

Civic Infrastructure amid AI Adoption

Enhancing Public Trust in an Age of AI and Digitalization

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AI governance, public participation, civic design



Context

Municipalities and companies increasingly consider AI solutions to deliver services

However, growing AI adoption can cause socio-economic harms and physical impacts

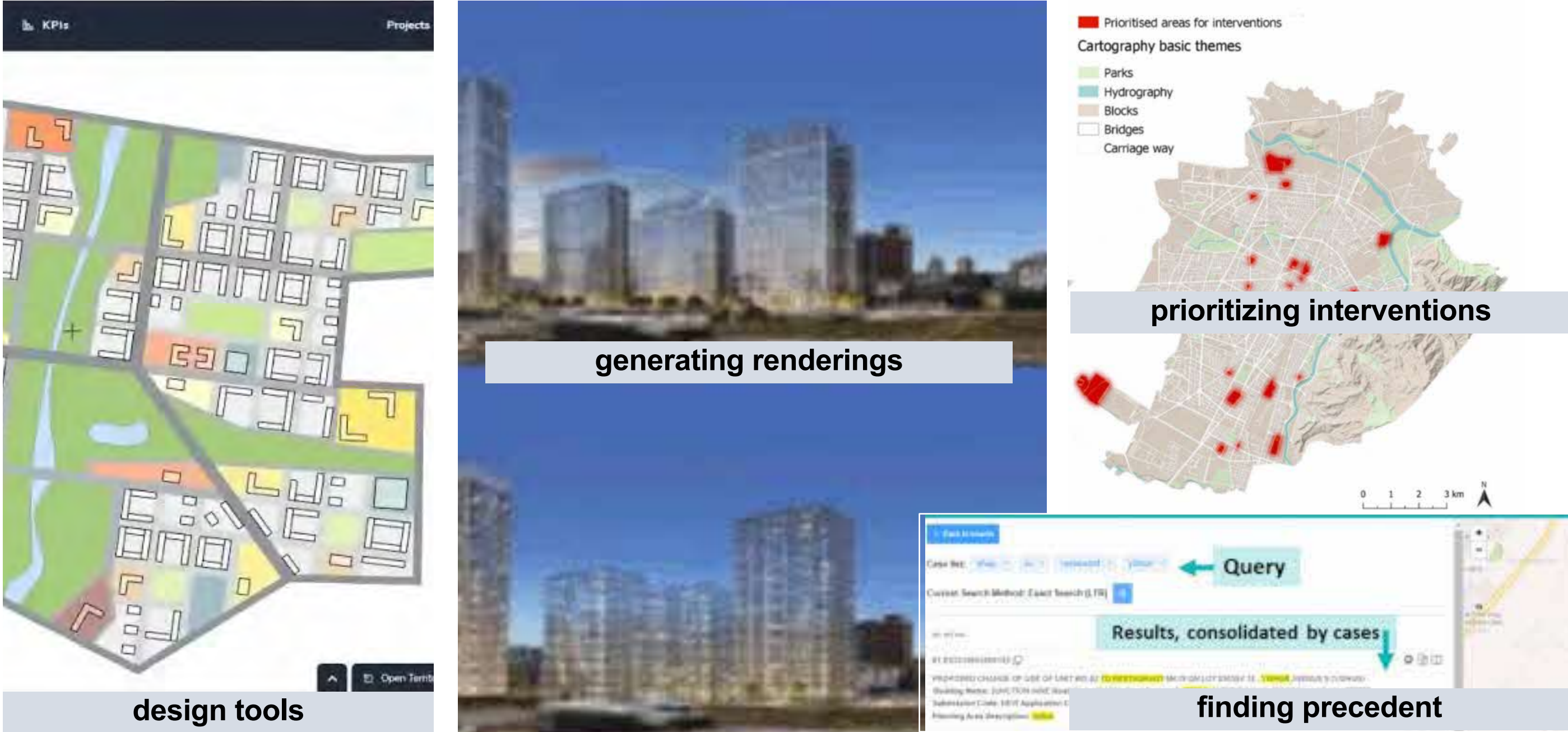


Image sources: CITYPLAIN (2025), URA DPLab (2024), Ellena et al. (2023)

- Primary / Direct**
Effects on users and those subject to AI decisions

 - Inaccurate predictions undermining service delivery
 - Algorithmic injustice leading to systematic service denial
 - Impacts to access to life opportunities or income
- Secondary / Indirect**
Effects on economic & social structures as AI proliferates

 - Proliferation of misinformation, disinformation, or scams
 - Degradation of personal privacy and autonomy
 - Economic impacts of worker displacement
- Tertiary / Physical**
Local environmental “footprint” and global effects

 - Energy and water consumption, emissions and pollution from data centers, affect quality of life in communities
 - Impacts of corporate relocations (housing, congestion)

Source: Zhao, Thompson, Gittel, Leong & Hsu (2026)

City governments are on the frontlines: they must deliver services effectively (with limited resources), while assisting residents in adapting to socio-economic impacts rooted in global change and national policies.

Complexities

Without a strategy for engagement, public confusion and uncertainty can harden into opposition

Public Concerns

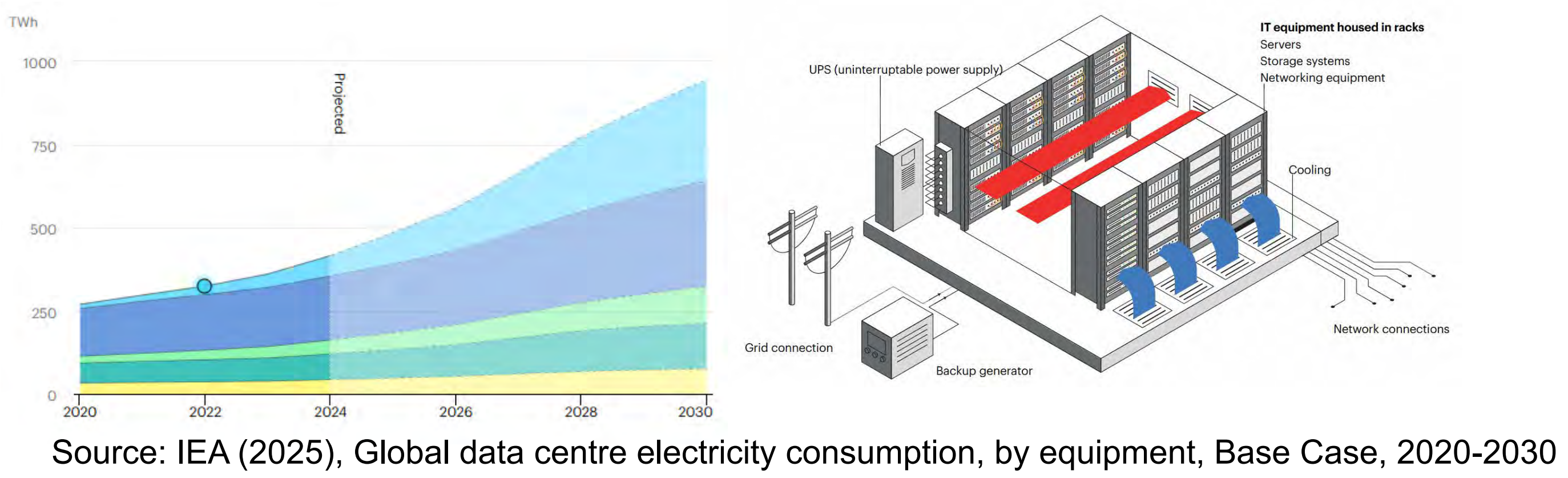
What are the impacts on my life and services I access?

What are our rights? Who advocates for them?

Who can be trusted with our data?

What bodies will implement these safeguards?

How does the city assess the public interest?



Source: IEA (2025), Global data centre electricity consumption, by equipment, Base Case, 2020-2030

Data centers’ effects on quality of life have also intensified conversations on technology’s impacts

Cities must develop civic infrastructure with interfaces at multiple levels to address the growing challenge of responsible AI adoption, while managing public concerns, expectations, and aspirations.

Policy Approaches

Individual Level: Civic AI education + improving access for all residents



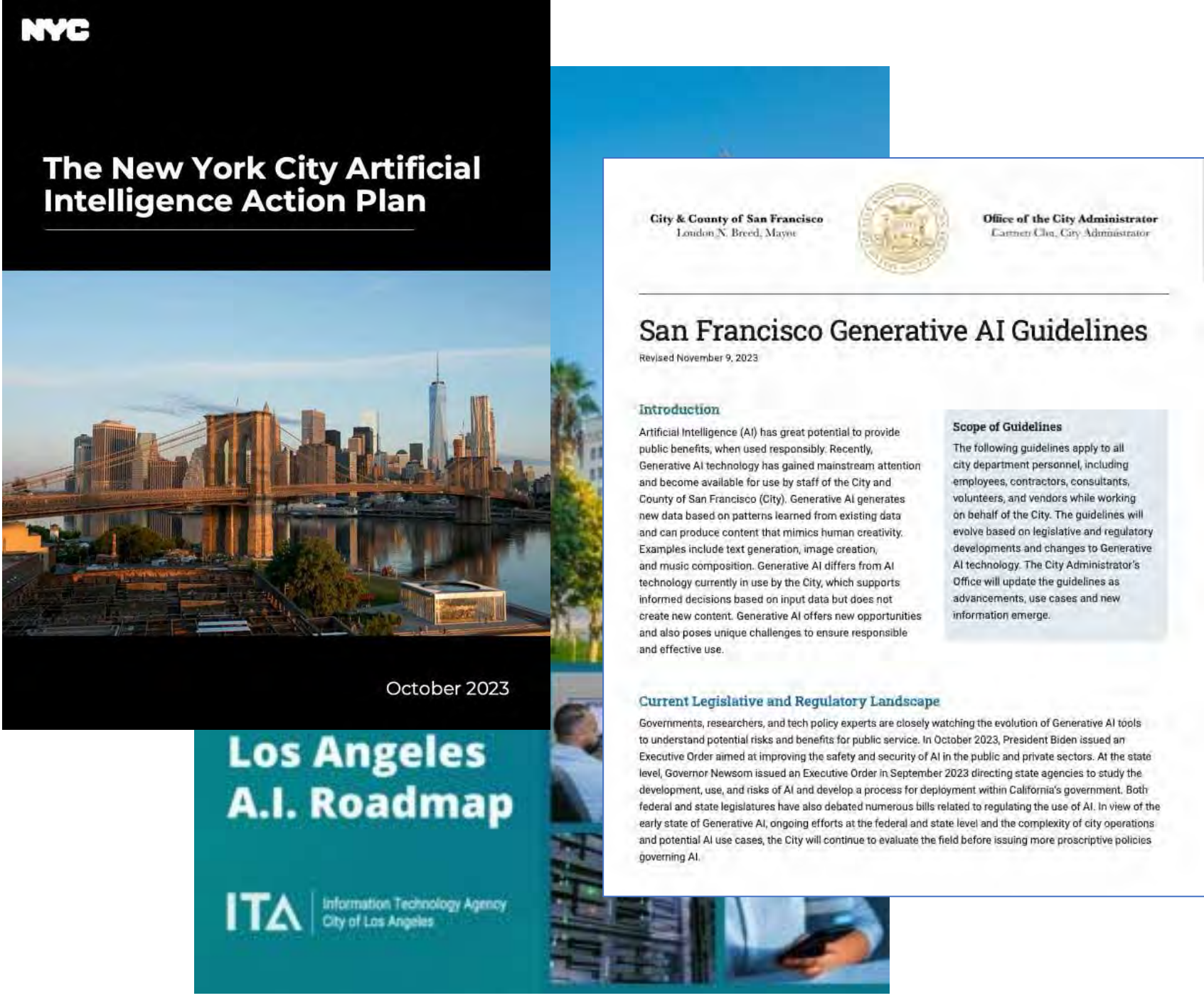
- Prepare citizens to navigate and critically respond to an AI-impacted society:
- Digital literacy initiatives
 - Upskilling for workers
 - Outreach through public programming

Organizational Level: Collaborate with community groups + startups



- Build (or utilize existing) civic spaces to encourage partnerships:
- Work with place-based non-profits
 - Spur urban solution providers to respond to public sector priorities

Institutional Level: Deepen municipal capacity + safeguards



- Train officials and build governance mechanisms into city strategies:
- Implement privacy safeguards
 - Audit, transparency, procurement
 - Participatory governance boards

Ahead

Meaningful, consistent, and creative engagement initiatives enhance public trust in city officials’ use of AI tools. In turn, engagement informs the ethical and effective use (and future development) of improved digital tools. Insights can also be drawn from:

Co-enforcement (Amengual & Fine 2017), embeddedness of policy-making officials (Evans 1995) and street-level bureaucrats (Pepinsky, Pierskall & Sacks 2017), human-centered design principles, and consensus building strategies that empower communities, instead of overriding their concerns (Susskind 2007, Hsu & Susskind 2026), including collective decision-making around community benefit agreements.



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Read the Cities & AI white paper from MIT DUSP
“AI will transform cities; Can cities transform AI?”
by Zhao, Thompson, Gittel, Leong & Hsu (2026)



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