


ARTIFICIAL INTELLIGENCE (AI) AND COMMERCIAL REAL ESTATE

AI is here, and there's no shortage of opinions on it. As the technology evolves and advances, AI is alternatively hailed as a savior to society's problems or reviled as a potential disaster of apocalyptic proportions. On one hand, AI is already hard at work making meaningful progress—in fields including commercial real estate—while offering glimpses at stunning advances from health care to transportation to public safety. On the other hand, there are legitimate concerns that replacing human judgment with machine learning carries real risks, from accelerating job loss to institutionalizing bias to the frightening consequences of losing the ability to recognize truth and reality.

The risks and rewards may be particularly extreme with AI, but as with so many previous technological advances, the answers likely will reside in how the technology is used and what guardrails are put in place. The hurdles are high, but if AI is viewed appropriately as a tool, if society ensures that ethical, social and legal concerns are addressed, and if oversight and regulation constrains the bad uses and bad actors while allowing beneficial uses to flourish, then AI could prove to be truly revolutionary with near-limitless potential.

THE ISSUE



Artificial intelligence (AI) is getting a lot of attention for good reason—it's advancing incredibly quickly with unknown consequences—but it's been in existence for decades. The term was first coined in the 1950s and refers to a computer or machine-based system that can make predictions, recommendations or decisions influencing real or virtual environments—tasks that are commonly performed by humans. AI systems typically work through “machine learning,” in which computers process and analyze large data sets and identify patterns or correlations.

The potential benefits of AI are tantalizing and potentially life-changing. At its best, AI can increase efficiency and reduce human error, all while offering constant availability. Not only can it make many of our current jobs easier, but it holds the real promise of improving the health of people and the planet. Applications of AI technologies range endlessly, but some of the most significant advancements include improving medical diagnoses that can catch diseases early, or developing new forms of communication for people with disabilities. Uses of AI can be more mundane as well, such as providing personalized shopping recommendations, or filtering out spam e-mail.

The public sector is also using AI systems to improve and streamline services in fields including law enforcement, elections, and transportation. Currently governments are using AI to predict where future crimes may occur, improve the accuracy of the signature matching process for absentee ballots, synchronize traffic lights, and predict road and bridge deterioration, to name only a few examples.

Unfortunately, the list of concerns related to AI applications is as great as the opportunities. Beyond theoretical worries that AI will eventually evolve to where humans will lose the ability to control it, many fears are already being validated in the present-day:

- **Misinformation** – AI has enabled an accelerating ability to produce fake but believable and realistic videos, images, audio, and text. While far from perfect, tools readily exist that make it easy for nearly anyone to create and spread misinformation quickly and effectively. The ramifications are enormous, with potential to cause havoc on a scale ranging from personal to global. Examples are wide-ranging, from harassing individuals through “deepfake” photos or videos, to attempts to affect elections through fake ads, robocalls, and bot accounts.
- **Bias** – While some hoped that AI decision-making would be impartial and unbiased, the reality can be very different. AI is created by people, and it reflects the biases and subjectivity of its creators, whether intentional or not. If the algorithms developed by code designers incorporate bias, or merely incomplete information, the results can perpetuate injustices and unfairness. Again, the potentially negative ramifications are widespread, as AI has already been incorporated into many everyday activities, including the screening of employment resumes and rental housing applications.
- **Safety** – As examples of safety risks, autonomous self-driving vehicles have crashed, and facial recognition technology has falsely accused the wrong people of crimes; while these types of mistakes may have been even more prevalent without this technology, it remains a significant question as to what tasks and responsibilities people are willing to cede to computers. On a larger scale, there are widespread concerns over the potential consequences of AI being enlisted to interfere with democratic processes or exacerbate social conflict.
- **Unsustainability** – While there are potential environmental benefits through AI, there is also a trade-off—AI technology requires an exorbitant amount of energy to run. A research study from the University of Massachusetts, Amherst, found that the process of developing large AI data models can result in the average emission of more than 600,000 pounds of carbon dioxide—nearly five times the lifetime carbon footprint of the average American car.
- **Unaccountability** – As problems occur, it’s currently unclear where the responsibility resides. Some of this ambiguity is due to a lack of transparency in the process of AI algorithms. Regardless, individuals may not have the necessary information to pursue legal claims or otherwise focus on accountability.



In 2023, a fake, AI-generated photo of an explosion at the Pentagon quickly went viral on social media, amplified by a variety of “verified” accounts. This led to a sharp, real-world drop in the U.S. stock market as news outlets and fact-checkers scrambled to counter the fabrication.

THE CRE PERSPECTIVE

AI is already in use in commercial real estate in a variety of ways and this will only accelerate. There could be competitive advantages for companies and properties that smartly integrate these new technologies into their business practices.

Building owners and managers are used to looking for solutions that deliver efficiencies, and AI is providing the next generation of smart technologies that can create the next iteration of sustainable buildings. This is just the start of a new wave of tools that have the potential to greatly improve building operations. Perhaps the most obvious use is AI can utilize algorithms to optimize building heating and cooling systems, ensuring comfortable conditions, significantly reducing energy use and addressing emissions concerns.

AI poses many more opportunities to improve operations and identify potential problems, including monitoring building systems, optimizing maintenance schedules, and improving security and safety. And in theory this technology will only improve as researchers investigate how people interact with these systems, and companies develop scalable solutions that address the varying needs of individual buildings.

Tenant and vendor relations stand to be greatly streamlined as well. While these tools can't completely replace human interaction, many tasks can be automated, saving time and reducing errors. AI tools can be used to summarize key components of lengthy lease documents and contracts, and the processes of filing paperwork and signing documents can be dramatically simplified. AI-aided customer service tools allow for around-the-clock support for tenants, addressing maintenance requests, processing payments and more.

The investment side of the industry will also see opportunities through the use of AI. Programs can analyze data to predict cash flow and forecast occupancy rates. AI can accelerate the pace of transactions, produce detailed analytics of properties and markets, and estimate development potential. Recommendations can be made to align with a company's objectives, risk tolerance, and targeted markets.

One sector of commercial real estate is benefitting directly from the onset of AI—the development of data centers. The massive data processing and storage needs necessitated by AI has accelerated the need for these facilities. The rapid development of data centers has been experienced in many parts of the country, seemingly bound only by the availability of land and the large amounts of energy required.



The Washington Post

According to a study by McKinsey & Company, the demand for data centers in the U.S. is forecasted to increase by approximately 10% per year through 2030. The power consumption of data centers will essentially double over this time period.

THE POLICY LANDSCAPE

CANADA

In 2023, the Government of Canada updated its [Directive on Automated Decision-Making](#), representing perhaps the first national policy focused on AI in public administration. The government states that it is increasingly looking to use AI in administrative decisions to improve service delivery, but it is committed to using AI “in a manner that is compatible with core principles of administrative law such as transparency, accountability, legality, and procedural fairness.” The directive requires a risk assessment, transparency of decision-making systems and source code, and quality assurance checks.

FEDERAL

- At the U.S. federal level, voluntary frameworks to this point offer recommendations but lack enforcement mechanisms. There is some momentum for legislation, as several Congresspeople have expressed interest, and even many private sector companies (Google, IBM, Microsoft, OpenAI) have encouraged Congress to institute federal oversight of AI, primarily based on needs to guarantee safety.
- In October 2023, the Biden Administration issued an [Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence](#). The EO attempts to establish standards for AI safety and privacy protections. The order builds on voluntary commitments adopted by more than a dozen companies, and requires the largest AI developers to rigorously test algorithms and share the results of their testing with the federal government before releasing them to the public. The order requires related training between the Department of Justice and federal civil rights offices, requires collaboration with the Departments of Education, Labor, and Health and Human Services, and directs HHS to establish programs specific to healthcare. The order also asks Congress to pass bipartisan consumer and children’s data privacy legislation.
- The EO follows an earlier document from the Administration—the [Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People](#). The resource was issued by the White House Office of Science and Technology Policy in October 2022. The blueprint focuses on five principles and associated practices to help guide the design, use and deployment of automated systems that are aligned with democratic values and protect civil rights, civil liberties and privacy. These principles include ensuring that the public is protected from unsafe systems, free from discrimination and inequities, protected from abusive data practices, informed of how an AI system is being used, and free to opt out of an automated system in favor of a human alternative.

EUROPEAN UNION

The European Parliament and EU Council reached a provisional agreement on an AI Act in December of 2023, and it is widely expected to pass in 2024. The sweeping regulation would have far-reaching global implications, establishing safeguards, fines, and risk levels with accompanying rules. The law would prohibit certain unacceptable uses, put stricter controls around some functions, and mandate transparency requirements and procedures for companies. If passed, the law would take effect in stages by 2026.

STATE AND LOCAL

- The National Institute of Standards and Technology (NIST) released an AI Risk Management Framework, developed to better manage AI-related risks to individuals, organizations, and society. The framework is intended to be voluntary and to help incorporate trust into the design, development, use, and evaluation of AI products, services, and systems. NIST launched an online [AI resource center](#) to promote the framework and related resources.
- In the absence of comprehensive federal legislation to regulate AI, some states have attempted to fill the void. They can turn to the federal recommendations for guidance, but for now, the country is experiencing a patchwork of regulation.
- According to the National Conference of State Legislatures (NCSL), at least 191 AI-related bills in 31 states were introduced in 2023, with 14 of the bills becoming law. The use of AI in elections and campaigns was one of the driving concerns, and Michigan, Minnesota, and Washington each enacted statutes prohibiting the publication of materially deceptive media that is intended to harm a candidate and deceive voters; in some cases the laws mandate a disclosure that the media has been manipulated.
- The trend toward state legislation is accelerating in 2024, and the Associated Press reports there are more than 400 AI-related bills being debated this year. A wider range of AI concerns are under consideration, led by nearly 200 bills targeting deepfakes, many of which specifically address deepfake pornography. Other bills represent first attempts to rein in several complex issues, such as placing some guardrails on chatbots or implementing some regulation to address bias in AI.
- Several cities are also pursuing their own policies. Seattle released a [Generative Artificial Intelligence Policy](#) that establishes rules the city will follow when utilizing AI programs. New York City passed an [Automated Employment Decision Tool law](#) back in 2021 that requires a “bias audit” if employers elect to use certain programs, and the city is also working on guidance for AI use within the city government.