Accessible transportation is a cornerstone of participation in today’s society, and present options are not meeting our needs. No major manufacturer is producing a vehicle for sale to the consumer is built with accessibility as a cornerstone of the user experience. Further, no major automaker produces a purpose-built light duty vehicle that can accommodate a wheelchair user. The average wheelchair user is forced to spend between $10,000 - $30,000 on substantial modifications to purchase a vehicle that is accessible. This price tag is often too high for the average person.

For those in the blind community -- and others who are currently unable to attain a driver’s license -- the autonomous vehicle (AV) technology currently under development by auto manufacturing companies (OEMs) holds the promise to help millions of people gain access to new transportation options. And with billions of dollars being invested in developing this new technology, this moment presents the opportunity to ensure that new vehicle designs -- autonomous or driven by humans -- are accessible to all. Our goal is full production of light-duty passenger vehicles that are accessible to people with a wide range of disabilities.

As part of its role as convener of the We Will Ride campaign, AAPD has developed a “scorecard” that rates the automotive industry’s progress toward creating an accessible vehicle. The scorecard was first announced in 2019, on the 29th anniversary of the passage of the ADA. This year, we release our first public “progress report” on the current state of OEM accessibility efforts.

**Methodology:** AAPD / We Will Ride staff reached out to the top 10 global auto manufacturers ranked by production volume, issuing them a detailed survey questionnaire that assesses multiple aspects of accessibility work, from community outreach, to design and engineering commitments, to production plans.

From responses to this survey and detailed conversations with OEMs on our inquiry list, we have found that, *although the industry has not yet reached the point of significant design or production progress, multiple major OEMs are already tackling the challenges associated with accessible design in their AV programs, and are expanding their disability community outreach programs as they work on these problems.*

**OEM Communication**
For our 2020 Accessibility Scorecard outreach, we contacted the ten largest global auto manufacturers:

- Toyota
- Volkswagen Group
- Hyundai / Kia
- General Motors/Cruise
- Ford
- Nissan
- Honda
- FCA
- Renault
- Groupe PSA

In response to our inquiries, we have engaged in substantive discussions with the following five companies:

- Toyota
- Volkswagen Group
- General Motors / Cruise
- Ford
- FCA

The findings described below are informed by these conversations as well as formal responses that OEMs submitted to our survey questionnaire.

**Chief Findings**

Although the focus of each participating company is different, cross-industry patterns emerge. We draw the following conclusions as the chief findings of our research:

Automakers are beginning to engage in wider outreach with disability groups, and to form internal working groups on accessibility. There is some progress on the experimental design front, but COVID-19 has presented an unexpected impediment that disrupted continued progress this year.

We assume that reduced auto sales have disrupted revenue streams that fund research and development on accessibility related work. While many OEMs retain significant capacity to do R&D on accessible AVs, the shortfalls of revenue may have caused OEMs to reassess priorities going into volatile economic times. At this time, OEMs have publicized few concrete plans to design and build a universally accessible passenger vehicle, and definitely no timelines for production.

No member of the industry is close to achieving production of an accessible light-duty passenger vehicle now, but we recognize that this process will take time.
The next step is to identify and address common barriers to production across the industry -- an opportunity for collaboration with industry stakeholders. In particular, we have developed a strong partnership with the Alliance for Automotive Innovation on addressing barriers to accessible vehicle production, many of them identified in this industry report.

Individual-level OEM Discussions
The general findings above apply to each of the companies interviewed; however, more specific notes on each company can be found below.

**Toyota:** Toyota’s outreach to disability community stakeholders is extensive, both with local and national groups. This outreach supports their design research, as this year they announced the creation of a fifth R&D division specifically focused on mobility solutions -- an important development. In the Japanese market, Toyota designed and produced a wheelchair-accessible vehicle that is deployed in Japan for use at the 2020/2021 Olympic Games. In the U.S., Toyota has also engaged constructively with the aftermarket modifiers. For their 2021 Sienna van, Toyota has provided major after-market modification companies with design early access in order to bring retrofit accessibility devices to market quickly after a vehicle’s release.

**Volkswagen Group:** Volkswagen has expanded their disability stakeholder engagement significantly last year along with their announcement of their “Inclusive Mobility” initiative. VW has not made a specific public commitment to develop a universally accessible light duty passenger vehicle. However, their design and engineering divisions have met with accessibility stakeholder groups to discuss design challenges and collaborate on the development of strategies to address accessibility barriers, such as wheelchair securement and passenger restraint. VW has taken a leadership role in pushing industry and government stakeholders to engage. This outreach has included meeting with accessibility stakeholders to drive additional research on solutions to wheelchair securement and passenger restraint.

**General Motors (GM) / Cruise:** Cruise has publicly acknowledged the challenges and limitations of the transportation system today, especially around mobility and Cruise's vision to “move beyond the car.” GM and Cruise have shared with us how GM is entering the next phase of its accessible, automotive focus, which shows promise. Last year, GM participated in the Alliance for Automotive Innovation’s accessibility workshops, and, together with Cruise, GM participated in workshops held by the Department of Transportation. Cruise has partnered with the National Federation of the Blind, American Council of the Blind, and Lighthouse for the Blind on sensory accessibility design as well as other local disability groups in the Bay Area. GM has actively engaged its internal employee resource group, GM Able, for insight into accessible design features. This year, GM and Cruise will continue their shared focus on accessible design, undertaking additional research and working closely with stakeholders across the disability advocacy community.
**Ford:** Ford has declined to participate in the scorecard process this year. However, the public record shows that a Ford employee chaired an SAE International workgroup that focused on identifying issues that people with disabilities may face when attempting to ride in an autonomous vehicle.

**Fiat-Chrysler (FCA):** FCA has not filled out the full scorecard survey this year, but the company released a [statement on the ADA anniversary](https://example.com) that articulates a commitment to diversity and inclusion for people with disabilities. Fiat-Chrysler launched an internal staff Business Resource Group on disability in 2019, chaired by FCA - North America’s Head of Quality on the executive team. This year, FCA participated in the Disability Equality Index for the first time, and FCA staff have communicated their intention to use the benchmarking information from their 2020 baseline results to help them identify opportunities for improvement.

**Conclusion**

The bulk of the work needed to develop accessible light-duty passenger vehicles is still ahead of us, and the massive disruption of COVID-19 has proven a frustrating setback to progress to all work on such experimental programs as AVs. However, this work will have many chapters, and we are encouraged by the renewed engagement from OEMs on our first public progress report and looking forward to seeing responses from an expanded group of companies. This year’s report gives us a baseline to work from.

On a hopeful note, as OEMs are considering which programs to put on hold, accessibility continues to move forward as a priority for the future of transportation. This continued commitment is an encouraging sign that new modes will be developed following inclusive design principles to ensure that everyone can benefit from the innovations made possible by autonomous driving systems.

For 2021 and beyond, our chief goal is identifying common barriers to production shared across members of the auto industry and working in collaboration to address them with industry. We hope these efforts will inform actions that our government can take to expedite the safe and accessible deployment of autonomous vehicles, and we will work with industry where we can to support and build an agenda to further this goal.