

Project on American Justice Fireside Chat Summary

The Future of the Criminal Justice System: Emerging Technologies

Overview

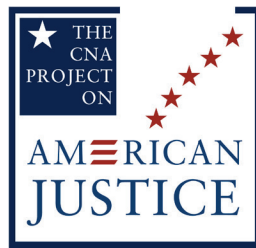
The CNA Center for Justice Research and Innovation's Project on American Justice (PAJ) for 2023 focuses on the future of the criminal justice system based on current research and trends. To support this effort, CNA works with several leading subject matter experts (SMEs) and senior advisors with research and practitioner experience in the justice field.

In March, PAJ launched its first of several "fireside chats" with these experts to discuss the effects of emerging technologies using a futures analysis approach to look at the future state. Specifically, PAJ uses an analysis framework that examines the social, technological, economic, environmental, and political factors (STEEP) that may influence the criminal justice system in the future. The framework aims to better identify opportunities to mitigate risks and promote success.

The PAJ team has identified several overarching STEEP factors based on research and current trends. Social factors include Generation Y and the aging population; urbanization through megacities, regions, and corridors; and expanding diversity. Technological factors include the growth in applied artificial intelligence, use of robotics, and adoption of automated vehicles. Economic factors include increases in the US national debt and expansion of wealth inequality. Environmental factors consist of climate action failure and bursts in eco-migration and climate refugees. Political factors include balkanization and a shift in global superpowers. Using the STEEP factors, our PAJ team created the following 2040 future scenario:¹

In 2040, the number of adults outnumbers the number of children for the first time in US history and urbanized megapolitan areas exist nationwide, including mega-areas Phoenix-Tucson, Columbus-Cincinnati, Tampa-Orlando, and Washington-Baltimore-Richmond. In these areas and throughout the country, artificial intelligence is commonplace. Automated vehicles transverse streets and robots are replacing the workforce. The US national debt has reached historic highs, limiting our government's ability to invest in new priorities. Economic instability and climate action failure have increased tensions among states and there is no longer any faith in local and federal governments. Communities have no trust in law enforcement. Globally, the US has lost its place as the top superpower and has been surpassed by China, and the number of foreign-born individuals in the US is at a historic high and has created a nationally diverse populace where no racial majority exists.

¹ The PAJ team is using this scenario as a baseline for the conversations and does not assume that this will be the final outcome in the future. Rather, we are posing that this is one of many possible futures in 2040.



Using this future-state scenario as a starting point, the PAJ team identified potential risks and opportunities regarding emerging technologies, as well as steps to take now to mitigate those risks and promote successes. A summary of the discussion continues below.

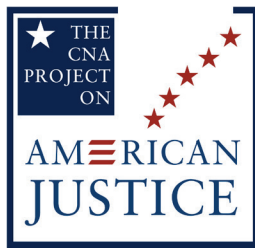
Risks and Opportunities

While discussing the 2040 future state scenario, SMEs identified several **risks** to the criminal justice system, which include:

- **Inability to fully leverage technology use because of community distrust:** Because communities do not trust law enforcement, for law enforcement, use of technology, and erosion of privacy, there may be further reductions in homicide clearance rates as people are less inclined to provide tips. The lack of trust can also hinder law enforcement's ability to implement emerging technology that could aid in investigations.
- **Overreliance on technology or AI:** As homeland security and emergency management become increasingly dependent on AI, we will become more vulnerable to cybersecurity issues, and hacking could be detrimental to law enforcement operations.
- **Social inequality and its consequences:** For example, some experts noted that the increased use of automation in the workforce may leave groups of people out, which can lead to increased distrust or criminal activity.
- **Falling behind the curve:** Unlike some other sectors, criminal justice system stakeholders have not been quick to adapt to changes in technology. As technology advancements quicken, some experts noted, there may be difficulty keeping pace with technology growth.

In addition, **opportunities** were identified in relation to emerging technologies in 2040.

- **Improved investigations:** As a result of widespread AI and automated vehicles, law enforcement will be more effective and efficient in investigations, particularly toward cybercrimes.
- **Enhanced capacity of first responders:** Similarly, unmanned aerial vehicles (UAVs) can help first responders in fighting fires, responding to incidents, and establishing perimeters.
- **More specialization for law enforcement:** Experts noted that law enforcement will be more specialized, rather than remaining generalist. For instance, police may use Zoom calls to address calls for service and identify specialized responses.
- **Standardization:** Although the nation is expected to be increasingly diverse, emerging technology may provide an opportunity for standardizing policing across the country, which could in turn help improve public perception.
- **Technology-based communication:** Information sharing between the criminal justice system and communities will be more technology-based, enhancing communication. For example, as populations become more diverse, justice system stakeholders can use language translation technologies to better synthesize and communicate information in real time. Some experts note that AI could even augment social skills and interactions.



Ideas to Take Action On

The SMEs recommended several steps to take now to address the concerns and opportunities identified throughout the discussion. These include:

- The criminal justice system should **more proactively engage with emerging technology**, such as AI, to use it more effectively, rather than criminalize it. This could be done through setting up advisory committees to discuss the use, value, and challenges of emerging technologies with community members, or leveraging fusion centers and regional technical centers to pilot technologies.
- Related, criminal justice system stakeholders need to **improve at researching and procuring appropriate technology**, being nimbler and more selective of technology, and being involved in advising technology creators and federal agencies of the needs and uses of such tools.
- As AI becomes more widely used, there **needs to be education and oversight through government regulation to ensure proper use**. This should include education campaigns geared toward communities on law enforcement and other criminal justice system partners' use of technologies, which can serve as a step toward increased trust.
- The increasing adoption of technology will require more people who know how to use it. Agencies **should begin thinking now about the skills and knowledge needed in new recruits and staff** for this evolving trend to a more technology-driven workforce.
- Organizational changes within the criminal justice system should begin with **leadership, public or political, that creates a sense of unity to help emerging technology be an opportunity rather than a challenge**.
- Government **resources should be implemented for groups who may be left behind in society because of advances in technology**, such as reimagining social work.

“Technology has a way of bringing fear to our communities through the belief it may be misused by agencies, and through simply not fully understanding the capabilities of it. If we can do more to educate our citizens through evidence-based studies, it may help to head off some of that fear and lead to a better understanding of just how the police will use it. It will be vital that law enforcement focuses on the community engagement piece related to emerging technologies, and continues to push for research studies to support its use.

- PAJ SME Cory Nelson

Overall, PAJ's first fireside chat on emerging technologies resulted in fruitful discussion on potential risks and opportunities, as well as considerations on steps to take now to reduce the abovementioned risks and promote successes. The next fireside chat will cover community relations.