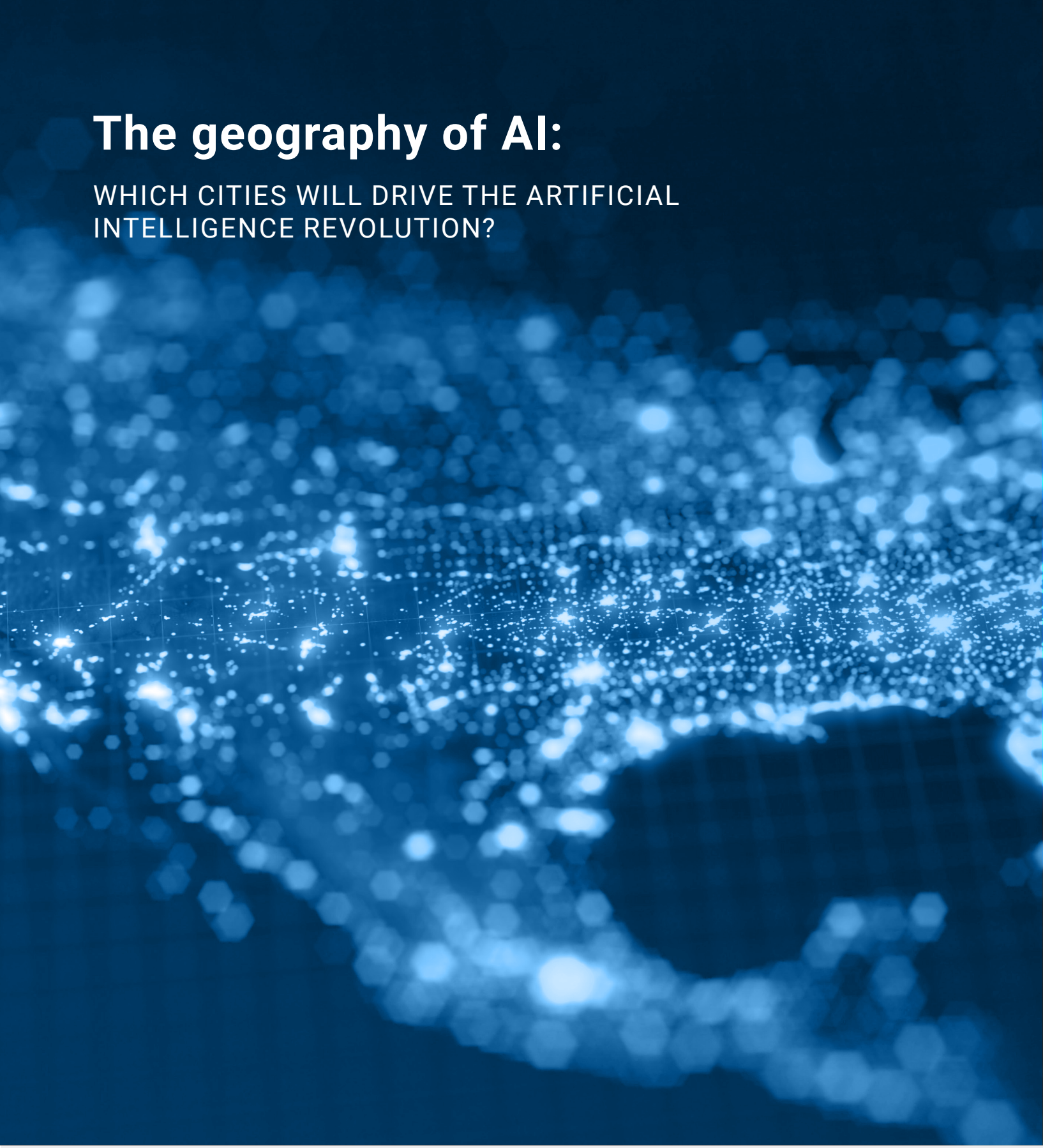
# The geography of AI:

## WHICH CITIES WILL DRIVE THE ARTIFICIAL INTELLIGENCE REVOLUTION?



Metropolitan Policy Program at BROOKINGS

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# Executive summary

As the post-pandemic economic era nears, much of the U.S. artificial intelligence (AI) discussion revolves around futuristic dreams of both utopia and dystopia, with promises ranging from solutions to global climate change on the positive side to a "robot apocalypse" on the negative. However, it bears remembering that AI is also becoming a real-world economic fact, with major implications for national and regional economic development.

Based on advanced uses of statistics, algorithms, and fast computer processing, AI has become a focal point of U.S. innovation debates. Even more, AI is increasingly viewed as one of the next great "general purpose technologies"—one that has the power to transform sector after sector of the entire economy.

All of which is why state and city leaders are increasingly assessing AI for its potential to spur economic growth. Such leaders are analyzing where their regions stand and what they need to do to ensure their locations are not left behind.

In response to such questions, this analysis examines the extent, location, and concentration of AI technology creation and business activity in U.S. metropolitan areas.

Employing seven basic measures of AI capacity, the report benchmarks regions on the basis of their core AI assets and capabilities as they relate to two basic dimensions: AI research and AI commercialization. In doing so, the assessment categorizes metro areas into five tiers of regional AI involvement and extracts four main findings reflecting that involvement.

Overall, the report finds that:

- The U.S. AI industry is growing rapidly, but is still emergent and relatively limited in scope.
- AI activity is highly concentrated in a short list of "superstar" metro areas and "early adopter" hubs, often arrayed along the coasts.
- Numerous research and contracting centers owe their standing to federal R&D flowing into major universities.
- Nearly 90 additional communities are potential centers of future AI growth, especially where large national or global firms are driving adoption.

In discussing these findings, the report points to genuine opportunities for some metropolitan areas as well as cautions.

On the upside, AI is a powerful force that is growing rapidly and could increase the productivity of virtually all regional economies. Therefore, as leaders seek to position their locales for post-pandemic vitality, AI can and should be part of the discussion.

At the same time, the information in this report suggests that the task of developing a significant AI cluster will be challenging. Wide variations in cities' starting points, research sectors, and business activities require that locations assess their positioning and capabilities clearly. The "winner-take-most" dynamics of digital and platform economies also counsel caution, as they suggest that relatively few places could drive the bulk of early-stage AI-related development.

Given that, the analysis concludes by reviewing a series of initial strategy considerations keyed to each of the AI city types identified in the report. These priorities range from centering local AI ecosystems on ethical use to promoting AI adoption among local firms to addressing the need for diverse talent. The information and assessments in this report underscore the need not for all metro areas to spring into action right now, but rather to assess their positioning and then consider acting.

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# More information

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