

**FOR THE EXCLUSIVE USE OF  
STEVE@CREPROPERTYADVISORS.COM**

From the Phoenix Business Journal:

<https://www.bizjournals.com/phoenix/news/2021/12/30/deal-of-the-decade-2021.html>

# **Deal of the Decade: Behind the scenes, business and political leaders worked tirelessly to bring TSMC factory to Phoenix**

Dec 30, 2021, 5:00pm MST

"This is a unique deal. This deal had more complexity, more moving parts, more involvement from people inside and both outside the state than anything else I've been involved in."

That is how Arizona Gov. Doug Ducey describes the effort that it took for the state, city of Phoenix, federal government and other groups



involved to secure Taiwan Semiconductor Manufacturing Co.'s new chip fabrication plant in north Phoenix. The first phase, which was announced in late 2020 to be worth \$12 billion, is the largest foreign direct investment in the state's history. Sources with knowledge of the deal have confirmed that the final investment in the facility, now under construction, will be even larger, worth about \$35 billion.

JIM POULIN | PHOENIX BUSINESS JOURNAL

From left, Sandra Watson, president and CEO of Arizona Commerce Authority, Gov. Doug Ducey, Phoenix Mayor Kate Gallego, Chris Mackay, community and economic development director for the city of Phoenix, and Chris Camacho, president and CEO of the Greater Phoenix Economic Council on the TSMC factory site.

According to city of Phoenix analysis, the first phase of TSMC is estimated to have an economic impact of \$38.2 billion over 20 years. According to an analysis by the Greater Phoenix Economic Council, the plant is expected to create a total of 4,296 jobs over 10 years, including jobs created directly by TSMC and indirect jobs.

Securing the plant, which the Phoenix Business Journal is recognizing as a business deal that not only shaped the last two years for Arizona, but will continue to do so into the next decade, is one that has grabbed the attention of local economic development leaders to federal government officials.

The silicon chip manufacturing plant has been named among the highest national security projects by the federal government, Christine Mackay, economic development director for the city of Phoenix, said.

"The federal government truly recognizes that to be competitive in manufacturing, from a security standpoint, having chips manufactured within our borders is of critical importance," Mackay said.

Federal government involvement has extended from the departments of Commerce and State, all the way to the White House during both the Trump and Biden administrations, local officials who were involved in the deal said.

"Trying to address the need for semiconductors in this community, it's one of the few issues that seems to really cross political lines," Phoenix Mayor Kate Gallego said. "I think we all agree that we want this domestic manufacturing. Those issues are very meaningful in today's political world. And when you can really bring people together with a deal like this, it's important."

**Timeline 2013-2021:** Track the progress of how the Taiwan Semiconductor deal came together

Over the past three or four decades, semiconductor manufacturing in the United States has decreased to only about 12% of the world's production, down from about 37% in 1990. At the same time, global demand for semiconductors, which are used in electronic devices ranging from cell phones to cars, has only grown, putting companies like TSMC in a global spotlight.

"Our appetite for connected devices has gone up exponentially," Chris Camacho, president and CEO of the Greater Phoenix Economic Council, said. More than 60% of the world's semiconductors are manufactured in Taiwan.

## **Years in the making**

Bringing the mammoth investment to Arizona was years in the making, and started with conversations as far back as 2013, Sandra Watson, president and CEO of the Arizona Commerce Authority said. Watson and then-Gov. Jan Brewer traveled to Taiwan that year, and Watson said she "made it a priority to get in front of TSMC" and pitch Arizona as a good location for a future development.

At that time, there was no plan for a project in the works, but Watson said she "knew Arizona would be perfect" for the company when the time was right.

TSMC was already on the radar when Gov. Ducey was elected in 2014, he said.

"I know the importance of semiconductors to the international economy, and when you can have those kind of headquarter offices in your home state it can be a game changer," Ducey said. "So, it was something I was eager to be as involved in as possible."

Representatives from TSMC and Taiwan visited Arizona in 2017, Watson and Ducey said, and the two both met with executives from the company to further grow the relationship.

Taiwan was also Gallego's first international trip as mayor. Gallego, who previously worked in economic development for SRP, said her background and knowledge of

how utilities work in Phoenix, as well as the involvement of the elected officials, made a difference in the company's perceptions of the state capital.

"I think my background, having worked at SRP and understanding the power and water, was very helpful and differentiated me from some of the other elected officials," she said. "I also understand we competed with other communities in the United States where the elected officials did not travel. And I think that shows Phoenix's commitment. This is a big deal for us, and we will make it a priority."

Camacho said the deal took the alignment of not only government and economic development organizations, but educational institutions and utility providers as well.

"If you have a weakness, companies will find out about it," he said. "In this case we were fortunate to have everything come together."

Camacho also traveled to Taiwan with a delegation of people from Arizona, including Watson, Mackay and leadership from APS and Arizona State University. In one meeting, Camacho said there were 45 different executives in the room, discussing issues ranging from timing, water, power, education and all sorts of other concerns.

"It was one of the most extensive due diligence processes I've ever seen," he said.

And there is still work to be done, especially on the federal level. Arizona leaders all pointed to the Chips for America Act, which was first introduced in the U.S. Congress in June 2020, as a critical piece of the puzzle that still has not fallen into place. Sen. Kyrsten Sinema (D-Arizona) is among the bipartisan sponsors of the act, and Sen. Mark Kelly (D-Arizona) has expressed the urge to get the act passed. The act proposed about \$50 billion to grow the chip production industry in the United States. However, it has not yet passed both houses of Congress.

Ducey said his message for federal lawmakers is clear.

"Pass the Chips Act," he said.

## **Building supply chain**

In December 2020, TSMC bought 1,128 acres of land in north Phoenix at an Arizona State Land Department auction and has since begun construction on the new facility. For the next two years the buildings will be under construction and begin testing. The



fab is expected to begin production in 2024. Before production can happen, it is critical for all involved that the supply chain needed to produce the chips is already in place.

“Over the next two years we will see a number of projects under construction in the Sonoran Oasis Science and Technology Park,” Mackay said. Companies that are in talks with the city and State Land Department include chemical manufacturing, components manufacturing, engineering, gas companies, equipment manufacturers and a variety of others.

“This will be a significant employment corridor that we all didn’t think would exist for another 20 to 25 years,” Mackay said. “They are drawing so much interest from other potential users out in that area, and it really opened up that corridor.”

Camacho said the sheer scale of what TSMC was planning to build limited their location options in the city of Phoenix, but said the State Land Department, which controls most of the land in that area of north Phoenix, and the city, can now be intentional and careful in how it plans the future of that area.

“It pulls forward that area to be developed more quickly,” he said. “Instead of a sea of residential homes, it will be a sea of industry.”

Mack Real Estate Group bought the land that was designated by the city as a “supplier site” for TSMC in early 2021, and has since sold a portion of it to Sunlit Chemical, a supplier to TSMC. Mack plans to begin construction on an industrial park on the remainder of the land next year, which will bring about 4 million square feet of space for large and smaller users.

“There have already been so many other deals as a result of the TSMC deal,” Gallego said. “We've seen significant investments in housing in the area. When I meet with hotel owners and real estate and retail developers, they are really looking at how they can serve TSMC and its suppliers. We've even seen an investment in energy storage in the area. So the whole corridor is transforming.”

And now, more evidence is surfacing that TSMC's economic impact will ripple across the whole Valley by the time the plant is fully operational. Earlier this month, brokers involved with the deal confirmed that another supplier that will service the factory — Chang Chun Group, a Taiwan-based petrochemical manufacturer — is getting ready

to set up shop south of Phoenix in Pinal County. Separately, another TSMC supplier, LCY Chemical, has already closed on a Pinal County location in Casa Grande.

Mackay said of suppliers that are interested in Phoenix and working alongside TSMC, about 60% are foreign based and 40% are based in the United States.

"I've never seen that level of foreign interest in Phoenix before," she said. "So much of it came from people taking notice of TSMC."

**Corina Vanek**

Reporter

*Phoenix Business Journal*

