Why It's So Hard to Convince the Public on Transportation Projects

A highway interchange in Houston ART WAGER VIA GETTY IMAGES

By Daniel C. Vock | JUNE 17, 2022

Drivers and engineers often hold very different attitudes on transportation that directly contradict those of transportation planners, new research shows.

TRANSPORTATION INFRASTRUCTURE

Engineers and the general public often hold attitudes on transportation topics that directly contradict core tenets of the transportation planning profession, and those differences are especially stark when it comes to reducing the use of automobiles, a new study found.

The contrasts start with the purpose of transportation policy itself. The study, conducted by several planning professors and published in the *Journal of Planning Education and Research*, found 83% of transportation planning students supported the goal of reducing driving, compared to only 52% of engineering students. The public was even more skeptical. Just 31% of respondents agreed with that goal.

Another major division concerned the idea of "induced demand." The planning profession has largely coalesced against the approach of trying to widen highways and other roads in an effort to reduce congestion on them. Bigger roads don't solve congestion, because more people drive when the roadways have more capacity.

While the idea has been widely discussed in the planning world since the 1990s, it has been more controversial outside of the profession. Elon Musk, for example, has called it "one of the most irrational theories I've ever heard." (Of course, Musk

Those divisions played out in the research, both in how much respondents believed in the concept of induced demand and how it should affect proposals to widen roads.

In the survey, 93% of planning students said roads should *not* be widened to meet demand. Just 58% of engineering students said the same thing. And the public largely rejected the planners' approach–just 24% of respondents agreed that roads should not be widened.

Planning students were also much more supportive than their counterparts of raising the federal gas tax, converting downtown parking into other uses, and imposing congestion pricing to discourage auto use.

All three groups overwhelmingly backed the idea of expanding transit, but, even then, the planning students were the most supportive of the idea.

Differing Perspectives Abound

Kelcie Ralph, a Rutgers university planning professor and one of the authors of the study, said one of the most striking findings was the difference in how people explained why American society had become so oriented around automobiles.

In planning schools, students are taught that the move toward automobiles was the result of government policies and business decisions that encouraged people to use motor vehicles rather than other modes of transportation, including the development of interstate highways, the prevalence of free parking or the availability of cheap gasoline.

"For the public, that's just not a story they tell, and engineers are between those extremes," she said in an interview with *Route Fifty*.

The survey showed that 82% of planning students agreed with the idea that driving was promoted as a policy, compared with 55% of engineering students and 41% of public respondents.

The underlying beliefs about how automobiles became so dominant in American life also affect people's preferences on transportation policy, Ralph said.

"If you think it was totally natural, that everyone loves driving, then you'd be more skeptical about changing the status quo," she explained.

policy. Eighty-four percent of planning students thought systems change was possible, compared with 78% of engineering students and 68% of the public.

The general differences in attitude played out with more specific examples, too. For instance, three quarters of planning students agreed with the idea that price could change people's behavior, compared with 70% of engineering students and 52% of the public.

Ralph told *Route Fifty* that the public's skepticism about the ability to change meant that planners in government should make far more use of pilot programs.

"Do real quick, light-touch, reversible policies and infrastructure, and, if it doesn't work, get rid of it," she said. "Our current planning process is so slow, and people can … veto it at every point. If we let that process play out, it's true, we won't actually change much. So we have to act quickly."

Ralph also emphasized that the purpose of the survey was not to blame engineers for their disagreements with planners, although the authors did say transportation engineers could "benefit from greater exposure to transportation planning concepts" like induced demand.

The other authors of the study are planning professors Nicholas Klein of Cornell University and Anne Brown of the University of Oregon, along with Calvin Thigpen, the director of policy research for Lime, the micromobility company.

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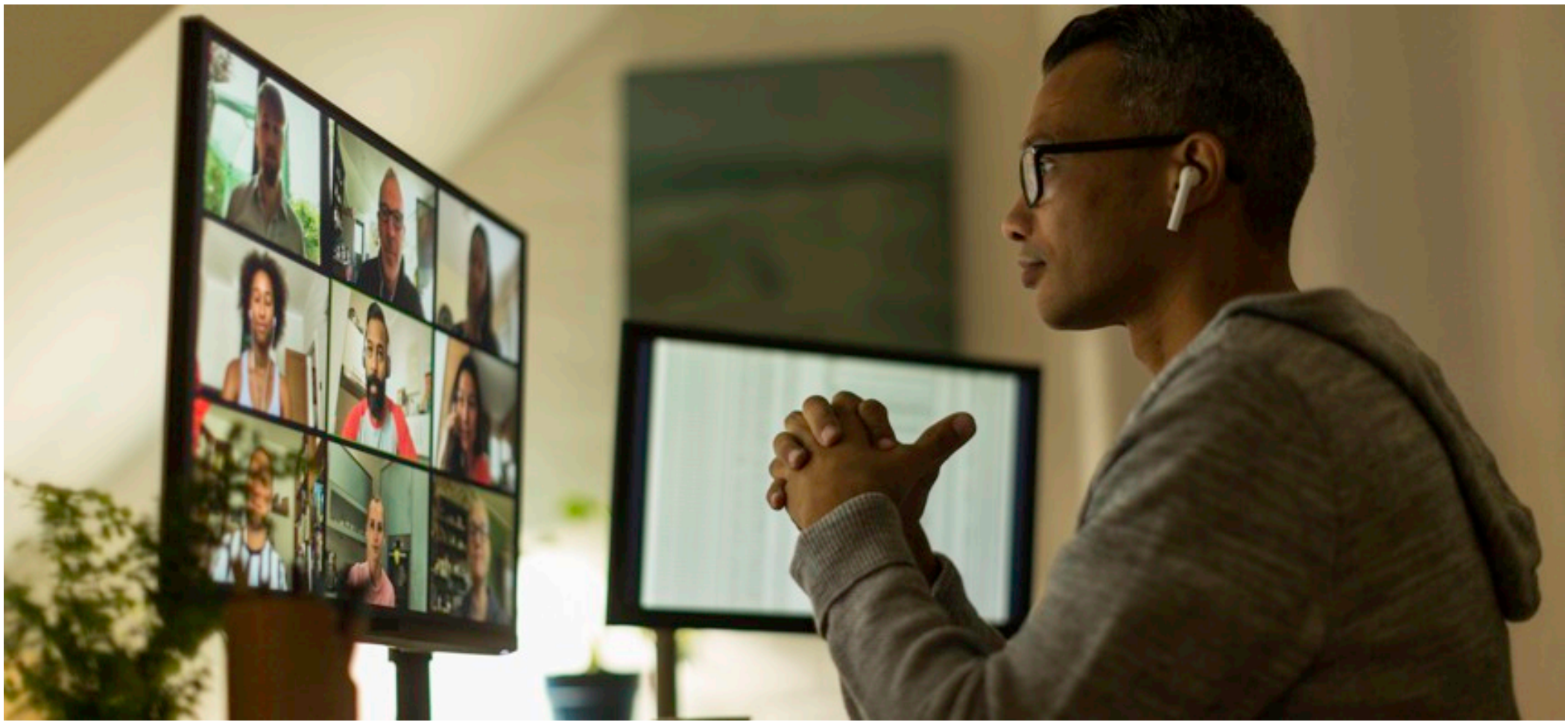

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By Stephanie Kanowitz | JUNE 17, 2022

With two-factor authentication and a cloud native platform that secures users, apps and devices, the New Jersey Judiciary's 10,000 employees can securely anywhere.

A foundation of zero-trust security controls helped the New Jersey Judiciary (NJJ) enable a fully remote workforce of 10,000 employees and increased the number of virtual courtrooms from 40 to 400 in six days at the onset of the pandemic.

One of the major changes was the use of two-factor authentication, which NJJ had begun to require for anyone trying to access the judiciary network remotely. When everyone went remote, it was just a matter of scaling up.

In summer 2020, as workers began returning to on-premises work, NJJ Chief Information Officer Jack McCarthy made two-factor authentication a requirement for everyone.

"No matter where you are, whatever device you're using, we wanted you to come in by two-factor," McCarthy said.

That's a significant change from the way things used to be: Anyone could enter a conference room and plug a laptop into a port in the wall and get network access. Now, his team knows exactly what devices and users are on the network – and what they're doing there.

"It's not that we're giving up and saying we can't protect everything, but when the bad guys only have to be right once and you have to protect against a million things, eventually you need a way to do things," McCarthy said. "What zero trust offers us is the ability to look at our network and say, 'OK, everything that's on here, we're not going to trust implicitly,' and we're going to say, 'If you want to come onto our network, you have to meet these factors, and we have to be able to authenticate who you are.'"

The next step was ensuring that workers can access certain applications on the network only by going through Zscaler solutions. NJJ had begun working with the cloud security company about a year before the pandemic started. "We created a bubble around applications, which protects them," McCarthy said, adding that it's an ongoing process as NJJ adds access points and applications.

McCarthy said one of his favorite solutions is Zscaler Digital Experience, which lets his team monitor network traffic to see where the most data packets are lost, indicating a problem. With so many remote workers, that was a huge help to help-desk staff, who could quickly identify the cause of any system slowdowns.

“Our biggest challenge was getting everyone to understand [work from home] was going to work, it was going to be OK,” McCarthy said. “You can imagine the complexities of trying to run court on a Zoom meeting when it first came out.”

A big win came in early spring 2020, when NJJ ran a state supreme court trial virtually. That success demonstrated to the rest of the judiciary what was possible. “We did it and you guys can do it as well,’” he said.

The courts are still taking advantage of the lessons learned from the pandemic experience. Last winter, when a snowstorm hit the area, the court switched to virtual with just 45 minutes’ notice. “That didn’t get enough press because nothing went wrong,” McCarthy said. “They just did it, it worked. But it was something I took as a badge of honor for my staff.”

Zero-trust controls don’t replace other defense measures such as firewalls, McCarthy said, but it is “a great tool in our toolkit,” particularly for stopping the spread should something malicious gain access.

“If something was to get into one of our PCs or – God forbid – get to a server, with zero trust, in theory, that ransomware can’t see anything else, so it can’t jump to another PC because it doesn’t know anything else exists,” he said. “Even if it’s a worm and it’s spreading … with the correct architecture of zero trust, it shouldn’t be able to jump across and get access unless you’ve explicitly said, ‘You can go from A to B using these credentials, using this authorization.’”

For other government entities looking to implement zero trust, he advises just starting somewhere.

“It allows you to do two things: You learn about the technology, you try something even if it’s one project with five users,” McCarthy said. “It also allows you to develop that relationship with the vendor, and what we saw in March 2020 is everybody that we had a relationship with came to us and said, ‘How can we help you?’”