions to tap the ingenuity of New York’s diverse population to shape the city’s next steps on AI and understand residents’ key concerns and priorities. Following these sessions, brief city government stakeholders on findings, and issue a public summary.

Complete within 6 months

3.2 Establish Plans to Integrate Public Input on Citywide Actions

In consultation with the Steering Committee, identify and plan for opportunities to integrate public input on specific, citywide actions established in the Action Plan.

Initiate within 6 months, then ongoing

3.3 Explore Public Education Resources and Partnerships

Explore the existing landscape of resources and organizations working to educate the public about AI and related topics to identify useful tools and potential partnerships. This may include, for example, exploration of educational materials or programs that may be made more readily available to New Yorkers, or partnerships that may be facilitated among relevant organizations.

Initiate within 9 months, then ongoing

3.4 Create Guidance for Agencies on AI Public Engagement

Craft initial guidance materials for agencies on integrating public engagement in their AI efforts, where relevant, to support responsible use, and better understand impacts for New York City’s diverse communities. This work may occur in partnership with experts in this emerging area, as established via the Advisory Network, or via a more structured partnership engagement.

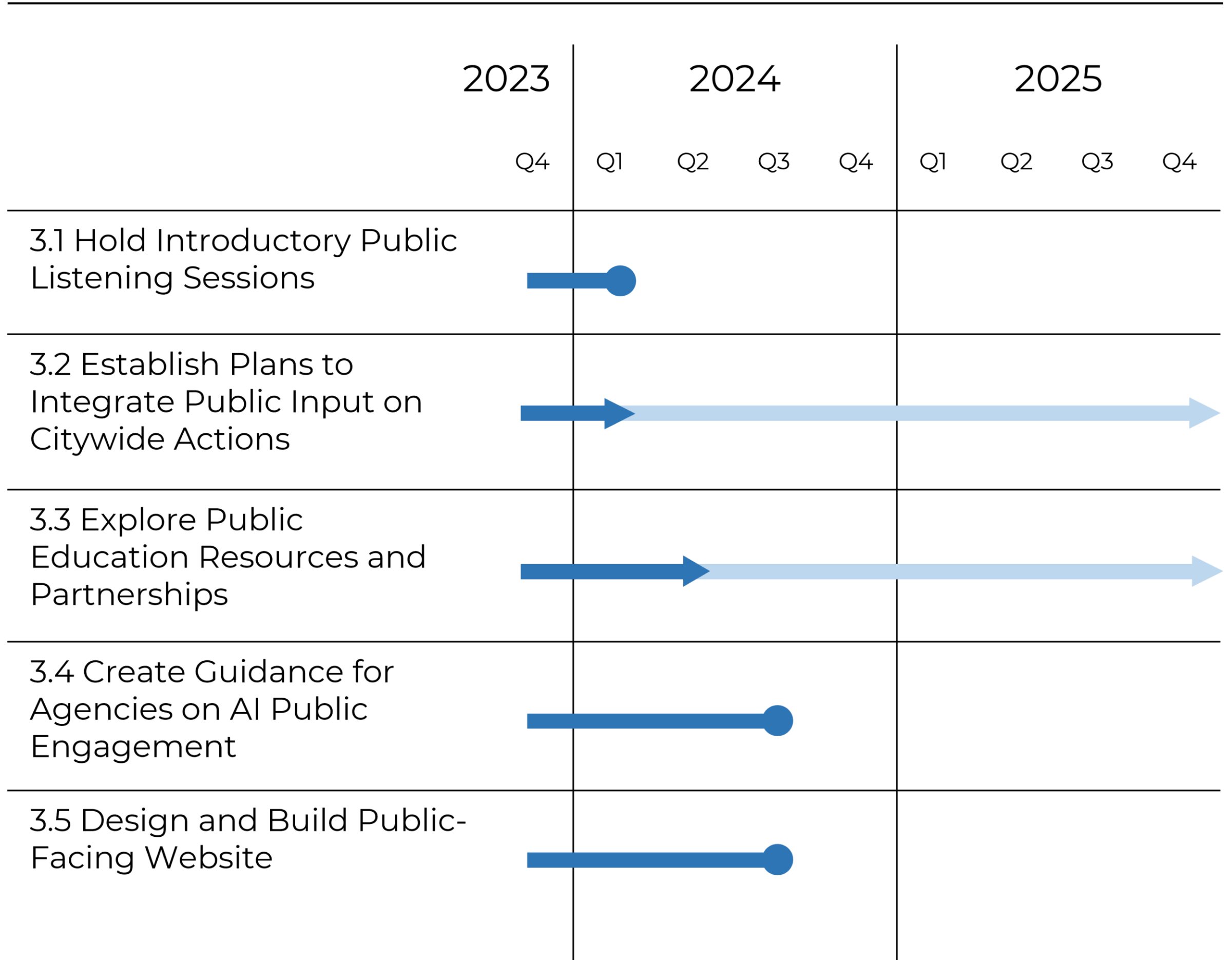
Complete within 12 months

3.5 Design and Build a Public-Facing Website

Design and build a public-facing website that will contain a range of resources for public use about AI broadly, as well as the city’s efforts in particular, including, for example, educational materials, city government reports, policies, and procedures.

Complete within 12 months

Initiative 03 - Timeline



- indicates action is in the "initiate or complete" phase
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- indicates the action will be completed by the date shown
- ▷ indicates the action continues beyond the date shown



Initiative 04

Build AI Knowledge and Skills in City Government

Objective

Prepare city personnel to effectively and responsibly work with and on AI, recognizing that AI literacy is critical not just for those in technical roles, but also for the many public servants who use, manage, or make decisions about AI tools.

Target Outcomes

- City personnel engage with new AI knowledge resources and report that they are obtaining value from them.
- Agencies regularly leverage centralized resources for swift AI information sharing.
- Collaborations across industry, academia, and beyond lead to successful project engagements leveraging partners' expertise to address key challenges the city faces.

Initiative 04 - Actions

Immediate Actions – projects start within 1 year

4.1 Explore and Pursue Opportunities to Foster Information Sharing Across Agencies and Teams

Enable agencies to share information about their use of and concerns related to AI. This may include leveraging the Office of Data Analytics' Analytics Exchange, Citywide CIO Forums, the Citywide Privacy Protection Committee, or other existing city convenings, or establishing new channels to support the exchange of information within the city, such as a dedicated AI community of practice or distribution list.

Complete within 6 months

4.2 Identify High-Priority Agency Skills Needs

Work with the Steering Committee to develop and implement a survey for agency executives to determine high-priority skills and knowledge needed across city government related to AI use and governance, to include skills for a diverse range of functions, both technical and not.

Complete within 12 months

4.3 Assess the Landscape of Internal and External Resources to Support AI Knowledge-Building Efforts

Engage with internal and external stakeholders to assess the state of existing resources, programs, and channels that can be leveraged to address identified city knowledge-building needs.

Complete within 12 months

4.4 Launch Initial Knowledge-Building Efforts

Work with the Steering Committee and other agencies involved in the city's internal workforce development to plan the scope, structure, and priorities of new AI learning resources for city staff and begin roll-out of initial efforts. Announce and promote these resources across agencies.

Initiate within 12 months, then ongoing

4.5 Explore Opportunities to Bring AI Talent into City Government for Limited-Term Projects

In partnership with industry, academic, or other stakeholders, and leveraging analogous efforts already underway within the city, explore the feasibility of a partnership program that brings external teams in on a limited-term basis to directly support city AI projects.

Complete within 12 months

Medium-Term Actions – projects start within 1–2 years

4.6 Centrally Track and Share Emerging Tools, Use Cases, and Considerations

Actively track the evolving technology, policy, and social landscape around AI from within OTI, and share information with agencies via established meetings or channels.

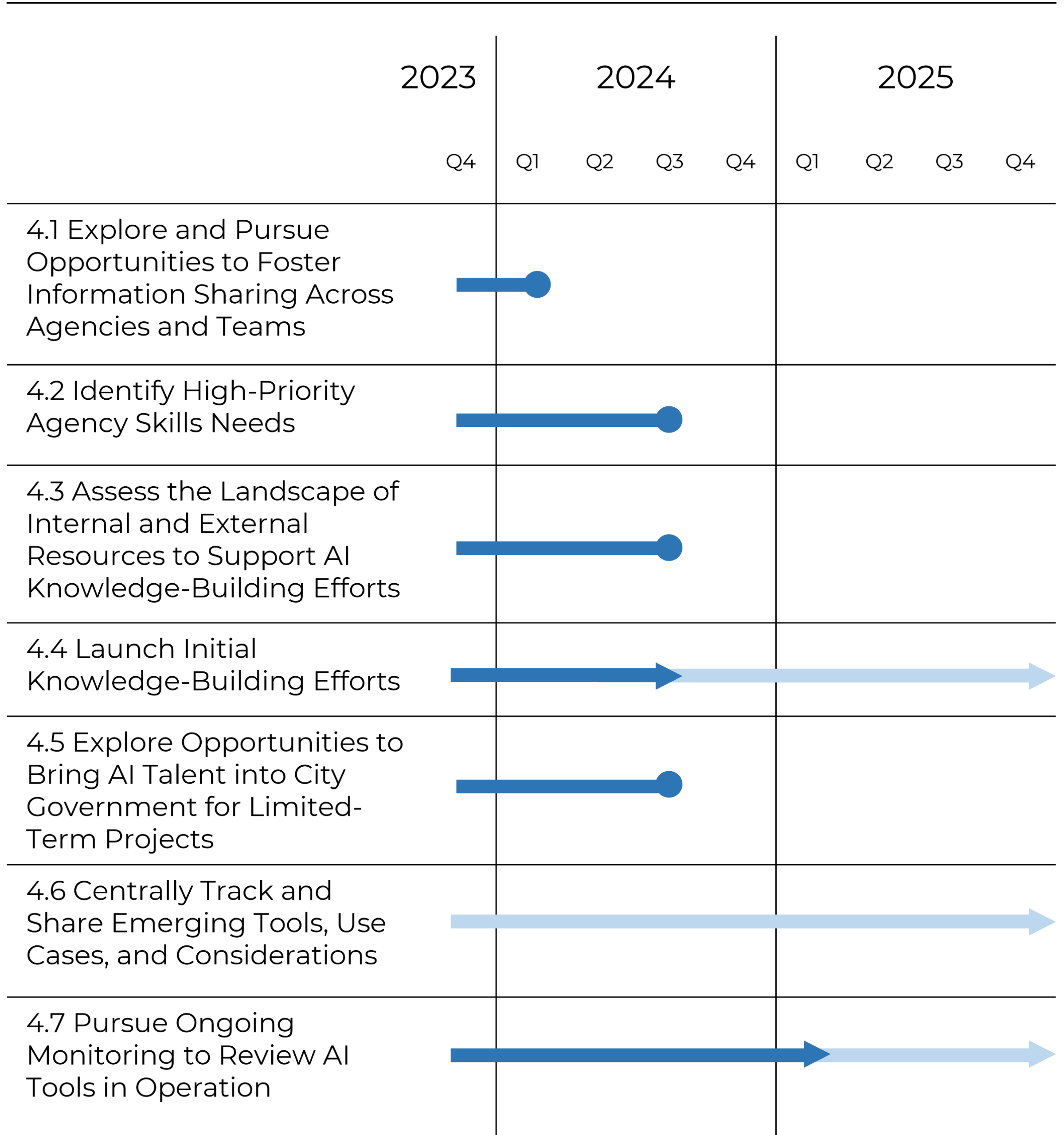
Ongoing

4.7 Encourage Alignment on AI Skills and Duties

In partnership with internal stakeholders, identify means to ensure that applicable city government job descriptions and civil services titles reflect the range of AI skills needed to support city efforts. For example, consider development of a civil service title for “data scientist.”

Initiate within 18 months, then ongoing

Initiative 04 - Timeline



■ indicates action is in the "initiate or complete" phase
■ indicates action is in the "ongoing" phase
○ indicates the action will be completed by the date shown
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Initiative 05

Support AI Implementation

Objective

Support city agencies in their efforts to build and use AI, based on identified agency needs, including a process to provide comprehensive assistance throughout the lifecycle of AI projects. Develop a knowledge base to equip agencies with resources and guidance, including in their reuse of existing tools, capabilities, and deployed technologies.

Target Outcomes

- Common agency challenges are identified and tracked on an ongoing basis.
- Agencies are effectively supported across their AI efforts, and benefit from centralized expertise and resources.
- City government is empowered to build AI tools in-house, where applicable, and to scale those efforts to expand their impact as appropriate.

Initiative 05 - Actions

Immediate Actions – projects start within 1 year

5.1 Identify Opportunities for In-House Tool Development

Using the typology of AI projects identified through public reporting, conduct an analysis related to advantages and disadvantages of in-house development vs. procurement for different project types. As part of the analysis, identify project types where in-house development is advantageous and suitable for expedient deployment. Additionally, identify specific use cases that appear scalable within an agency or transferable across agencies.

Complete within 9 months

5.2 Develop Example Project Lifecycles and Identify Bottlenecks

Consult with OTI teams and agency partners to develop example project lifecycles that can be used to identify common bottlenecks and determine the form and degree of support that OTI should provide to agencies. Bottlenecks may include, for example, agency or citywide procedures, infrastructure or software availability, costs and funding, sufficient and appropriate skills, sponsorship, or data quality.

Initiate within 12 months, then ongoing

5.3 Define OTI and Agency Roles in Support of Projects

Create a “Roles and Responsibilities” model for supported projects. For example, OTI could assign “owners” to key project activities from high-level ideation to technology implementation. This could also include support with problem definition, model building, budget development, defining a vendor proof of concept, risk mitigation, and compliance with city policies and guidance, among other areas.

Complete within 12 months

Medium-Term Actions – projects start within 1–2 years

5.4 Scale, Reuse, and Repurpose Identified In-House Projects

For projects that may be identified as suitable for scaling or transferring across agencies, create scaling plans in partnership with agencies and other stakeholders. Include considerations related to availability of skills, budget, and applicability.

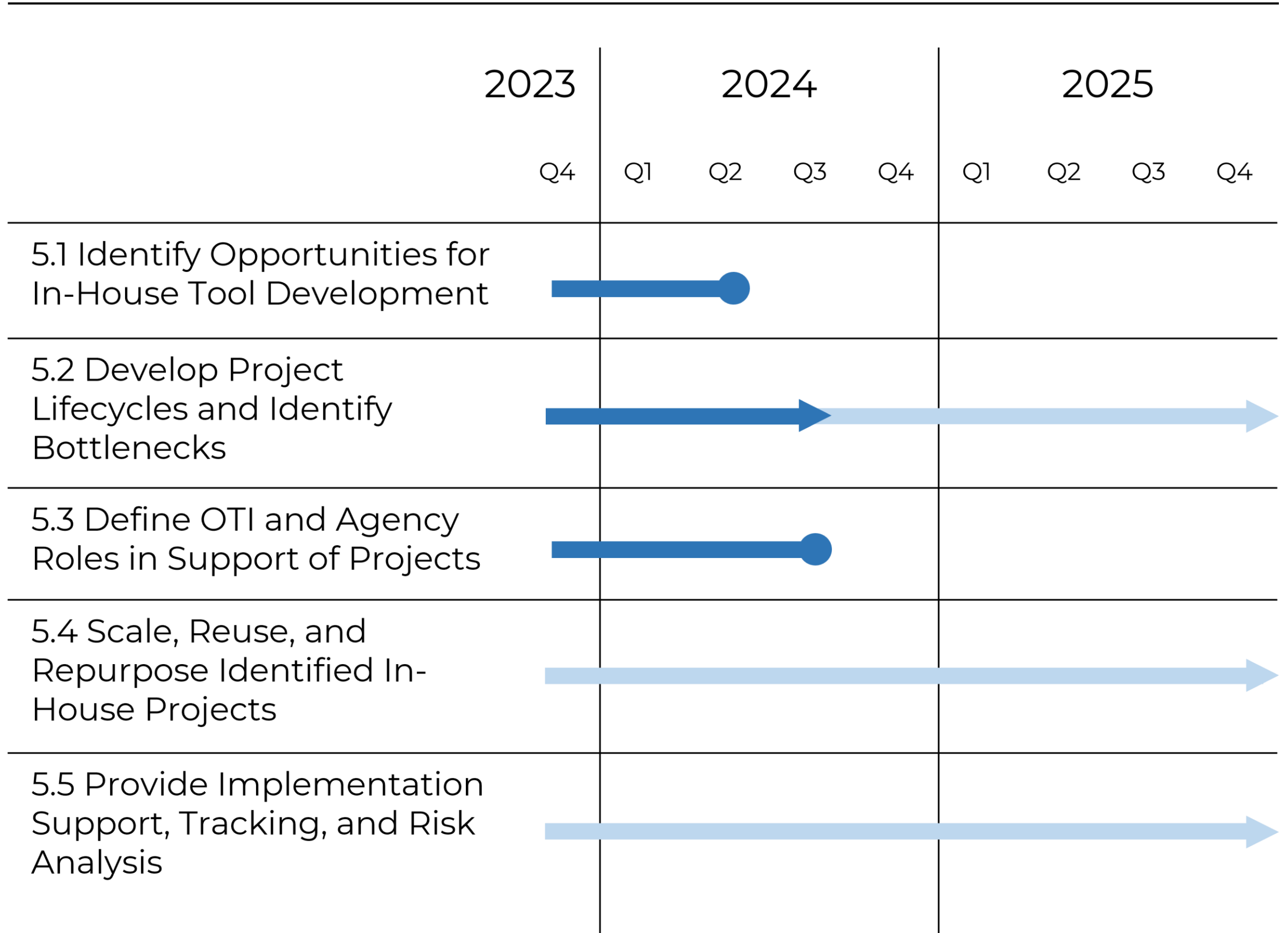
Ongoing

5.5 Provide Implementation Support, Tracking, and Risk Analysis

Provide agencies with ongoing operational and infrastructure support, as well as project tracking and risk analysis, where needed, to promote successful implementation. Analyze staff and budgetary needs, and document workflows for common project support requests to appropriately build centralized support capacities and resources.

Ongoing

Initiative 05 - Timeline



- indicates action is in the "initiate or complete" phase
- indicates action is in the "ongoing" phase
- indicates the action will be completed by the date shown
- ▶ indicates the action continues beyond the date shown



New York City's Department of Health and Mental Hygiene (DOHMH) is exploring a variety of AI and algorithmic tools to monitor and mitigate public health threats. *Photo: Ed Reed, New York City Mayoral Photography Office*

Initiative 06

Enable Streamlined and Responsible AI Acquisition

Objective

Develop AI-specific procurement standards or guidance to support agency-level contracting, ensuring procured products adhere to the city's AI principles and goals and take steps to mitigate risks, including challenges with respect to transparency and explainability that can occur when procuring AI tools from third-party vendors. Leverage opportunities to streamline city government's AI contracting to avoid redundancies and support cross-agency access to high-demand tools, as appropriate.

Target Outcomes

- Agencies are supported in their AI contracting efforts, and procure AI tools according to clear criteria that support responsible use.
- Centralized resources facilitate agencies' streamlined acquisition of AI solutions, where appropriate, including for experimental piloting.

Initiative 06 - Actions

Immediate Actions – projects start within 1 year

6.1 Conduct an Agency Needs Assessment

Conduct an agency needs assessment to identify and document where agencies need support with contracting for their AI solutions, considering definitions and typologies of different types of AI, and where there are opportunities to streamline efforts.

Complete within 9 months

6.2 Establish a Directory of Procured AI Tools and Guidance on Appropriate Use

Establish and share across agencies a directory of AI solutions that city government has already procured to support visibility and access, where appropriate. Include within this directory guidance on appropriate use of such tools.

Complete within 12 months

6.3 Support AI Piloting

Leverage existing OTI infrastructure to support the city's experimentation and evaluation of AI tools through pilots and proof-of-concept (POC) or demonstration projects.

Initiate within 12 months, then ongoing

Medium-Term Actions – projects start within 1–2 years

6.4 Develop AI-Specific Procurement Standards, Terms, or Guidance

In partnership with relevant agencies, and complementing existing contracting requirements related to privacy and cybersecurity, develop a set of contract standards, terms, or guidance for procurement of AI tools, to support agency-level contracting, and help ensure procured products align with city AI principles and goals. These materials should be tailored to project types and risk profiles, and may include, for example, content related to performance, transparency and explainability, fairness and non-discrimination, privacy, cybersecurity, and environmental impact, among others.

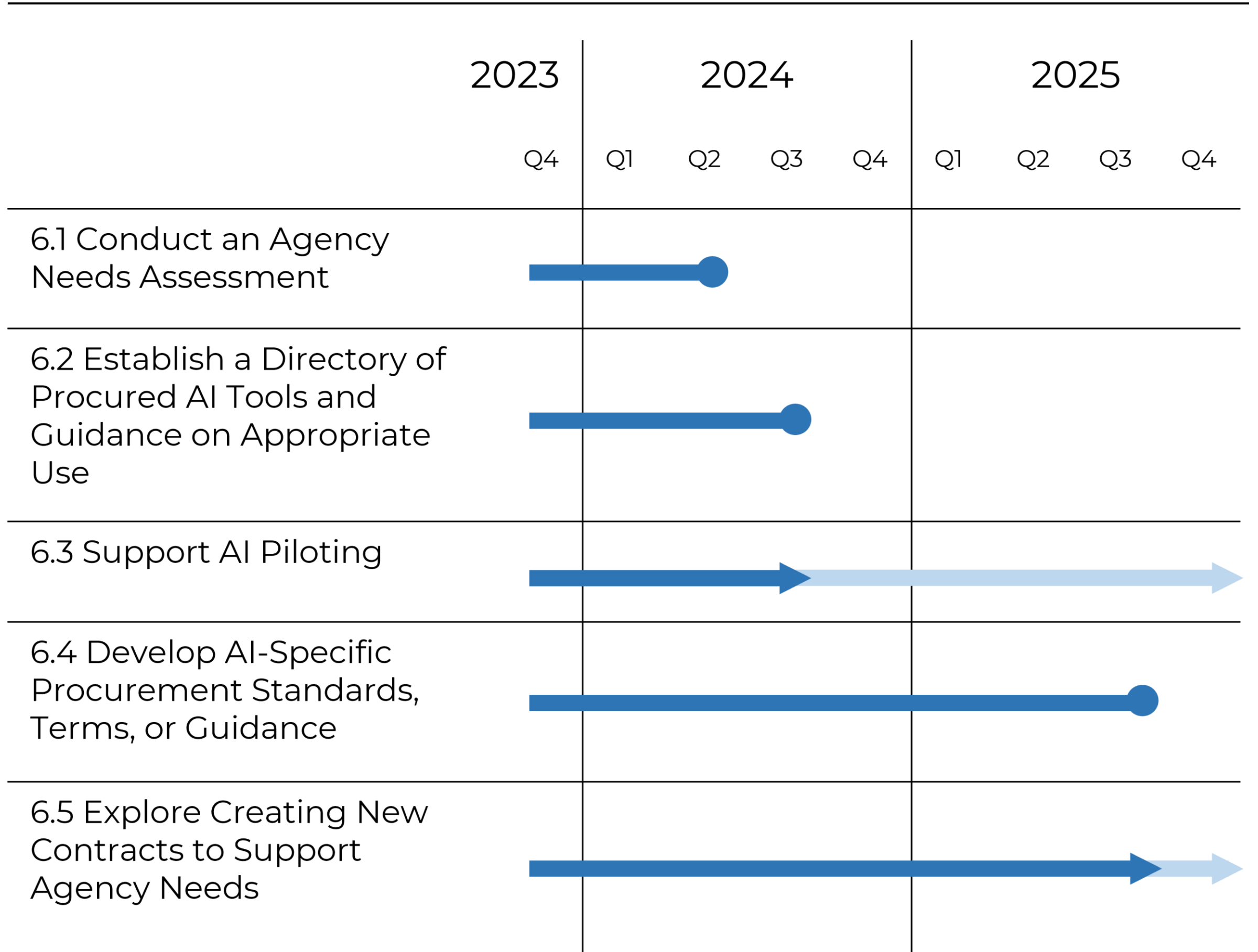
Complete within 24 months

6.5 Explore Creating New Contracts to Support Agency Needs

If indicated, explore establishing new shared or citywide contracts for high-demand AI tools to streamline access for agencies, support competitive terms and pricing, and align with citywide MWBE goals.

Initiate within 24 months, then ongoing

Initiative 06 - Timeline



■ indicates action is in the "initiate or complete" phase
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Initiative 07

Ensure Action Plan Measures are Maintained and Updated, and Report Annually on the City's Progress

Objective

Revise Action Plan initiatives where and when applicable to ensure the city's efforts remain current and helpful. Communicate openly with the public regarding implementation, to ensure that the city remains accountable.

Target Outcomes

- Action Plan efforts are periodically revised and remain up-to-date with the changing AI landscape and developing best practices.
- The city is highly transparent, actively disseminating information regarding progress on the Action Plan.
- The public is well-informed on the city's status toward implementing the Action Plan.

Initiative 07 - Actions

Immediate Actions – projects start within 1 year

7.1 Institute and Implement Processes for Refreshing Key Aspects of the City’s Plan on an Ongoing Basis

Identify areas of AI work, as described in this Action Plan, where change management processes are needed to help ensure timeliness and currency of the city’s management of AI. AI is a highly dynamic technology and policy space, and an iterative approach will be required to account for the changing technological, organizational, and social landscape, as well as emerging best practices in the field. Accordingly, the city will need to maintain and update its efforts in several areas to ensure they remain relevant and up-to-date. This includes updates to a range of governance measures, public engagement efforts, and city knowledge-building resources, among others.

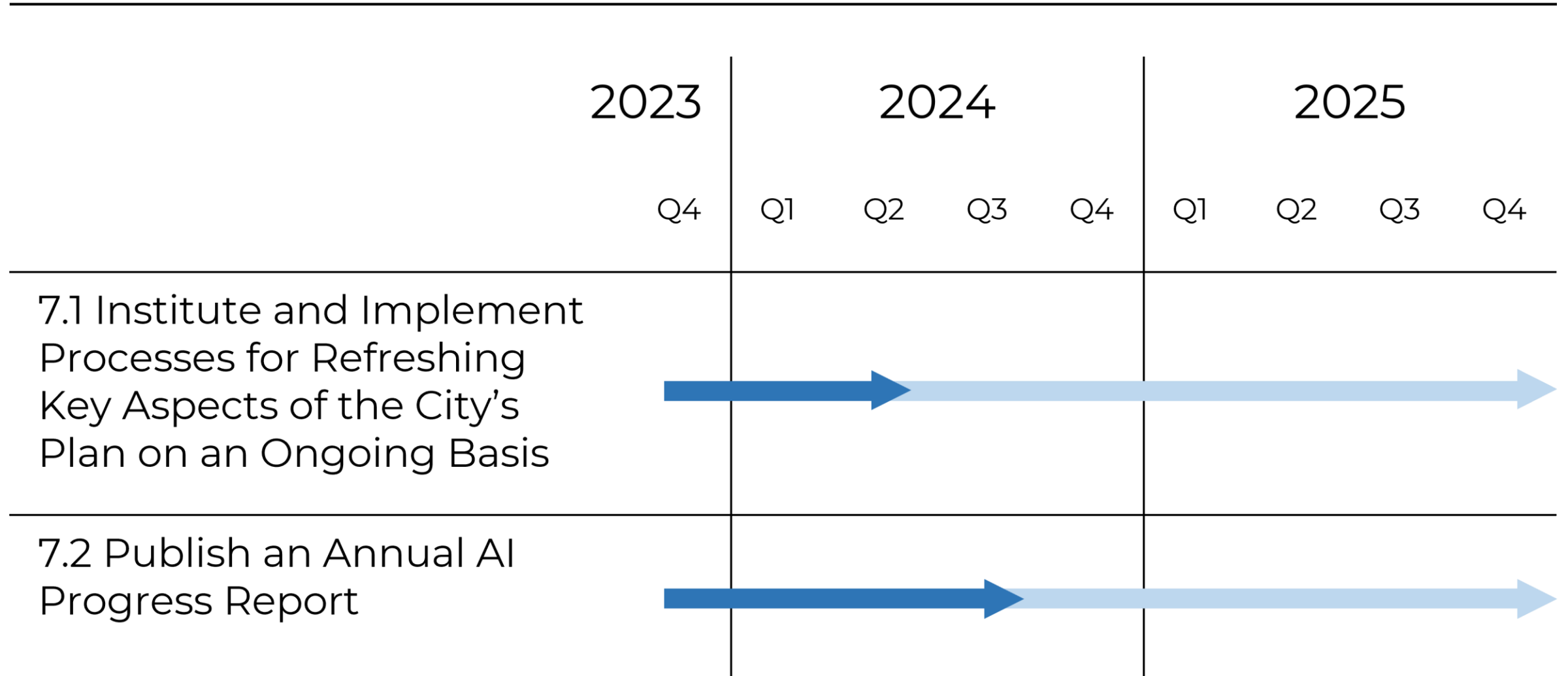
Initiate within 9 months, then ongoing





7.2 Publish an Annual AI Progress Report

Track the city’s progress toward the implementation of the actions set out in this Plan to ensure accountability on an annual basis, via a public report. This report will include an account of any updates made to actions outlined, as described above.

Initiate within 12 months, then ongoing

Initiative 07 - Timeline



-  indicates action is in the "initiate or complete" phase
-  indicates action is in the "ongoing" phase
-  indicates the action will be completed by the date shown
-  indicates the action continues beyond the date shown

Next Steps

The city will immediately embark on the implementation of this Action Plan, as detailed above.

The city looks forward to engaging with New Yorkers, and with stakeholders across sectors as we move forward with implementation. We welcome feedback on this Plan at: <https://www.nyc.gov/content/oti/pages/contact>

Notes

1 The city’s algorithmic tools reporting outputs from 2020 to 2022 can be found at <https://www.nyc.gov/content/oti/pages/reports>; the NYC AI Strategy and appended AI Primer can be found at https://a860-gpp.nyc.gov/concern/nyc_government_publications/nv9355378?locale=en; agency applications are described in each of these efforts.

2 Although frequently used together, the terms “artificial intelligence” and “algorithmic tool” are not synonymous. Many, though not all algorithmic tools are derived from or are applications of AI. And based on particular contexts or regulations, not all applications of AI may be considered algorithmic tools. See New York City Local Law 35 of 2022 for additional details on the definition of “algorithmic tool” used therein and associated reporting requirements: <https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=4265421&GUID=FBA29B34-9266-4B52-B438-A772D81B1CB5>.

3 As noted, the city’s algorithmic tools reporting outputs from 2020 to 2022 can be found at <https://www.nyc.gov/content/oti/pages/reports>.

4 As noted, the NYC AI Strategy and appended AI Primer can be found at https://a860-gpp.nyc.gov/concern/nyc_government_publications/nv9355378?locale=en.

5 More information about such agency work can be found in both the city’s annual algorithmic tools reporting documentation, at <https://www.nyc.gov/content/oti/pages/reports>, and in the NYC AI Strategy, at https://a860-gpp.nyc.gov/concern/nyc_government_publications/nv9355378?locale=en.

6 This consolidation was enacted through the issuance of Executive Order 3 of 2022, which is available at <https://www.nyc.gov/office-of-the-mayor/news/003-002/executiveorder-3>.

7 The OTI Strategic Plan can be found at <https://www.nyc.gov/assets/oti/downloads/pdf/about/strategic-plan-2022.pdf>.

8 For more on the AI Accountability Framework from the Government Accountability Office (GAO), see: <https://www.gao.gov/assets/gao-21-519sp.pdf>. For more on the National Institute for Standards and Technology (NIST) AI Risk Management Framework, see: <https://www.nist.gov/itl/ai-risk-management-framework>. For more on the White House Office of Science and Technology Policy (OSTP) Blueprint for an AI Bill of Rights, see:

<https://www.whitehouse.gov/ostp/ai-bill-of-rights/>. Other federal efforts include the creation of the National Artificial Intelligence Advisory Committee (NAIAC) and the National Artificial Intelligence Research Resource (NAIRR) from the National AI Initiative Act of 2020. The NAIRR Task Force released their final report in January 2023, see: <https://www.ai.gov/wp-content/uploads/2023/01/NAIRR-TF-Final-Report-2023.pdf>. At the federal level, an example effort from Congress includes Senator Charles Schumer's SAFE Innovation Framework for AI policy, see: https://www.democrats.senate.gov/imo/media/doc/schumer_ai_framework.pdf.

9 The NYC Department of Education (DOE) has recognized that as AI reshapes the jobs and careers available to NYC students, schools can play a key role in both equipping students to use AI and to critically examine its implications. To this end, the DOE is incorporating AI-related topics in its Computer Science for All (CS4All) initiative to ensure all NYC public school students learn computer science, its Future Ready NYC program to build career-connected pathways for high-school students, and its broader digital literacy and digital citizenship efforts. In September 2023, the DOE also announced the launch of an AI Policy Lab that will broadly outline steps to address AI's impact across the public education landscape. For more on these programs, see: <https://sites.google.com/schools.nyc.gov/cs4allnyc/>; <https://www.schools.nyc.gov/learning/subjects/career-and-technical-education>; <https://www.schools.nyc.gov/school-life/school-environment/digital-citizenship>.

The Office of Talent and Workforce Development's Tech Talent Pipeline also leads a number of initiatives to build a diverse and inclusive local tech workforce, including in AI-related and other in-demand roles. These programs include CUNY 2X which builds out new faculty lines and incentivizes curricular innovations in tech related degrees, internship and apprenticeship programs that provide new onramps to tech careers, and a number of projects that leverage AI to support better student outcomes. For more on these efforts, see: <https://techtalentpipeline.nyc/>.

New York City Economic Development Corporation will continue to work to grow all aspects of the tech sector in NYC, including AI, with a focus on identifying opportunities to foster AI applications for good to solve for the greatest challenges of our time, including across scientific research, health care and climate change.

In another vein, the Department of Consumer and Worker Protection is tasked with enforcing Local Law 144 of 2021, which requires employers and employment agencies that use “automated employment decision tools” to provide notification and conduct and publish bias audits of the tools in advance of their use in employment decisions in New York City. For more on the Local Law, and DCWP’s rules and related work, see: <https://www.nyc.gov/site/dca/about/automated-employment-decision-tools.page>.

And the City Commission on Human Rights is charged with the enforcement of the city’s Human Rights Law, Title 8 of the Administrative Code of the City of New York, which protects New Yorkers against bias and discrimination in employment, housing, and public accommodations. This can include bias and discrimination that occurs as a result of the use of AI tools. For more on the City Human Rights Law, see: <https://www.nyc.gov/site/cchr/law/the-law.page>. For more on a 2022 settlement that addressed “algorithmic bias,” see: <https://www.theverge.com/2022/2/25/22949293/tumblr-nycchr-settlement-adult-content-ban-algorithmic-bias-lgbtq>

10 Pursuant to the OTI Strategic Plan, the Office of Data Analytics recently created a citywide data governance program with an executive steering committee under which groups of agencies will convene to create and endorse standards, documentation, and other artifacts designed to improve the usability and interoperability of the city's myriad data assets.

11 A complete list of organizations engaged for the NYC AI Strategy is included on pp. 112-113 of the document, available at https://a860-gpp.nyc.gov/concern/nyc_government_publications/nv9355378?locale=en

12 This definition is adapted from the definition advanced in the city's 2021 AI Strategy: https://a860-gpp.nyc.gov/concern/nyc_government_publications/nv9355378?locale=en and was formalized in guidance issued by the city for agency compliance with Executive Order 50, and Local Law 35 reporting. In recognition of the evolving nature of these technologies, the city may revisit this definition on an ongoing basis to ensure its efforts reflect the latest developments in the field.

13 For example, the White House Office of Science and Technology Policy (OSTP) 2022 "Blueprint for an AI Bill of Rights," available at <https://www.whitehouse.gov/ostp/ai-bill-of-rights/>, the National Institute of Standards and Technology (NIST) AI Risk Management Framework, available at <https://www.nist.gov/itl/ai-risk-management-framework>, or the Organisation for Economic Co-Operation and Development (OECD) AI Principles, available at <https://oecd.ai/en/ai-principles>.

14 As noted, the city's algorithmic tools reporting outputs from 2020 to 2022 can be found at <https://www.nyc.gov/content/oti/pages/reports>.

15 *Ibid.* Text of Local Law 35 of 2022 can be found at <https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=4265421&GUID=FBA29B34-9266-4B52-B438-A772D81B1CB5>.

16 See <https://www.nist.gov/itl/ai-risk-management-framework>.

17 See <https://www.gao.gov/assets/gao-21-519sp.pdf>.

