

# Eyes on the Road?

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*Is this the future?*

No, I'm not talking about the giant turtlenecks that these people are wearing. I'm talking about autonomous driving, where you sit back and let the car drive itself.

Before I answer that, let me tell you why we're talking about this.



Last fall, I was looking at a company called Axalta. Their main business is selling paint to body shops.

The stock looked cheap because people thought autonomous driving would mean no more accidents; thus, less demand for paint

I didn't end up recommending Axalta for other reasons, but the question of autonomous driving applies to a lot of companies.





In an autonomous world, there would be winners and losers.

On our coverage list, for example, there's Geico (owned by Berkshire Hathaway) and Intact Financial. These are two of North America's largest auto insurance companies. That industry would be challenged in a driverless world.

Many of you own CP or CN Rail. If trucks don't have to pay for drivers, railroads lose a key cost advantage.

Google is investing heavily in autonomous technology – they could be a winner.

The reality is that we should probably all cheer for self driving vehicles.



94% of accidents involve human error.

Autonomous cars could help people who can't drive because of age or disability.

And, it could free up time for us all. You don't get a lot done while you're driving. Wouldn't it be nice to read a book or take a nap, and still get to where you're going?



Many think that we're now on the cusp of change.

The technology for self-driving is improving. There are test vehicles in dozens of cities as we speak.

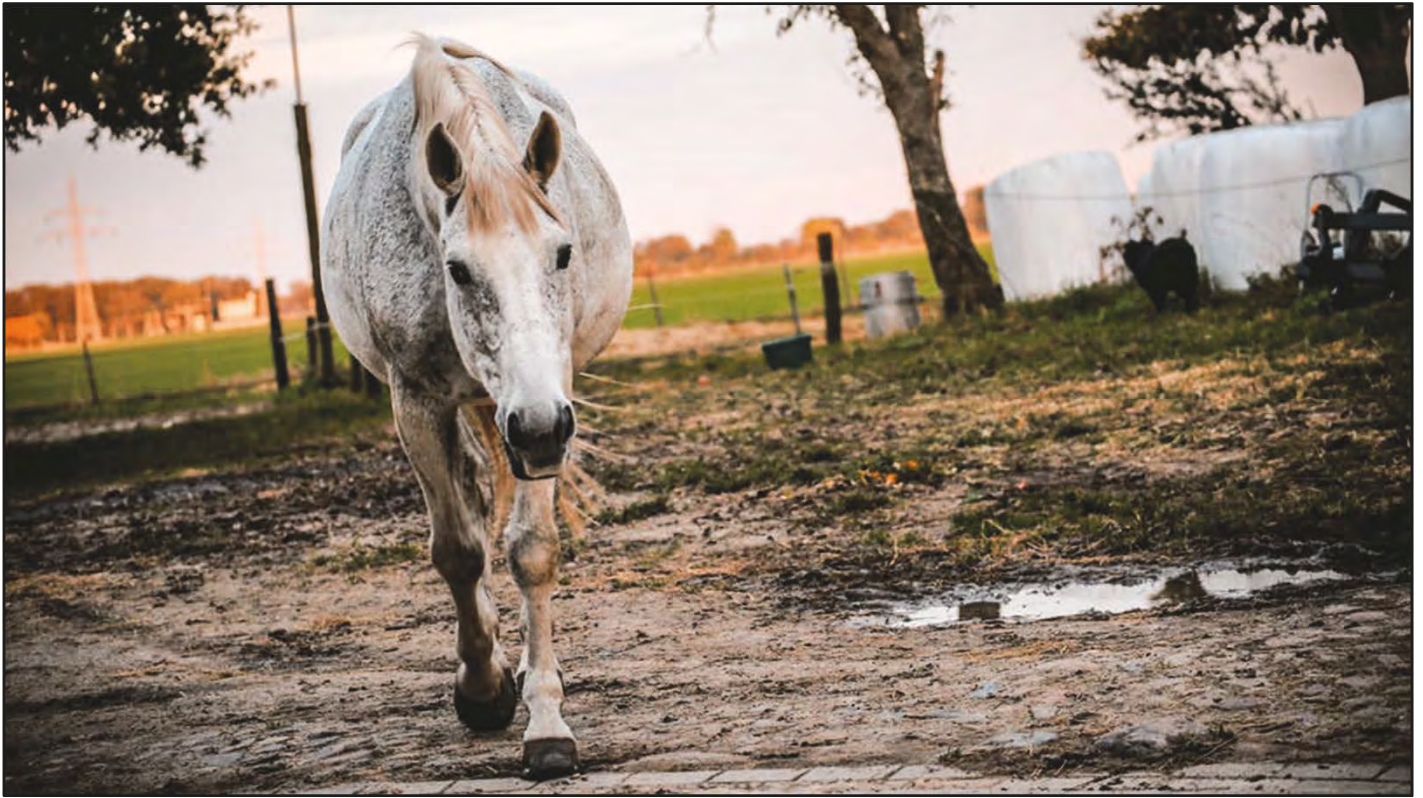
I read an article recently that said by 2020, we will all become permanent back seat drivers.





But my guess is we may be driving like this – with our hands on the wheel – for longer than many might think.

To contemplate the future, it helps to look at the past.



There was a time when we didn't have cars – we used horses to get around.

Horses seem like nice animals – but they're not so nice when there are tens of thousands of them walking the streets.

They bit people; they kicked people. They attracted flies and spread disease.

Did you know that the average horse releases somewhere between 20 - 50 pounds of poop per day?

There was a lot of demand to get these creatures off the road.

In 1875, for example, the State of Wisconsin offered a \$10,000 reward to the first person who could produce a practical substitute for horses.

But, it took a long time to replace the horse.





1803



1908

In the early 1800s, people were experimenting with self propelled vehicles. That's an early U.K. invention on the left.

It wasn't until 1908 that Henry Ford produced the Model T – and that's when the average person could buy a car.

So it took over a hundred years to get the technology and the affordability in place.

And even then, change was slow.



For decades, horses and cars shared the road. I recently learned that my great grandmother, while learning to drive, drove into a horse. She chose never to drive again.

As late as 1925, there were more horses in the U.S. than automobiles.

In 1930, there were still 90 American companies making buggies.

Despite all the benefits of cars over the horse, the transition was long and slow.





As it turns out, slow is the norm when it comes to vehicles.

Seat belts are a wonderful safety device and not that hard to use.

They started becoming an option on cars in the late 1940s, but no one wanted them. It was 1976 before Ontario became the first Canadian province to enact a law that they be worn. British Columbia was in 1977.

Today, all these years later, there are still millions of people who don't wear a seat belt. And, there are still U.S. states where you don't have to wear one.



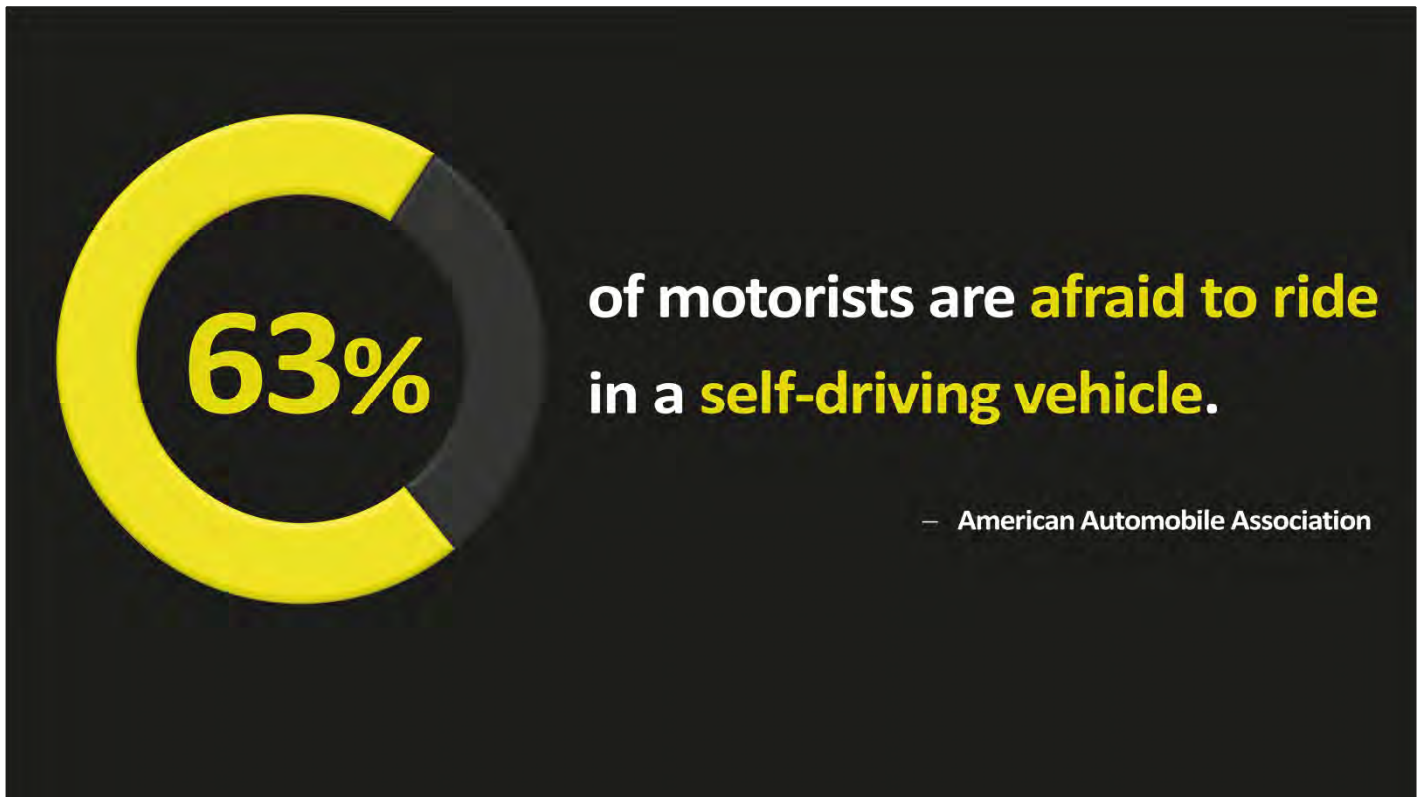


I remember the first time I visited my girlfriend's family in Australia. Her parents had a new car that beeped if it got too close to something.

I still remember her father getting really annoyed every time that car beeped. The second time I visited them, he had found a way to turn that feature off. That behaviour is pretty common.

With lane departure technology, which is another semi-autonomous feature, Honda dealers found that it is deactivated on 70% of the vehicles that come in for service.

People don't like change and change tends to be slow.



Today, we're not seeing much demand for autonomous driving.

Companies are investing but the average person doesn't seem so keen.

A poll released this month by the American Automobile Association, found that 63% of motorists said they'd be afraid to ride in a self driving vehicle.

Even if interest increases, there are a lot of other obstacles to overcome.



Better technology costs money.

Right now self-driving prototypes are very expensive. The cost will come down over time, but there still will be a price.

Optimists believe self-driving technology will add between \$7,000 - \$10,000 to a car's sticker price in 2025. Many would argue much, much higher.

Either way – it's a big impact.





Roads need to be in fairly good shape and well-marked for autonomous driving to work.

In 2016, Volvo's North American CEO was showcasing a semi-autonomous car at the Los Angeles auto show. The vehicle kept refusing to drive because it couldn't find the lane markings. Eventually, the CEO got upset and told the Mayor of LA "you need to paint the bloody roads."

I grew up in Newfoundland – sometimes we got a lot of snow. You couldn't always see the lines. Dirt roads are a problem; so are potholes and poor signage.

Think of the cost and effort it would take to change the entire road network – are taxpayers and politicians going to want to pay for that?



Regulators need to get on board.

Every province in Canada and every state in the U.S. has its own department of transportation. They'd all have to come up with and agree on the rules.

We know regulators tend to move slowly. In BC, we still don't have Uber approved.





There are a lot of other issues as well.

If a ball rolls onto the street, an autonomous vehicle is programmed to stop, as it makes the assumption that there's a kid following the ball.

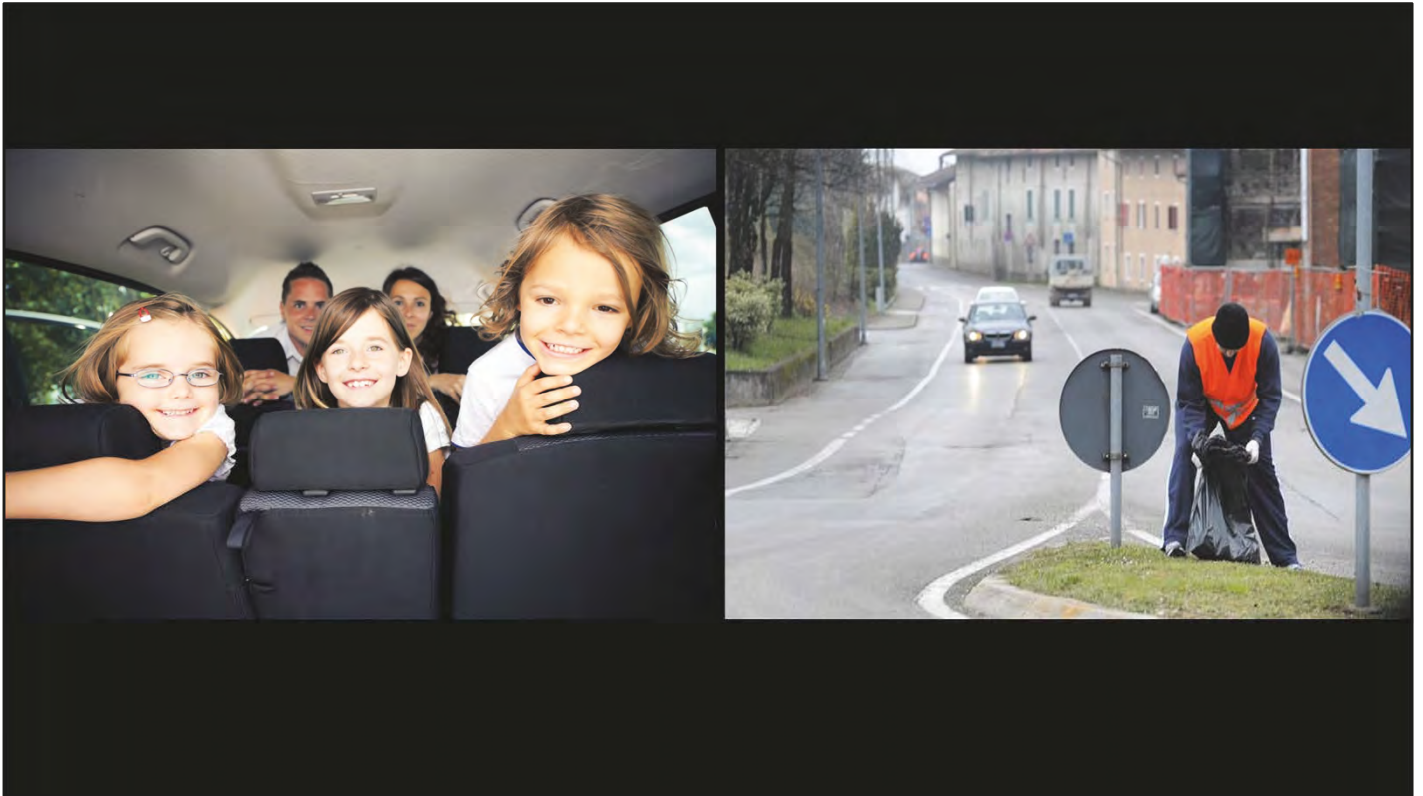
Some have speculated about a wonderful new game that kids might play – where they stand on the side of the street and roll balls into traffic. *Sounds like fun.*





What about pedestrians?

There will be no need to wait for a gap in traffic. Just cross the street whenever you want – and watch the gridlock build.



Let's say a car has no choice but to hit something: a mini van full of kids who might be partially be protected from impact or an individual who has no protection.

Who does it hit and who makes the decision that will be programmed into the vehicle?



Photo credit: Simon Druker for NEWS 1130

Last fall, I was driving through Downtown Vancouver. Two of the three bridges to get out were blocked by a parade. The one that was open – the Burrard Bridge – was under construction.

Traffic was brutal.

A car from a side street wanted to get in front of me and I didn't want to let him in because I was running late for a softball game. So, I inched up to block him out. The car crammed its way in anyway and I thought for sure it was going to hit me.

A person did that.

Think about what you do when you pull into traffic. You make eye contact, you look for hand gestures, there are all sorts of social cues that take place. And sometimes, you need to get aggressive.

How long would an autonomous car have sat there that day?



**“There will be no revolution.  
Evolution is a better bet...”**

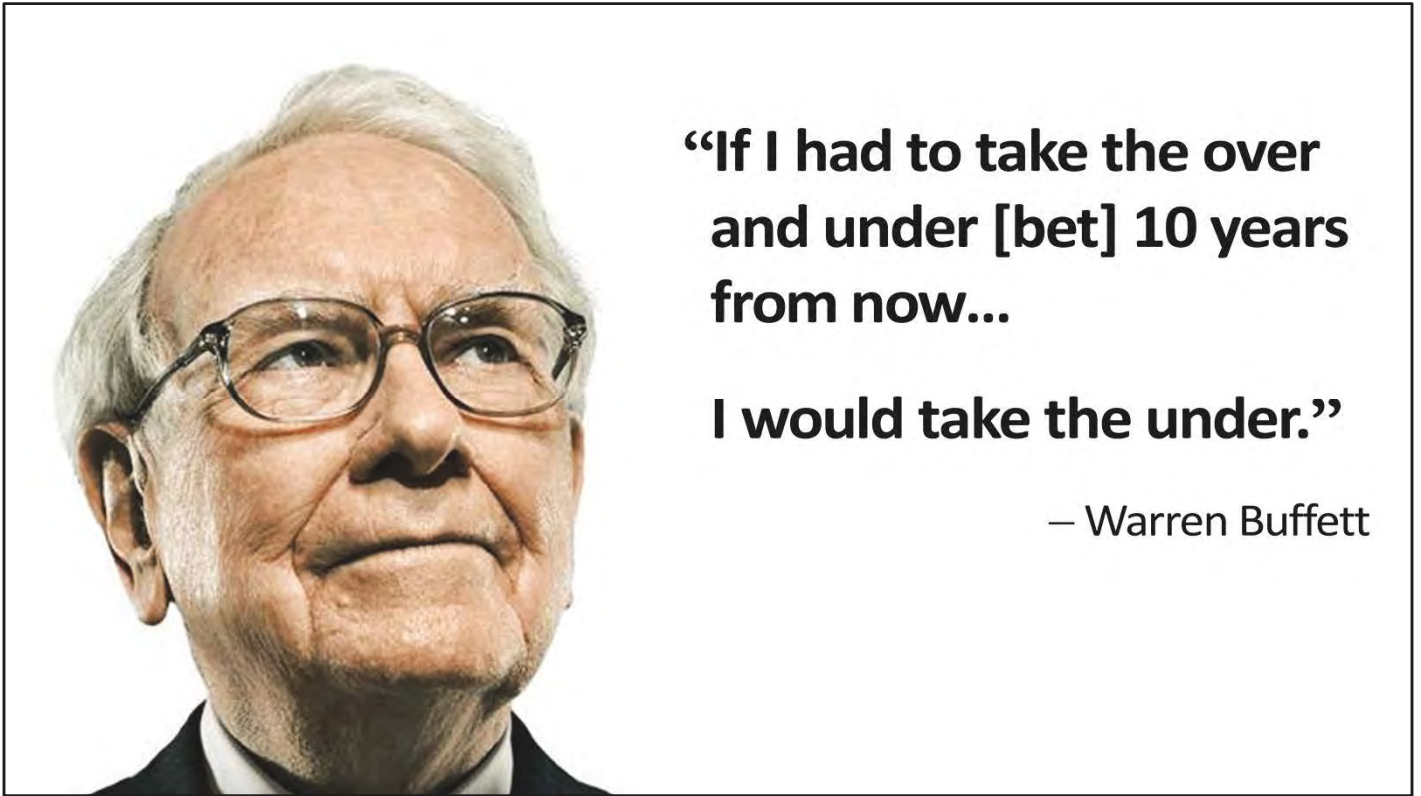
– James Grant



Finally, a lot of people just like to drive. They've been driving for years. They like being in control. They like driving their way. And, that's a behavior that's tough to change.

There's a great quote by James Grant, who writes an investment newsletter. In a piece on autonomous driving, he discussed some of the points we reviewed today and wrote:

“There will be no revolution. Evolution is a better bet – a slow-moving, decades-long integration of autonomous-driving technology into the existing ecology of budget-minded motorists, daredevil bicyclists, plodding politicians, texting pedestrians, controlling coders, and suing lawyers.”



Warren Buffett would agree. During a recent CNBC interview, he said:

“If I had to take the over and under [bet] 10 years from now on whether 10% of the cars on the road would be self-driving, I would take the under.”

He’s backed that up with Berkshire’s money. Last fall, Berkshire bought the largest chain of truck stops in the U.S. They make their money selling drinks and snacks, not to empty trucks but to truck drivers.

W: https://en.wikipedia.org/wiki/List\_of\_defunct\_automobile\_manufacturers\_of\_the\_United\_States





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**A** [ edit ]

- ABC (1906–1910)
- Abbott-Detroit (1909–1916, Abbott 1917–1918)<sup>[1]</sup>
- **Able** (1917–1919)
- Ace (1920–1922)
- Acme (1903–1911)
- Adams-Fanwell (1899–1912)
- Adria (1921–1922)
- A.E.C. (or Anger) (1913–1915)<sup>[2]</sup>
- Aerocar (1905–1908)
- Aero Car (1921)
- Aerocar (1946)
- Aero-Type (Victor Page model)<sup>[3]</sup>
- Ahrens-Fox (1913)
- Aircocot (1947)
- Airway (1949–1950)<sup>[4]</sup>
- Ajax (1914–1915)
- Ajax (1920–1921)
- Ajax (1925–1926)
- **Ajax Electric** (1901–1903)<sup>[5]</sup>
- Aland (1916–1917)
- Albany (1907–1908)
- Albatross (1939)
- ALCO (1909–1913)<sup>[6]</sup>
- Alden-Sampson (1904, 1911)
- Aldo (1910–1911)
- Alena Steam Car (1922)
- All-Steel (1915–1916)
- Allen (1913–1922)
- Allen (1913–1914)
- Allen Kingston (1907–1910)
- Allis-Chalmers (before 1919)
- Allstate (1952–1953)
- Alpena (1910–1914)
- **Alsaac** (1920–1921)
- Alter (1914–1917)
- Altham (1896–1899)
- Altman (1901)
- **Aluminum** (1920–1922) (see Pomeroy)<sup>[8]</sup>
- Amalgamated (1917–1919)
- Ambassador (1921–1925)<sup>[9]</sup>
- Amco (1917–1922)
- America (1911)
- American (1899)<sup>[2]</sup>
- American (1902–1903)<sup>[3]</sup>
- American (1906–1914)
- American (1911–1912)<sup>[3]</sup>
- American (1914)<sup>[3]</sup>
- American (aka American (Balanced) Six) (1917–1924)<sup>[3]</sup>
- American Austin (1929–1934; American Bantam 1938–1941)<sup>[3]</sup>
- American Beauty (1918–1920) (see Pan-American)<sup>[7]</sup>
- **American Berliet** (1906–1908)
- **American De Dion** (1900–1901)
- American Electric (1896–1902)
- American Electric (1913–1914)
- **American Fiat** (1910–1918)
- **American Gas** (1902–1904)
- American Junior (1916–1920)
- American Juvenile Electric (1907)
- American Mercedes (1904–1907)
- **American Mors** (1906–1909)<sup>[3]</sup>
- American Motors (or AMC) (1966–1987)
- American Napier (1904–1912)
- American Populaire (1904–1905)
- **American Power Carriage** (1899–1900)<sup>[3]</sup>
- American Simplex (1906–1910, Amplex 1910–1913)
- American Steam Car (1924–1931)
- American Steamer (1922–1924)
- American Tri-Car (1912)
- American Underslung (1905–1914)
- American Waltham (1896–1899)
- **American Wheelock**<sup>[3]</sup>
- Ames (1910–1915)<sup>[2]</sup>
- **Ams-Sterling** (1917)<sup>[3]</sup>
- Anahuac (1922)
- Anchor Buggy (1910–1911)
- **Anderson** (1907–1910)<sup>[6]</sup>
- **Anderson** (1906)<sup>[10]</sup>
- Anderson (1916–1925)<sup>[3]</sup>
- Anhut (1909–1910)<sup>[3]</sup>
- Anger (see A.E.C.)<sup>[1]</sup>
- Angus (see Fuller)<sup>[2]</sup>
- **Anheuser-Busch** (1905)<sup>[12]</sup>
- **Anhut** (1909–1910)<sup>[3]</sup>
- Ann Arbor (1911–1912)
- Anna (1912)
- Ansted (1926–1927)
- Ansted-Lexington (1922)
- **Anthony** (1899–1900)<sup>[3]</sup>
- Apollo (1906–1907)
- Apollo (1962–1964)
- Apperson (1902–1926)
- Apple (1917–1918)
- Apter (2005–2011)
- **Arabian** (1915–1917)<sup>[14]</sup>
- ArBenz (1911–1918)<sup>[3]</sup>
- Ardsley (1905–1906)
- Argo (1914–1916)
- Argo Electric (1912–1916)
- Argonne (1919–1920)
- Ariel (1905–1907)
- Aristos (see **Mondex-Magic**)<sup>[2]</sup>
- Armstrong Electric (1885–1902)
- Arnolt (1953–1954)<sup>[15]</sup>
- Arrow Cyclecar (1914)
- **Artzberger** (1904)<sup>[16]</sup>
- Astra (1920)
- Atlas (1906–1907)
- Atlas (1907–1911; Atlas-Knight 1912–1913)
- Auburn (1900–1936)
- **Auburn** (1912–1915)<sup>[17]</sup>
- Aultman (1901)
- **Aurora** (1905–1906)<sup>[3][18]</sup>
- **Aurora** (1907–1909)<sup>[19]</sup>
- **Aurora** (1957–1958)
- Austen (see **Roper**)<sup>[2]</sup>
- Austin (1901–1921)<sup>[3]</sup>
- **Auto-Bug** (1909–1910)<sup>[3]</sup>
- Auto Cub (1956)
- Autocar (1900–1912)
- **Auto Cycle** (1906–1907)<sup>[3]</sup>
- **Auto Dynamic** (1900–1902)<sup>[3]</sup>
- Autoette (1910–1913)
- Autoette (1948–1970)
- Automatic (1921)<sup>[3]</sup>
- **Automobile Fore Carriage** (1900)<sup>[20]</sup>
- Automobile Voiturette (see Gasmobile)<sup>[3]</sup>
- **Automotor** (1901–1904)<sup>[3]</sup>
- Auto Parts (see King-Remick)<sup>[21]</sup>
- **Auto Tricar** (1914)<sup>[3]</sup>
- Auto Two (see Buffalo)<sup>[3]</sup>
- Auto Vehicle (see **Tourist**)<sup>[2]</sup>
- Avanti (1963–2007)

Finally, let's say autonomous driving is closer than we think. You may want to invest in the theme, but how?

You'd have been absolutely right to bet on the automobile in the early 1900s. But how would you have picked a winner from the hundreds and hundreds of auto companies?

This Wikipedia page lists all the U.S. auto companies that no longer exist and this is just the A's.

Who's heard of Alpena, Arrow Cyclecar, Argo Electric?

Today, there's a huge number of companies working on autonomous.

How do you pick a winner?





I think Autonomous is an interesting space. There's a lot of money and a lot of people trying to make it work.

Someday it could come and change the way we live. So, we're going to keep an eye on it.

We'll keep one eye on the risk to the companies we own. And, we'll keep one eye on opportunities. But for the foreseeable future, I think we'll all be keeping both eyes on the road.



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