

Senator Gary Peters
**Subcommittee on Surface Transportation, Maritime,
Freight, and Ports**
**U.S. Committee on Commerce, Science, and
Transportation**

**Field Subcommittee Hearing:
Made in America: The Future of Automotive
Innovation and Semiconductor Chips**

Detroit, Michigan
Monday, March 28, 2022

The Committee will come to order.

I want to begin by explaining why we are here in Detroit. Last week, the Senate Commerce Committee had a hearing in Washington, D.C. about semiconductors and their role in manufacturing and the economy.

Today we're bringing the committee to Michigan – because here, this is not some abstract policy issue – this is where auto manufacturing, the chip shortage, and related challenges are taking place. And where I think we can continue leading into the future.

Our communities and families are steeped in these issues, and it's important to have this conversation among the people and places that are experiencing them.

Michigan established the American automotive industry – transformed mobility and society – built the middle class – and will continue leading the way for years to come.

When Henry Ford introduced the first Model T of assembly line fame back in 1908, it did not contain a single semiconductor chip.

Indeed, for several more decades, that continued to be the case.

By the 70s – some cars contained a handful of chips.

The role of chips in automobiles has ballooned since then, with modern cars using well over 1,000 semiconductor chips or more - spanning various costs, functions, and technologies.

Given these developments, it's no surprise that a global chip shortage following the COVID-19 pandemic had a devastating impact on the auto industry.

This chip shortage resulted in temporary layoffs, causing hardship for workers at an already challenging time.

It also cut into one of the main drivers of the national economy: auto production.

This is especially concerning because looking toward the future – cars will become even more dependent on chips.

As President Biden has said in visiting both Ford and GM right here in Michigan, “the future of the auto industry is electric.”

I would make a small addition to that statement: the future of the auto industry is electric as well as connected and autonomous.

In terms of electrification, novel semiconductor technologies promise to reduce charging times – extend range – and enhance performance for Electric Vehicles, among other benefits.

Not only will Electric Vehicles help save our planet by combatting climate change – they will also reduce our dependence on foreign energy sources and protect Americans from unpredictable gas prices.

When it comes to connected and autonomous vehicles – semiconductors chips will power the Artificial Intelligence and other capabilities necessary to make self-driving cars possible.

This aspiration can't become reality soon enough – because lives are quite literally on the line.

Tragically, recent data shows that during the first nine months of 2021 – an estimated 31,720 people died in car crashes. This represents a jump of 12 percent compared to 2020.

This is completely unacceptable.

Achieving a future with zero fatalities on our roads will be challenging and require many approaches – there is no silver bullet.

But autonomous vehicles hold great promise to play a major role in reducing injuries in deaths by eliminating human error and impaired driving, which are commonly involved in crashes.

These trends – electrification and autonomy – mean that in the coming years, chips will play an even greater role in the most essential functions of automobiles: driving and powering the vehicle.

So how do we prepare for this future, and how do we prevent a repeat of problems like the chip shortage? We need to shore up our supply chains by making the things we need, right here in America.

The pandemic has delivered a painful message. Our supply chains are efficient, but they are not resilient. So when something goes wrong, problems pile up quickly, depriving Americans of the things they rely on – which also contributes to inflation.

And much of this is due to the fact that we are too reliant on overseas production.

Through my role leading the Committee on Homeland Security and Governmental Affairs, in 2019, I released a report on prescription drugs. Among other issues, we found that America was over reliant on foreign manufacturers for prescription drug materials – and that we were poorly prepared in the event of a pandemic.

Little did we know that a pandemic would be just around the corner a few months later.

And as we all now know, the nation experienced challenges with PPE and other supply chain issues that sadly hampered our COVID response. Fortunately, companies such as GM, Ford and Stellantis – as well as auto suppliers – stepped up during the pandemic by repurposing their facilities to produce essential items like ventilators and masks.

But in the long term, we need a national strategy to protect our country.

Whether it has to do with chips for the auto industry or other essential goods and materials, we need to start securing our critical supply chains.

This is something we're already doing when it comes to national defense.

As a former Naval officer in the U.S. Navy Reserve – and now a member of the Senate Armed Services Committee – I have fought to ensure that critical defense assets are made in the United States.

For example, Marinette Marine, which is right along the Michigan-Wisconsin border, is building the Navy's Littoral Combat Ships – with about half the workers coming from Michigan, employing hundreds of Michiganders.

We would never rely on the Chinese government to build our warships. We build them here in America with American workers to ensure that in times of need, our military is prepared.

We must apply that same approach here with semiconductor chips – especially given how they are

central to everything from automobiles to lifesaving medical devices.

That's why it is imperative for Congress to fund the CHIPS Act.

In particular, we need to pass legislation I led with Senator Stabenow that would provide \$2 billion to incentivize the domestic manufacture of the so-called mature chips that are in short supply and that manufacturers of all kinds rely on – especially in the auto industry.

This \$2 billion is in addition to \$50 billion to ensure the United States becomes a leader in the manufacture of advanced chips and other semiconductor technologies that will drive innovation.

Here's the bottom line: we must remain laser-focused on making our supply chains resilient by manufacturing critical goods in America.

That includes semiconductor chips, but also other supplies that are essential to millions of American jobs, like in the auto industry.

I look forward to hearing today's testimony about how we can build up American auto manufacturing and our

economy by leveraging American-made chips and critical supply chains.

With that, I will now introduce our witnesses to provide their opening statements.