

Bicycle Retailer

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A N D I N D U S T R Y N E W S

E-BIKE MARKET REPORT

Voltaire makes franchise play in e-mobility retail

Partners plan rapid expansion of stores offering e-bikes and other electric vehicles.

By Doug McClellan

VERONA, N.J. — It was their interest in a sophisticated electric wheelchair that eventually led Derek Mithaug and his business partner, Mark Baraniak, to the electric bike business.

The two have sisters in wheelchairs. With a third partner, Jamie Gilson, they are the founders of a new retail franchise concept for “e-mobility” stores called Voltaire Cycles. The first Voltaire Cycles store opened Dec. 1 in Denville, New Jersey. Voltaire’s goal is to open as many as 25 stores in the next 18 months.

The partners eventually shelved the idea of selling the wheelchairs — Mithaug said they require a lot of floor space to retail properly

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Photo courtesy Voltaire Cycles

The founders of the Voltaire Cycles franchise concept, from left: Jamie Gilson, Mark Baraniak and Derek Mithaug

WHO'S AT THE WHEEL?

Autonomous car development moves down the road with gaps in oversight — and no industry voice on danger to cyclists.

By Matt Wiebe

Do you think a new car’s lane-holding feature adjusts for cyclists as it crosses the state line from New York, where there is no minimum passing distance, into Pennsylvania, where there is a 4-foot minimum passing distance?

As a cyclist touring on America’s small highways, many with limited shoulders, how confident are you that the 60 mph car approaching you from the rear with its autonomous lane holding engaged will pass you safely?

A single demonstration drive in December 2016 in an Uber autonomous vehicle was all it took for San Francisco Bicycle Coalition executive director Brian Wiedenmeier to get very active petitioning the ride-sharing company — and the state of California — to get Uber’s vehicles off the street. He also warned coalition members about Uber autonomous vehicles’ dangerous driving.

“Rather than merging right into the bike lane before making a right-hand turn, the

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Vista Outdoor bike brands caught up in gun debate firestorm

By Lynette Carpiet

FARMINGTON, Utah — Politics and bikes have intersected in the past, but debates have centered around funding for bike paths and trails. In the wake of the Parkland, Florida, high school shooting, however, consumer activism shed a bright light on the ties between guns and bikes, and in particular, Vista Outdoor.

The publicly traded company, with annual revenue of \$2.5 billion, has owned Bell,

Giro and Blackburn for two years, and Camel-Bak since 2015 — all acquisitions Vista made to diversify beyond its core gun and ammunition business, which softened in recent quarters as the

political climate changed.

Still, shooting sports account for 54 percent of its overall sales, with the remaining 46 percent from outdoor products, according to its latest investor report. Vista Outdoor owns more than 50 brands in those segments, including Savage Arms, one of the largest manufacturers of rifles and shotguns.

But until the mid-February shooting, Vista Outdoor hadn’t been caught in the

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NAHBS 2018 COVERAGE

Visit to New England draws first-time exhibitors from East Coast. Organizers say show will return to Sacramento for 2019.

Full story and photo gallery start on page 12.

Survey says: E-bike users love the things ... and use them often

By Doug McClellan

Electric bike owners ride farther and more often, replace more car trips, and feel safer than they do on conventional bikes.

And, boy, do they like their e-bikes.

Those are some of the conclusions of a new study of e-bike owners in the United States and Canada. It's the largest research study ever done of North American e-bike owners, and gives new insight into why people buy e-bikes and how they use them. The conclusions are predominantly good news for the burgeoning e-bike industry and for cycling in general.

A whopping 96 percent of respondents, for example, say that riding an e-bike is fun.

Most e-bike owners have ridden conventional bikes as an adult. But they ride their e-bikes a lot more than they did their conventional bikes: About 55 percent of survey respondents said they rode a con-

ventional bike weekly or daily — but more than 91 percent now ride their e-bikes at least weekly. Almost half, in fact, said they ride every day.

"This suggests that e-bikes can drastically increase use of time [on] a bicycle," the authors wrote.

The study, "A North American Survey of Electric Bicycle Owners," was conducted by John MacArthur of Portland State University and Christopher Cherry of the University of Tennessee, along with Portland State's Michael Harpool and Daniel Schepke. MacArthur and Cherry are two of the leading U.S. researchers into electric bikes in the United States. The final report can be downloaded for free at <http://trec.pdx.edu/research/project/1041/>.

The research team conducted an online survey in 2017 and solicited responses from e-bike owners through brand and retailer websites and email lists, social me-

dia platforms, blogs and forums, and other publications, including Bicycle Retailer. The Bicycle Product Suppliers Association, PeopleForBikes, and the National Institute for Transportation and Communities underwrote the \$40,000 survey.

They received 1,796 responses from e-bike riders in every state and eight provinces. Half came from the West Coast — California, Oregon and Washington. The 2017 survey was a follow-up to one done in 2013 and attracted three times as many responses.

The industry will not be surprised to learn that most respondents were white, male, at least 45 years old, and had at least a bachelor's degree. More than half said their health was at least "very good."

The study focuses on e-bikes for transportation and recreation but doesn't delve into the hot-button topic of electric mountain bikes on trails.

Shiny happy people. MacArthur said the high level of enjoyment reported by e-bike owners could have important implications for cycling.

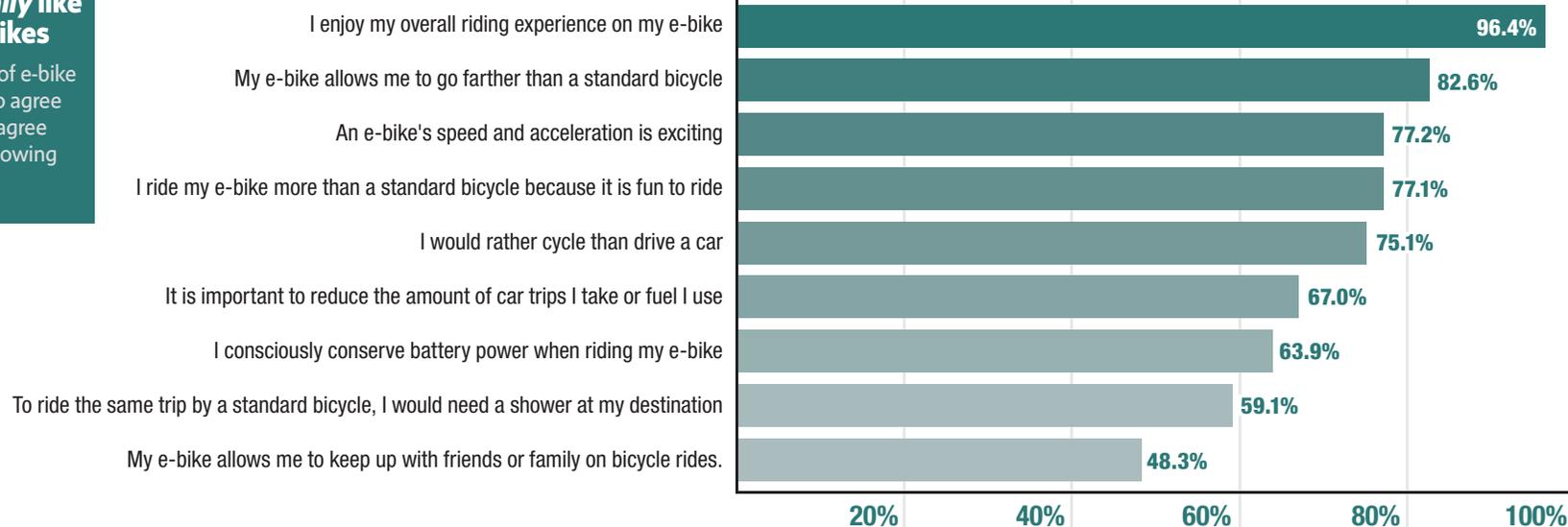
"As we look to the broad research question of how do we get more people biking, and biking more often, it's really about behavior change. It's about getting people on the bike and enjoying it. If they don't enjoy it, or if it doesn't work for them, they're not going to continue to do it," he said.

He noted that research on behavior change shows that high levels of "enjoyment and satisfaction" is a significant indicator of whether someone can successfully change his or her behavior — in this case, spending more time on a bike instead of in a car.

The survey asked riders to describe their last three e-bike trips. Respondents averaged 9.3 miles per trip, which means

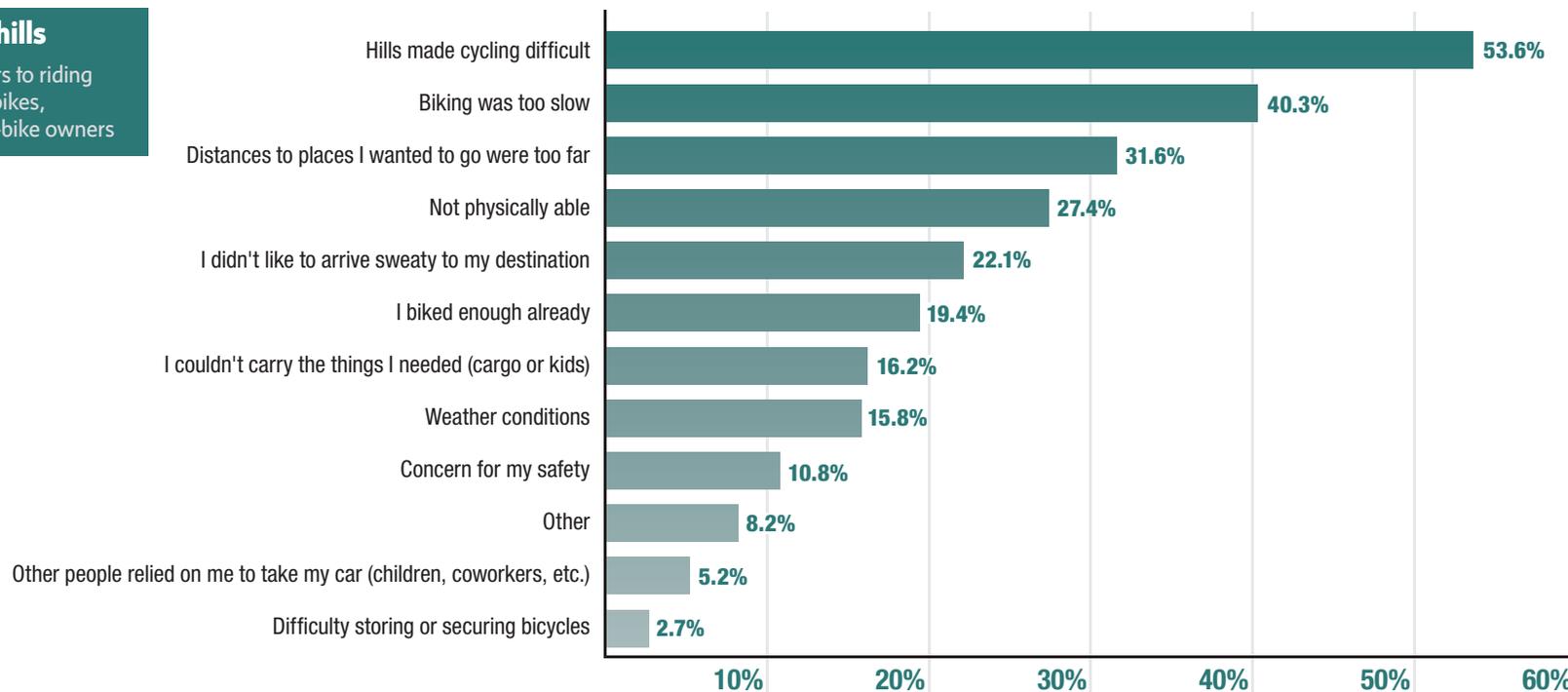
They really like their e-bikes

Percentage of e-bike owners who agree or strongly agree with the following statements:



Too many hills

Biggest barriers to riding conventional bikes, according to e-bike owners



E-BIKE MARKET REPORT

they replaced approximately 1,778 motor vehicle trips.

The 9-mile average is significant, MacArthur said. That's because for decades, policymakers have typically considered 5 miles to be the threshold that determines whether someone opts to ride a bike or drive a car.

"Now we can start looking at a 5- to 10-mile or even a 15-mile distance not being insurmountable for someone to bike," MacArthur said. An e-bike "breaks down these barriers to bicycling that we've seen over the past 20 years."

Child play. Riders also reported that they were more likely to use their e-bikes for utilitarian trips — going shopping, taking the kids to school, commuting to work — than conventional bike riders. That means e-bikes can replace more car trips than conventional bikes.

When asked what percentage of trips they take by different modes, e-bike owners said half of their weekly trips were by car and 35 percent of their trips by e-bike. Walking and riding a conventional bike each accounted for about 5 percent of trips.

"With increasing concern for reducing emissions by motor vehicles and minimizing the congestion of motor vehicles in urban and suburban areas, e-bikes can serve as a healthier and cleaner way to travel," the authors noted.

Some 64 percent of survey respondents said they lived in a household with at least one child, and cited the ability to carry or ride with kids as a big reason for buying an e-bike.

MacArthur said he was surprised by the unexpectedly high percentage of respondents — about 12 percent — who own e-cargo bikes. In open-ended comments, many riders praised the flexibility of their electric haulers.

"My current e-bike is a cargo bike. I

can carry passengers and cargo on it that I could not carry on my regular bike. I can also take multiple trips and longer trips that I would not take on a regular bike," one person said in an anonymous comment.

Another said, "A cargo bike with [a conversion kit] has allowed our family of five to live without a car for years. We can choose routes based on where we would like to go and safety without being as limited by hills, distance or what we need to carry."

Safety in speed. Other findings that could have far-reaching implications for cycling concern the perception of riding safety. E-bike riders said they felt markedly safer on their e-bikes than they did on their conventional bikes — 78 percent to 64 percent.

The difference was most significant for less-experienced cyclists who used to ride conventional bikes occasionally, if at all. Less than half of that group said they felt safe on a regular bike, compared with 75 percent on an e-bike. Among frequent cyclists, 79.5 percent said they felt safe on an e-bike, compared with 70 percent on a conventional bike.

"These results suggest that e-bikes may enhance perceived safety for those who do not feel comfortable on a standard bicycle," the authors said.

E-bikes aren't without their safety issues. A majority of e-bikers said drivers misjudge their speed. Some 68 percent said they go faster than other cyclists, and nearly 82 percent said they go faster on an e-bike than they did on a conventional bike.

But respondents were eight times more likely to say that their e-bike helped them avoid crashes, compared with those who said it was a significant contributor.

One reason for the increased sense of safety is that e-bikes allow riders to take longer routes to avoid problematic streets or intersections, accelerate faster to avoid potential conflicts.

E-bikes in users' daily lives

The 2017 electric bike survey invited respondents to comment anonymously about how they use their e-bikes. Here are some of the comments they submitted:

"I can take my kids all over the city without having to consider elevation gains, or parking. My children are more involved and social, and interact more."

"I am 63 years old and have had three knee surgeries and cardiac bypass. Having an e-bike enables me to ride more often than I would on my regular bike. You need to understand how beneficial e-bikes are to us as we get older."

"Before the e-bike I would normally only commute to work two to three days a week (because of the weight of my laptop, clothes, lunch, etc.). The extra weight, combined with the amount of elevation gain would leave my legs too tired to commute more than that. However, I can now easily commute five days a week."

"I can take two to four kids plus cargo, as a petite woman, and ride all over our city without worrying about making it home."

"Sold my SUV. E-bike is my only form of transportation now (unless I catch a ride with someone, or take an Uber or public transportation, but that's rare now)."

"Due to my heart and lung disease, [my e-bike] is the only way I can ride again."

"I ride my e-bike consistently. I used to decide every morning whether I was biking in or taking transit, which was a small but regular mental burden. I no longer think about it. I usually ride quickly, but if I'm tired I can slow down and let the e-bike do more of the work. This is primarily a mental barrier."

Beyond boomers. In the United States, e-bikes have typically been considered a product for aging baby boomers. But MacArthur said the study found some significant differences between certain user groups, such as women and men or commuters and recreational cyclists, which may suggest ways for the industry to tailor their marketing approaches to a wider range of customers.

"For the industry, what I see is a huge opportunity to sell e-bikes to a broad group, but they might need to message how the bike could be useful for that person," he said.

Instead of just selling to older riders, for example, an e-bike brand could market a particular model to a 30-year-old who wants to ditch the car for her 9-mile commute to work.

"I think there is a lot of opportunity within a broad swath of these groups," MacArthur said.

For men, the most important reason for buying an e-bike was recreation. For women, the top reason was avoiding hills. Women were also much more likely than men to cite the need for carrying cargo or kids, or keeping up with friends and family members on bikes, as reasons for buying an e-bike.

For riders under the age of 55, the top reason for buying an e-bike was replacing car trips.

Brand unawareness. One study finding may give the industry pause: E-bike owners said the bike brand was the least of their considerations when deciding which e-bike to buy. Instead, respondents are far more concerned about the style and its battery range.

MacArthur said that could indicate that no one company has succeeded in becoming a brand leader in e-bikes.

On the other hand, respondents weren't as concerned with price either.

MacArthur said he was surprised that price wasn't a bigger issue for e-bike buyers. It could mean e-bike buyers aren't as price-sensitive. Or they may be willing to pay more because they intend to use their new e-bike in lieu of a car, and figure they'll make up the difference because they aren't paying as much for gas or parking.

Traditional IBDs are still behind when it comes to selling e-bikes, as 37 percent of respondents said they bought their e-bike from an e-IBD and 36 percent online. Less than 19 percent bought an e-bike from an IBD.

The number of people who convert a conventional bike into an e-bike dropped notably from the 2013 survey. In the earlier survey, less than half of respondents reported buying a dedicated e-bike; in 2017, the comparable percentage was 79 percent.

BRAIN

