

Cathleen Allison Special to Las Vegas Review-Journal

Robots work in many areas of the Tesla Gigafactory, which makes enough vehicle assemblies to build 1,000 cars a day.

Outsize effects from big facility

Tesla site having major impact on Reno area

By Bill Dentzer Review-Journal Capital Bureau

SPARKS

On an overcast, snow-dusted December day, Tesla's sprawling battery plant in rural Storey County sits like a squared-off iceberg dropped into the rugged, scrubby mountains of Nevada's Virginia range 20 miles east of Reno's city center, tech wizardry and outsized metrics bursting from every seam.

The white three-story building covers 44 acres and is among the largest in the world, precisely oriented for GPS friendliness that simplifies the guidance of the driverless forklifts that ply its corridors, ferrying goods from one production line to the next. Massive as it is, eventually the campus will more than triple in size. When fully built, it's expected to be powered entirely by renewable energy from an array of 200,000 rooftop solar panels,

another world's-largest example. Inside machines, robots and



The Tesla Gigafactory, east of Reno, employs more than 7,000 people. The facility currently has a 1.9 million-square-foot footprint and boasts 5.5 million square feet of total space.

technicians combine to produce, assemble and ship the batteries that fuel Tesla cars and store power for homes and businesses. The plant produces enough vehicle assemblies to build 1,000 cars a day — about 42 per hour,

around the clock, every day. "We're not making 1,000 cars a

year here," Chris Lister, the Tesla vice president in charge of the facility, explained on the interior leg of a tour. "This is like, how many can you make as fast as you possibly can — just principles of speed and agility, and putting in the right level of automation."

Dubbed Gigafactory No. 1 – the first of potentially many Tesla

See **GIGAFACTORY** 4D

UNLV grad persuades Plaza to proffer game he devised

T took me only five hands to double my money when I sat down to play Casino Dominoes at the Plaza last week.

Trust me, it was beginner's

The new game, which faces final Nevada Gaming Commission approval Thursday after a successful 45-day trial that wrapped up in November, is being played as a table game



RICHARD N. **VELOTTA** INSIDE GAMING

exclusively at the Plaza daily between 6 p.m., and 2 a.m. With any beginner's luck for

the game's inventor, 42-yearold Harold Moret, a UNLV graduate, it'll be available in other casinos in Nevada and across the country before

For Moret, who has been passionate about playing dominoes ever since he learned games from his grandfather 30 years ago, getting a version of dominoes on the casino floor in his first try was his version of beginner's luck.

It was a historic first as well: Casino Dominoes is the first game successfully brought to the casino floor by an African-American game inventor.

But it's more about hard work than luck.

"You can't just get excited and do something for a couple of weeks and think that it's done," Moret said. "You really have to stick to it."

Sticking to it means traveling and meeting with casino bosses to sell them on dedicating floor space to a game that has the same footprint as the average blackjack table. It also means showing up at the Plaza four times a week to distribute brochures about the game and talk with players.

He sells casinos with the

See **VELOTTA** 4D

WYNN SHAREHOLDERS

Wynn stock dropped in price from \$200 a share on January 26, 2018, and is much lower now. If you owned Wynn stock on January 26, 2018, and have sold it in the last ten months, you have the right to sue to recover your losses.



Call 702-385-6000 to get a free legal consultation.

► GIGAFACTORY

Continued from Page 1D

hopes to build around the world—the plant has a production level of 20 gigawatt hours. For scale, that's equivalent to the energy capacity of 400,000 base-model Tesla Model 3s, the vehicle whose power plants and drivetrains are built at the plant before being shipped to Fremont, California, for final assembly.

Chauffeuring visitors around the building's perimeter, a guide recites other Giga-sized metrics. The facility has seen a steady stream of guests in recent weeks amid a publicity push for the company's high-desert, high-capacity behemoth. Its oft-reported production wrinkles have been mostly ironed out, and capacity is ramping up.

As the van edges along an unpaved road behind the plant, one of the thousands of wild mustangs that roam the surrounding hills looks down impassively from a rock outcropping, stock-still as the vehicle passes once, then returns by the same route a few minutes later.

By the numbers, the company is only fractionally responsible for regional pressures on housing, infrastructure, public services and local economies, contributing to area trends that are amplified versions of those playing out across the country, especially in housing and employment.

But perhaps in direct proportion to its ambitious public persona, it seems to bear similarly outsized responsibility for changes the region is now experiencing that have been dubbed the "Tesla effect."

"I wasn't personally overjoyed by the announcement of Tesla," said Brian Bonnenfant, project manager for the Center for Regional Studies at the University of Nevada, Reno.

But Bonnefant, along with many others, remembers the painful depths of the last recession, when area unemployment approached 14 percent and even The Muppets lampooned Reno's misfortune in a 2011 movie.

"We absolutely needed the abatement, and I think it's been highly successful," he said.

Ahead of goals

That abatement was the 2014 deal the state and Tesla made to bring the company to the Tahoe Reno Industrial Center, a 104,000-acre industrial park that is 60 percent larger than Reno itself. The state abated \$1.4 billion in taxes for the company for up to 20 years, and Tesla agreed to meet certain benchmarks for employment and capital investment.

Since then, other players in advanced manufacturing and technology have followed — Google, Apple, the data center operator Switch and cryptocurrency innovator Blockchains among them. The industrial park has 120 tenants, and the regional economic authority counts 200 companies that have opened in the area since 2014.

"The Tesla announcement and their subsequent growth in our region is the best thing that could have happened to Northern Nevada as far as accelerating the diversification of our economy," said Mike Kazmierski, president and CEO of the Economic Development Authority of Western Nevada.

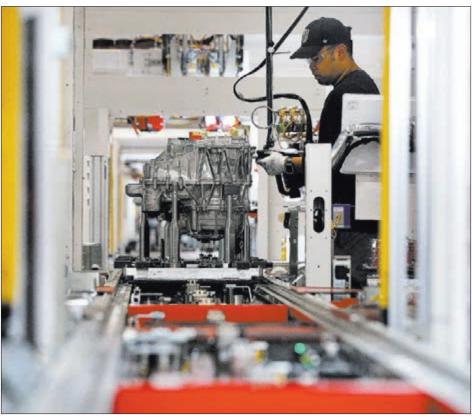
"We projected 50,000 new jobs over a five-year period four years ago, he said. "We've almost achieved that number in the first four years.

Two days after that wary wild horse watched the passing van, the state released a report showing the Gigafactory ahead of benchmarks for job creation and capital investment. Tesla in June blew past the goal of 6,500 new jobs. It has created more than 7,000 and eventually expects to employ two or three times that number. And it has invested \$1 billion more in buildings and equipment than the \$5 billion



Cathleen Allison Special to Las Vegas Review-Journal

 $Chris\ Lister,\ vice\ president\ of\ operations\ at\ Tesla,\ conducts\ a\ tour\ of\ the\ Giga factory\ on\ Dec.\ 4.$



Kris Salcedo works on drive units at the Tesla Gigafactory.

originally envisioned.

Tesla will not owe property or business taxes on the plant until 2024, and it will not pay any sales tax for a decade past that. But the state report card says spending by employees of Tesla, its contractors and suppliers "generates sales and property taxes at the full unabated rate"

Within that activity, the news is mixed. Tesla and other major new area companies have helped local businesses ranging from construction to retail and food establishments, but they've also created salary competition.

"There's definitely a wage war going on for entry-level positions and not enough bodies to fill them," said Shannon Franz, branch manager for the Reno office of Elwood Staffing "I could probably fill almost 400 positions right now."

Housing costs

The area might have record low unemployment, but housing is expensive and hard to come by, and infrastructure is strained.

Area growth is below what it was before the last recession, largely because it is constrained by market forces. Take housing costs: At the end of 2008, the 12-month average median home price in Washoe County stood at \$254,000. By April 2012, it had dipped below \$150,000. When the Tesla plan was finalized in September 2014, home prices already had stormed back from the low, rising 57 percent to \$234,000. Home costs rose 16 percent the fol-

lowing year and have risen between 9 and 13 percent annually since, reaching \$372,000 as of October.

Similarly, monthly rents for apartments and townhouses dropped from a pre-recession peak average of \$885 to \$821 by the first quarter of 2011. They reached an all-time high of \$1,318 in the second quarter of this year, according to the Reno real estate appraisal firm Johnson Perkins Griffin. The vacancy rate is now below 2 percent.

Jobs and population growth

Overall employment in the Reno-Sparks metropolitan area has surpassed its pre-recession peak of 224,000 and stood at nearly 242,000 as of last August. The unemployment rate, which neared 14 percent in Washoe County in early 2011, is now 3.3 percent.

Projected population growth rates for the area vary but hover around 1.5 percent annually.

Tesla CEO Elon Musk, appearing with other technology company heads and Gov. Brian Sandoval at a Gigafactory event in October, said housing and infrastructure were the biggest constraints to growth the company faced, and that Tesla was exploring ways to help address the housing shortage.

Bonnenfant said that's something Tesla must do. Besides state abatements, Nevada paid to extend USA Parkway, which links Tesla to Interstate 80, south to U.S. Highway 50.

"The state's done enough," he

said. "This needs to be solved by industry, since they brought the problem here."

Reno city officials would concur, noting that tax revenues are not keeping pace with the rising cost of providing services.

"I really think that the companies that are bringing the jobs have to step up and recognize that they need to be part of the answer to that challenge," said Reno Vice Mayor Naomi Duerr.

"I think they're very focused on getting up and running, as they should be, but they also need to quickly understand the culture and what they can do to be a positive force in our community in addition to the great jobs that they are bringing."

Kazmierski, of EDAWN, said that's asking too much of a company that has exceeded its commitments for growth. It's incumbent on communities "to do the community's job to provide the housing and address the resource issues."

That said, EDAWN is working with Tesla on providing nearby temporary living facilities that could house transient workforces such as construction laborers.

"Infrastructure has been a huge focus for us," said Chris Reilly, who oversees Tesla's workforce development and education programs. To help reduce traffic, this year it inaugurated a shuttle program that now carries 1,700 employees daily, he said.

"Regarding housing, we've probably been hosting developers every single week," Reilly said.

On the other side of Tesla from Reno and Sparks, in Lyon County, the city of Fernley hopes to have its day. The city of 20,000 expects to see that population grow by half over the next decade, City Manager Daphne Hooper said.

To provide housing for that influx, Fernley is focused on infill rather than open space development, building out vacant subdivisions that stalled or failed in the downturn. It wants to create higher-density, multifamily housing that would come at lower cost.

But it wants to see jobs created within its borders for residents, not commuters.

"This is really an opportunity for Fernley to become more than a bedroom community, to help our local economy and build the city, to keep our resident working here," Hooper said.

Contact Bill Dentzer at bdentzer@ reviewjournal.com or 775-461-0661. Follow @Dentzernews on Twitter.

► VELOTTA

Continued from Page 1D

numbers. Casino Dominoes has the same house edge as Three Card Poker, about 5.34 percent, meaning casinos can be more profitable with dominoes than they are with blackjack, baccarat or craps. The trick is getting players to shift away from the ever-popular blackjack.

The game isn't too hard to learn and appeals to dominoes aficiona-

Moret has replaced traditional domino tiles with playing cards with domino markings. The domino deck has 56 cards, two sets of 28. That enables players to try for high-payout side bets involving multiple doubles.

Here's how the game, a variation of Muggins, is played: The dealer distributes four cards face up to each player in up to six positions at a table. The last of the four cards dealt is the "connector."

There's no competition with other players or the house; each hand stands on its own and is for each player to win or lose.

The goal for each player is to link the three domino cards to the connector. So, for example, if the connector card is a 3 and a 6, any of those three dominoes connect to the other three cards if they have a 3 or a 6 on them. Points are calculated based on the value of the unconnected ends, and doubles are

counted on both ends.

Example: If the connector card is a 6/3 and the domino cards are 6/6, 5/3 and 4/2, the 6/6 would produce 15 points (6+6+3); the 5/3 would produce nine points (6+3); while the 4/2 would be unconnected and worth nothing.

Payoffs are based on point totals equaling multiples of five, with 15 points rewarded at 8-to-1; 10 points, 3-to-1; and five points, 2-to-1.

The night I played, the minimum wager was \$5.

My luckiest moment occurred when I was dealt a 3/2 to the connector position. A successful connection with 3/2 in the connector position rewards the player a 5-point bonus effectively paying 2 to 1.

Then, there are the doubles side bets. Those are calculated from all of the four cards dealt. Two doubles pays 2-to-1; three win 4-to-1; four is 20-to-1; double doubles pays 100-to-1; and a so-called "maiden's hand" — the double 6, 5, 4 and 3 — pays 300-to-1. A \$5 bet with a maiden's hand would result in a payout of \$1,500.

My \$20 bankroll with minimum bets climbed to \$40 after four hands. I lost the last hand, tipped my dealer five bucks and walked out with \$10 more than I had when I walked in.

Contact Richard N. Velotta at rvelotta@reviewjournal.com or 702-477-3893. Follow @RickVelotta on Twitter.