

Compact for the American Future

Building for the Digital Future

In our 21st century economy, technology makes the world go 'round. Fortunately for the United States, we have some of the brightest and most capable minds discovering new and useful technologies every day. But our collective brilliance and innovations are often shortchanged by our systems and institutions that make technology less equitable, fair and accessible.

The COVID-19 pandemic has only further underscored the problems with our technologies and the systems that undergird them. Millions of Americans working and learning from home struggled to access reliable broadband Internet. Testing backlogs led to delays so long it rendered results basically useless. And consequentially, misinformation and disinformation have been allowed to fester online as social media companies haphazardly self-regulate. Look no further than a viral video featuring the dark-money-financed "America's Frontline Doctors" spouting mistruths about the pandemic – the video was viewed over 14 million times and was tweeted by the president himself before the major social media giants took it down.

Now, more than ever, we need system-level change to increase innovation, expand access to useful technologies, provide guardrails against the unintended consequences of big data, and build a better future for all. In the next installment of the **Compact for the American Future**, we'll discuss policies and strategies to *Build for the Digital Future*.

Pandemic Preparedness and Response

As Ed Young of *The Atlantic* [wrote](#), the COVID-19 pandemic has brought the most powerful nation on the planet "to its knees." Why? For a number of reasons, including a perhaps less-examined issue: despite our world-class technologies, they were not built for an effective crisis response.

From testing failures to shortages in personal protective equipment to the spread of disinformation that has hurt our government's response and reduced the public's adherence to safety measures, technology has failed the U.S. in effectively combatting COVID-19. How can we improve our technological systems to be better prepared for the next crisis?

- Testing is the bedrock of any viral pandemic response. We must ensure a **national testing strategy** is put into place and executed, and that tests are accurate, rapid, efficient, and ubiquitous.
- The current administration has allocated significant resources to the discovery and production of COVID-19 vaccine. That is certainly a laudable effort. But vaccine production should be independent of political considerations, though it should circumvent otherwise cumbersome bureaucratic protocols that could slow its development down. **Vaccines must be proven safe and effective through clinical trials and should be made one of the key priorities of a pandemic response.**

- Implementing contact tracing programs during COVID-19 has been sporadic and ineffective. We need to build up technologies to make **contact tracing** efficient, including streamlining personnel hiring and training, producing user-friendly apps, capturing data that is useful and actionable, automating collection, and allowing cities and states to communicate to each other so we can vastly improve our national digital contact tracing systems. Efforts like those in Taiwan are worth examining further. Any digital program must take into account and balance personal privacy concerns.
- The United States should lean into its ability to use **big data** to solve complex problems. Enhanced investments in big data would allow for national population-level data that can be used quickly for analysis and subsequent policy decisions to help curb disease transmission, track movement patterns, monitor health of communities and put prevention tactics into place.
- Reporting accurate data from the hospital, local and state levels to the federal level is crucial to a national pandemic response. It is why health officials are up in arms over the current administration's coronavirus database switch unveiled in July that required hospitals to send daily reports to a central hub in Washington, bypassing the CDC. Hospital administrators have had to scramble to meet daily reporting requirements, all while concerns mount that the data could be concealed from the public and used for political purposes. We must **protect data integrity** because it is so central to an effective response. Reporting requirements, metrics, and the very system used should be run out of the Centers for Disease Control and Prevention and determined before or at the very least at the outset of an outbreak.
- Telemedicine is important in non-pandemic environments – it makes healthcare more accessible and is an affordable option as well. **Telemedicine should be made readily available** and at low or no cost for patients during healthcare crises like the one we are currently facing.
- It may sound like an interesting high school course, but **robotics** can be lifesaving. Using robotics technology allows for care to be administered in hazardous environments and repetitive tasks to be taken on with precision and without human error.
- We should tap into our great academic infrastructure and collaborate with the world to employ various **emerging technologies** that can help fend off a spreading pandemic. Such technologies include artificial intelligence to help detect the virus, blockchain to improve tracing, and cloud computing to improve disease modeling

- Effective communication during a public health crisis is key. From physicians to national public health officials to elected leaders, Americans need to trust the information they are receiving to protect themselves and others. We must **improve our public communication** – including the message, messengers, and mode – to be more effective in getting timely, succinct, and accurate information to the public. This means ensuring that there is a technological infrastructure in place before a crisis to be able to put communication into swift action. The mixed messages from top officials on the risk of COVID-19, if and how the public should use masks, as well as unnecessarily rosy predictions in the early days of the pandemic hobbled our collective response. Beyond the public, first responders and those working on the ground need to have access to the most up-to-date information to effectuate their activities.
- Finally, we must be proactive about stopping the origin and spread of **misinformation and disinformation** (both foreign and domestic) that can greatly reduce trust in the government and public health officials and lead to behaviors counter to combatting a pandemic. Clear distribution of accurate information is our first line of defense, and mis/disinformation can squander it. One doesn't need to look further than current conspiracy theories on COVID-19 (Bill Gates, 5G, microchips, George Soros etc.) and a certain sleek video called "Plandemic" to understand how deep and wide these issues run in America. More on this crucial policy in the following section.

Making Technology More Fair and Accessible

A recent Pew survey found that 42% of Americans named technology as the source of the biggest improvement to life in America over the past 50 years. The next closest response was medicine and health at 14%. Americans have been particularly receptive about the benefits of technology and optimistic about how technology can improve the country even more in the future. With such strong support in public opinion, there is a high floor to build from.

What we have missed is connecting this support to people's day-to-day lives and guarding against the pitfalls inherent new technology before policy has a chance to catch up. So, beyond preparing for the next pandemic, the U.S. must explore policies to catch up to the technologies already out there and be ahead of more to come. Here's what that could look like:

- The next president should establish a **cabinet position on technology** and its influence on Americans' lives. From electricity to the phones in our pockets to clean water, technology touches everything. A cabinet position is a critical first step to reorganize and potentially reset policies and programs that govern technology from our federal agencies. State governments that have not done so should consider an office of technology as well. Technology will only keep advancing, and our highest levels of government should have the expertise they need to make sure technology is working as efficiently as possible for their systems and for every American. This of course is not meant to replace the various legislative actions that the Congress and state legislatures can and should take to modernize technology policy in America.

- The FCC is one agency that should be removed from politics – we've seen in the current administration how political considerations have gotten in the way of sound policy. The next FCC commissioner should **restore net neutrality rules** and pave the way for state and localities to own build **municipal broadband** so every American can be connected. The federal government must commit significant investments to this effort with particular focus on low-income, minority, and rural communities that are disproportionately impacted by the lack of broadband Internet. And the next Congress must establish what Internet regulatory authority the FCC does – or does not have – in concert with the cabinet level team and staff dedicated to technology in America.
- Federal regulators should be **empowered to take on tech giants**. Every company in America must play by the rules, but if the rules aren't fair, we're already a step behind. Congress must be empowered to regulate the big tech companies to prevent anti-trust issues and break up monopolies, promote competition, and make sure private data stays private.
- One place to start: Congress can implement a **set of standards** companies have to meet – much like policies that govern other industries. Those standards can encompass everything from privacy to data integrity to combatting disinformation and misinformation, and more. Guidelines and recommendations can be issued by the technology secretary to improve community standards as well as diversity, equity and inclusion.
- The cabinet secretary on technology can **dispense regulators committed to using existing antitrust laws** to break up mergers that reduce competition among big tech companies.
- Most Americans believe that they own their personal information and data online. A Future Majority [analysis](#) found that the business model for the gathering, analyzing and selling of Americans' private data has led to revenues that will reach nearly \$200 billion by 2022. If Americans own their data, then Americans should be party to the revenues. A **fund for broad public purposes** could be established with those revenues to finance key programs to rebuild America, including infrastructure investments, healthcare expansion, and reducing the national deficit.
- But first, Americans deserve to have their data and their privacy protected. We must **affirm personal data as a property right** and Congress and states must establish a **consumer data bill of rights** to protect Americans from fraud, misuse and abuse of their private information. Moreover, Americans must know how their data is being collected (with the ability to opt out of such collection), to whom their data is being shared, and what data and information companies have of individuals. Informed consent must be the priority and users must have the option to delete data after using it.
- The Congress should **reexamine some portions of the Patriot Act of 2001** that are a potential affront to basic civil liberties and privacy rights.
- The U.S. has been losing market share in high-tech sectors, including STEM industries, pharmaceuticals, data processing, semiconductors, electric power, and more. These technologies are essential to long-term economic wellbeing, and we should **invest in R&D to support the development and production of critical technologies**.

- But it doesn't end with high-tech and essential technologies. The United States has lost its edge in innovation that could make entire systems more efficient and equitable – from healthcare to education to food production, and much more. We've innovated greatly in Silicon Valley, but our productivity growth as a nation has slowed. It's time we **take learnings and innovations from our technological sectors and apply them writ-large to the U.S. economy**. That starts with major investments in R&D in areas where market failures are most inhibiting (think healthcare and clean energy) to grow the economy and solve our greatest challenges.
- The U.S. should also fund basic research of theoretical work that might have practical and commercial applications in the future. This means going beyond commercial R&D to **basic R&D** that can be used by the government, public and private institutions, academia and more to eventually innovate and produce useful products and processes.
- America should invest in and scale **smart cities**. [Louisville, Kentucky](#) is a great example. The city has taken on the challenge over the next 20 years to “enhance the abilities of public service employees and citizens by empowering them to solve public problems through the use of existing and emerging technologies.” The program pledges to bring fiber optic cable to every home, surge autonomous vehicles, sensors to collect information to make communities healthier and safer, and more. Smart cities are bolstered by public private partnerships and work best when community members have a seat at the table. Using technology to inform city design and community building will improve mobility, health of residents, make cities more sustainable, increase public safety, grow the economy, and increase civic engagement.
- States should invest and incentivize every city to adopt a **311 framework and system**. Using the latest technologies, including big data and user-friendly apps, cities and their citizens alike would benefit greatly from these non-emergency resource and service hubs.
- The federal government as well as state and municipal governments should prioritize **open data platforms** for citizens, businesses and officials to access government data. This can include campaign finance data, patents and IP tracking, employment statistics, and much more, so researchers can do their jobs better and citizens can be more engaged.
- Lawmakers should consider the notion of developing a federal (or perhaps state) **citizen portal** that leverages technology to make critical services and functions easy for all Americans. The portal can be modeled on successful examples in other countries, including South Korea and Canada, and include everything from voting information to taxes to passport documentation and other critical documents – a one-stop-shop for citizens to engage with their government and access the things they need to start a business, get a driver's license, receive unemployment benefits, apply for any number of permits and more.

- We should **use technology to make government better by improving constituent communications**. The most important aspect to any elected official office is its constituent services. But too many offices are using 20-year-old technologies that have no place in a modern, efficient government office. Investments should be made to equip every single office with up-to-date CRM technology, data collection instruments, and communication tools so critical requests get answered in a timely fashion. Everyone will be better for it.
- We must make a concerted effort to increase **STEM education** in our education curricula – from school age to vocational and technical training to 4-year college and beyond, a workforce knowledgeable in STEM is a workforce that will thrive in the 21st century. As we build the pipeline of engineers, scientists and other technology professionals, we must ensure that women, women of color, and other underrepresented communities are given the same fair shot as their peers.
- As part of our plan for *Building America's Infrastructure*, we discussed **modernizing our nation's schools**. A core component of this effort is providing schools with up-to-date technology, equipment and software to bring learning and teaching in line with or exceeding today's standards.
- Our digital world has begun to have unintended consequences on our health, including the health and development of our children. The next president should form a **task force to fully understand the health and social impacts** that technology and social media have on America's children to ultimately issue recommendations about health-centered design, screen-time guidelines, and privacy concerns.
- The federal government can incentivize or set benchmarks that U.S.-based tech companies must meet to become **100% carbon neutral** in their supply chain, products, and corporate emissions (taking notes from Apple Inc., for example).
- Silicon Valley alone cannot compete with China, who is emerging as the global leader in artificial intelligence. We must make significant and immediate investments in **artificial intelligence research and development** to be the global leader in what will become the world's most important technology. We must boost coordination between the government and private industries so that the national interest is served.
- Finally, it is long overdue that Congress takes very seriously with **legislative action the misinformation and disinformation** that has curtailed our pandemic response, contributed to unnecessary divisions in our society, and undermined our democratic processes and institutions. Social media networks as they currently stand have virtually no gatekeepers – when you add self-selection into fringe communities plus the multiplier effect, it leads to the rapid transmission of dangerous misinformation and disinformation. It is urgent that Congress establishes guardrails to prevent the origination and spread of false information online (both foreign and domestic) and require social media companies to implement robust labeling and algorithmic removal measures of such content. Regulations must extend to disclaimers on political advertising, with updated standards to meet the times and the ever-growing nefarious tactics used by bad actors. Lastly, there should be a communications campaign to education the public on how to distinguish reliable information from fake sources online.



Let's Build: Freedom. Fairness. Future

Conclusion

The most recent technological revolution has brought immeasurable positive changes to the world and to the United States – from computing technology to the Internet to artificial intelligence and astounding advances in medicine to social networking – we are a much more connected, informed, and productive society. But the benefits have not come without downsides – including privacy concerns, human rights issues, misinformation and disinformation, and social isolation.

The COVID-19 crisis has further exposed shortcomings, not only in our technologies, but in the policies that make them accessible – or not. With good public policy that helps leverage technology, not just during our most trying times, but in thriving times as well, we can help give every American a fair shot at the future they want to build for themselves and their families.

That is why *Building for the Digital Future* is a key pillar of the **Compact for the American Future** – and along with [Healthcare for the 21st Century](#), [An Economy that Works for all Americans](#), and [Building America's Infrastructure](#), we can emerge from this crisis to build a brighter future for all.

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