

A Blind Spot in Safety:

An analysis of blind spot warning in popular heavy vehicles in the U.S.

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Executive Summary

This study aims to investigate and quantify the cost of blind spot warning (BSW) in the United States' top-selling 2022 automobile models that are 4,000 pounds or heavier, including larger SUVs and pickup trucks. Previous research has demonstrated the potential of BSW to prevent crashes, but Consumer Reports (CR) has found that this feature is often sold as part of a package for a substantial additional fee rather than as a standard feature. Expanding on a report from 2020, we find that BSW remains an add-on feature in several top-selling vehicles, and that automakers often require consumers to spend thousands of dollars extra to equip their vehicle with the technology. We examined the 14 most popular heavy passenger vehicles that meet the criteria outlined later in this report. These vehicles accounted for 26% of sales of non-commercial vehicles in the U.S. in 2022. BSW is included as standard on the lowest trim levels of **only three** of these models. **None of the top five brands** offer this feature standard on all trim levels. If consumers had paid for BSW on these top five models on the lowest trim where it was available, they would have each paid about **\$1,600** on average. CR urges automakers to prioritize this safety technology and include it as a standard feature across all trim levels, especially on larger, heavier vehicles where the benefits could be even greater.

Introduction & Background

Traffic deaths in the U.S. have soared in recent years. Motor vehicle-related fatalities in the U.S. hit a low in 2011, but have been on the rise since then and increased significantly in 2020. They then hit record numbers in 2021, when nearly 43,000 people died on roadways. This marked a 10.1% increase from 2020 and a 16-year high.¹ There was a very slight decline in roadway deaths in 2022 and again in the first three months of 2023, but these fatalities remain stubbornly high nevertheless.^{2,3}

It is also worth noting that fatalities have increased at a particularly alarming rate for pedestrians and other vulnerable road users. According to the Governors Highway Safety Association, pedestrian deaths increased 77% between 2010 and 2021. About 7,500 pedestrians were killed in 2022, making it the deadliest year for pedestrians since 1981.⁴ Bicyclist deaths and injuries have been on the rise in recent years as well, with 966 killed and an estimated 41,615 injured in 2021 alone.⁵ The number and rate of traffic fatalities is unacceptable and makes the U.S. an outlier when compared to other developed countries.⁶

In addition to the devastating human toll, car crashes are extremely costly in economic terms. The National Highway Traffic Safety Administration (NHTSA) estimated they cost American society **\$340 billion in 2019 alone,** which equates to **\$1,035 per American** and 1.6% of U.S. GDP.⁷ Given that traffic fatalities have increased in recent years, these costs have likely risen since 2019.

Strikingly, our roadways have become more dangerous despite the fact that auto safety technology has dramatically improved over the past few decades. One of the reasons for this appears to be that vehicles have gotten heavier on average—in two respects. First, vehicles have gotten larger with time. Pickup trucks, for example, were 32% heavier in 2021, on average,

¹ IIHS, "Fatality Facts 2021 Yearly snapshot" (May 2023) (online at: <u>https://www.iihs.org/topics/fatality-statistics/detail/yearly-snapshot</u>).

² NHTSA, "Early Estimate of Motor Vehicle Traffic Fatalities in 2022" (Apr. 2023) (online at: <u>crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813428</u>).

³NHTSA, "Early Estimate of Motor Vehicle Traffic Fatalities For the First Quarter of 2023" (June 2023) (online at: <u>crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813482</u>).

⁴ Governors Highway Safety Association, "Pedestrian Traffic Fatalities by State: 2022 Preliminary Data" (June 2023) (online at: <u>www.ghsa.org/resources/Pedestrians23</u>).

⁵ NHTSA, "Traffic Safety Facts – 2021 Data – Bicyclists and Other Cyclists" (June 2023) (online at: <u>crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813484</u>).

⁶ Organisation for Economic Co-operation and Development (OECD), "Road Safety Annual Report 2022" (December 23, 2022) (online at: <u>www.oecd.org/publications/road-safety-annual-report-23124571.htm</u>).

⁷ NHTSA, "NHTSA: Traffic Crashes Cost America \$340 Billion in 2019" (January 10, 2023) (online at: <u>https://www.nhtsa.gov/press-releases/traffic-crashes-cost-america-billions-2019</u>).

than they were in 1990, according to a Nature Comment article.⁸ Second, large vehicles make up a larger portion of the U.S. auto fleet.^{9,10}

Heavier vehicles generally pose a greater risk to those outside of them when compared to lighter vehicles. Researchers have found that being hit by a vehicle that is 1,000 pounds heavier increases the odds that the victim will be killed by 47% and that the fatality risk is even higher if the striking vehicle is an SUV, pickup truck, or minivan.¹¹ Consumer Reports (CR) has also found that heavier vehicles tend to have a harder time avoiding crashes, as they tend to perform worse on our emergency handling and braking tests compared to smaller vehicles.¹²

CR considers technology an important element of any comprehensive effort to improve road safety. As noted, auto safety technology has dramatically improved over the past few decades.¹³ However, with fatalities remaining high and heavy vehicles comprising a larger segment of the vehicle fleet, safety technology is becoming increasingly critical for road safety.

The focus of this report is blind spot warning (BSW). CR defines BSW as technology that detects vehicles in the blind spot while driving and notifies the driver to their presence. Some systems provide an additional warning if the driver activates the turn signal.¹⁴ As was the case a

https://www.consumerreports.org/car-safety/the-hidden-dangers-of-big-trucks/).

¹¹ NBER, "Pounds that Kill: The External Costs of Vehicle Weight" (June 2011) (online at: <u>https://www.nber.org/papers/w17170</u>).

⁸ Nature, "Make electric vehicles lighter to maximize climate and safety benefits" (October 12, 2021) (online at: <u>https://www.nature.com/articles/d41586-021-02760-8#ref-CR1</u>).

⁹ As has been the case for years, pickup trucks were the three top-selling vehicles in the U.S. in 2022 (Ford F-Series, Chevrolet Silverado, and Ram). Source: Automotive News Research & Data Center, (online at: <u>https://datacenter.autonews.com/</u>, subscription required).

¹⁰ As of 2021, pickup trucks account for 1 of every 5 vehicles sold in the U.S. In addition to the changing vehicle fleet composition, trucks have gotten larger with time. Full-sized trucks, versus more compact or midsized models, have held an increasingly large share of the pickup market. In 2000, full-sized trucks held 12% of the pickup market; as of 2021, they held 79%. (Online at:

¹² CR, "The Hidden Danger of BIG Trucks" (June 08, 2021) (online at:

https://www.consumerreports.org/car-safety/the-hidden-dangers-of-big-trucks/).

¹³ As CR documented in 2020, automakers have voluntarily committed to including Automatic Emergency Braking (AEB) in their vehicles. (Online at:

https://advocacy.consumerreports.org/wp-content/uploads/2020/06/CR-A-High-Price-on-Safety-June-202

<u>0.pdf</u>). By December 2022, fifteen of twenty automakers had met their commitment of including Automated Emergency Braking (AEB) in 95% of the passenger vehicles they sell in the U.S. Further, we have seen some action from NHTSA. As a result of mandates from the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law (BIL), the administration published a notice of proposed rulemaking on AEB with pedestrian detection on light vehicles, and is expected to publish a proposal for minimum performance standards for lane departure warning and lane-keeping assist systems in February 2024. (Online at:

https://www.federalregister.gov/documents/2023/06/13/2023-11863/federal-motor-vehicle-safety-standard s-automatic-emergency-braking-systems-for-light-vehicles and

https://www.reginfo.gov/public/do/eAgendaViewRule?publd=202304&RIN=2127-AM52). NHTSA also recently put out a proposal to update the New Car Assessment Program (NCAP) and provide consumers with more information about the pedestrian crashworthiness of new vehicles. (Online at:

www.federalregister.gov/documents/2023/05/26/2023-11201/new-car-assessment-program).

¹⁴ CR, "Clearing the Confusion: Common Naming for Advanced Driver Assistance System" (July 25, 2022) (online at:

few years ago, BSW is often sold as an add-on and is sometimes not available on certain trims, even for a fee.¹⁵

According to the Insurance Institute for Highway Safety (IIHS) and Highway Loss Data Institute, BSW technology has reduced lane-change crashes with injuries by 23 percent.¹⁶ Another IIHS study that used police report data found that vehicles with blind spot monitoring were 14% less likely to get in a lane change crash. Using that finding, the authors projected that some 50,000 crashes would have been prevented in 2015 if all cars were equipped with the technology.¹⁷ Even more crashes would likely be prevented by it today.

Larger and heavier vehicles tend to have larger side and rear blind spots, which increases the importance of BSW. CR recommends BSW as a safety feature, and rewards vehicles that have it as a standard feature across all trim levels – along with rear cross traffic warning (RCTW) – with a bonus point in our ratings.¹⁸ In a 2022 nationally representative survey of 2,180 Americans who were planning to buy or lease a car or truck within the next year, CR found that 82% of them ranked the feature as either somewhat, very, or extremely important in their next car or truck. In fact, over half of them (53%) ranked it extremely or very important.¹⁹ Moreover, in a 2020 survey of CR members, 56% of drivers who used BSW told us it helped prevent a crash.²⁰

Below, this report quantifies the additional costs consumers bear in order to make their vehicles—and other people on the road—safer through the use of BSW. CR considers BSW an important safety feature for all vehicles, but a higher number of particularly heavy vehicles without the feature heightens concerns given the added risk they pose to other road users. We have historically advocated for proven safety features to be included as standard in all new vehicles, and our latest findings on BSW have reinforced that position.

https://advocacy.consumerreports.org/wp-content/uploads/2022/07/Clearing-the-Confusion-One-Pager-20 22.pdf).

¹⁵ NHTSA would have been directed to require BSW in all new vehicles under the House-passed infrastructure bill, but this provision was not included in the Senate bill that was enacted. (Online at: <u>www.congress.gov/bill/117th-congress/house-bill/3684/text/eh</u>)

¹⁶ DOT ITS Deployment Evaluation, "Blind spot warning technology contributes to a 23 percent reduction in lane change injury crashes" (August 15, 2019) (online at:

https://www.itskrs.its.dot.gov/its/benecost.nsf/ID/9e81c5c7193cd5d885258448005b625b).

¹⁷ Traffic Injury Prevention, "Effects of blind spot monitoring systems on police-reported lane-change crashes" (June 2018) (online at:

https://www.researchgate.net/publication/325919572 Effects of blind spot monitoring systems on poli ce-reported_lane-change_crashes).

¹⁸ BSW and RCTW typically come together and use the same sensors, and CR also is calling on automakers to make sure RCTW is standard on all trim lines.

¹⁹ Consumer Reports, "Car Buying: A National Representative Multi-Mode Survey, 2022 Results," May 2022. (Online at:

https://article.images.consumerreports.org/prod/content/dam/surveys/Consumer_Reports_Car_Buying_M arch_2022.pdf).

²⁰ Fall 2020 CR Survey of members reporting on about 55,000 vehicles from model years 2017-2021; (See also: <u>https://data.consumerreports.org/reports/adas-lane-systems/</u>).

<u>Methodology</u>

Vehicles were selected for study in this report based on several criteria.²¹ All are from the 2023 model year and sold more than 100,000 units in 2022. All have a curb weight of 4,000 pounds or more, because some evidence suggests that vehicles below that threshold tend to pose less of an outsized risk.^{22,23} It is worth noting that the top-selling cars of 2022 were disproportionately heavy models: seven of the top ten met the criteria to be included in this report.

Research was conducted by shopping online for each of the vehicles on manufacturer websites.²⁴ We recorded the manufacturer suggested retail price (MSRP) as advertised during the initial step in the online "build" process. MSRPs are generally uniform across the country. One limitation of our research process is that the MSRP is typically not the price consumers will ultimately pay–actual prices could be higher or lower depending on add-ons and discounts. For example, destination charges are additional fees that tend to be tacked on at the end of the online build process. They have been on the rise in recent years and can come as a surprise to consumers.^{25,26}

For each vehicle that met the criteria outlined above, we first checked if BSW was included as a standard feature on the least expensive trim level. If it was not, we determined how much it would cost a consumer to add the feature. BSW is often bundled with other features as part of a package. In those instances, we recorded the advertised price of the package on the website and the actual price the consumer would be charged at checkout by going through the full build process online. Given that vehicle pricing is often confusing for consumers, we wanted to document any discrepancies between the advertised and actual prices of the packages. Moreover, as CR has previously reported, safety features are often bundled with convenience features, and we wanted to document that in this report as well.²⁷

If BSW was not included as standard on the lowest trim, we looked into the next available trim level that did include the feature as standard. In some cases, we needed to go up multiple trim

²² CR, "The Hidden Danger of BIG Trucks" (June 08, 2021) (online at:

https://www.consumerreports.org/car-safety/the-hidden-dangers-of-big-trucks/).

²³ Traffic Injury Prevention, "Trends in aggressivity and driver risk for cars, SUVs, and pickups: Vehicle incompatibility from 1989 to 2016" (August 5, 2019) (online at:

https://www.tandfonline.com/doi/full/10.1080/15389588.2019.1632442).

https://www.consumerreports.org/buying-a-car/the-truth-about-destination-fees-a1615480982/). ²⁶ In Alaska, destination charges must be included in the MSRP (Online at:

²¹ The data was collected in 2023, and provides a snapshot of the market at the time the data was collected. We recognize that prices change over time.

²⁴ While building the vehicles online, we used the zip code of Consumer Reports' Auto Test Center in Colchester, Connecticut (06415). While MSRP tends to be uniform across locations, users are often prompted to enter a zip code while shopping online. This might influence discounts and cash incentives.
²⁵ CR, "Sticker Shock: The Truth About Destination Fees" (February 18, 2021) (online at:

https://law.alaska.gov/department/civil/consumer/vehicles.html). Otherwise, destination charges tend to change unpredictably, meaning current destination charges might differ from when the data in this report was collected.

²⁷ CR, "Sticker Shock: Navigating Car Trim Levels" (August 22, 2018) (online at: <u>https://www.consumerreports.org/buying-a-car/sticker-shock-navigating-car-trim-levels/</u>).

levels to find a vehicle that included BSW without an additional fee. The exercise was intended to demonstrate the price gap between more affordable trim levels and those that include this safety technology as a standard feature.

The criteria used for this report enabled us to create a sample dataset, but it is important to note that this dataset does not represent the whole market. We examined models with some of the highest sales in calendar year 2022, and the least expensive trim level for each of these models. As a result, there are no hybrids or electric vehicles included in this report. We recognize that there are hybrids and EVs–as well as potentially other, relatively high-end versions of models–that are 4,000 pounds or heavier and were not included in the report, despite failing to come with BSW as standard across all trims.

<u>Findings</u>

1) Availability of BSW

- Of the 14 models we examined, only three–approximately 21%–had BSW included as a standard feature on the lowest trim.
- Disappointingly, none of the top five selling models included the technology as a standard feature on the lowest trim. These models accounted for over 2 million sales, or 15% of total new car sales, in 2022.²⁸
- While Tesla advertises BSW as included in all of its models,²⁹ BSW as CR defines it is not available as an option on the Tesla Model Y or on any other Tesla model. Instead, Tesla uses a proximity sensor (generally used in low-speed parking maneuvers) that is displayed via a small wiggle line on the driving display. This line is very small, easy to miss, located in a driving display rather than near the side mirrors, and does not provide an additional warning when drivers engage their turn signal. In CR's owner satisfaction surveys, Tesla's BSW ranks nearly last every year. In fact, according to our survey data, some Tesla owners report not having this feature on their car at all.^{30,31}
- Of the eleven vehicles that do not include BSW as standard on the lowest trim level, it is not possible to add BSW on five of them (excluding the Tesla Model Y).
 - As a brand, Toyota stands out here. For three of the four Toyota vehicles in this list, it is not possible to add BSW to the lowest trim.
 - Ford lists Co-Pilot 360 Technology as standard equipment on all Bronco trims, but the contents of the Co-Pilot 360 feature vary by model. The word "Technology" here makes a big difference: the standard Co-Pilot 360 Technology feature does *not* include BSW on the Bronco, although the optional Co-Pilot 360 feature does—an important distinction that is difficult to find on the automaker's website. Consumers must go up a trim in order to add Ford's "Blind Spot Information System," their name for BSW.
- The three General Motors models in the analysis also do not include BSW as standard on the lowest trim (Chevrolet Silverado 1500, GMC Sierra 1500, and Chevrolet Tahoe).

Because some consumers might "go up" a trim level to get a safety feature, we looked at how many trim levels a consumer would need to go up to get BSW without an additional fee. In many cases, doing so would not make financial sense as it sometimes would significantly increase the total purchase cost. Three of the top five vehicles we analyzed would require an increase in price of **over \$20,000** to have BSW included as a standard feature.

³⁰ CR, "Consumer Reports' Guide to ADAS Usability: Consumer insights on understanding, use, and satisfaction of ADAS" (December 2022) (online at:

https://data.consumerreports.org/wp-content/uploads/2021/09/consumer-reports-active-driving-assistance -systems-ux-guide-revised-december-09-2022.pdf).

²⁸ Automotive News Research & Data Center, "New car sales in 2022" (online at: <u>https://datacenter.autonews.com/</u>, subscription required).

²⁹ Blind Spot Collision Warning Chime is the official name in their materials.

³¹ CR "Advanced Driver Assistance Systems (ADAS) Survey" (2021) (online at: <u>https://data.consumerreports.org/solutions/auto/#adas-survey-data</u>).

The full data set is displayed in Table 1, below.

<u>Table 1</u> As shown below, none of the six pickup trucks in our analysis included BSW as standard on the lowest trim.³² The table includes all of the models in our analysis and the availability of BSW on them, the cost of adding BSW, and the difference in MSRPs between the lowest trim and the first trim that includes BSW as standard.

Blind Spot Warning in SUVs and Pickups

	BSW Standard On base trim	Lowest Cost to Get BSW Additional cost from base trim	Upgrade to Lowest Trim With BSW Standard Additional cost from base trim
Ford Explorer	Yes	_	_
Jeep Grand Cherokee	Yes	_	_
Toyota 4Runner	Yes	_	_
Chevrolet Tahoe	Νο	\$4951	\$13,400
Ford F-150	Νο	\$1,455 (advertised \$655) 1	\$8,105
Chevrolet Silverado 1500	Νο	\$1,735 (advertised \$1,085) 1	\$20,900
GMC Sierra 1500	Νο	\$1,760 (advertised \$835) 1	\$28,600
Ram 1500	Νο	\$2,290 (advertised \$595) 1	\$26,340
Toyota Highlander	Νο	\$2,400 <u>2</u>	\$2,400
Jeep Wrangler (4-door)	Νο	\$4,895 <u>3</u>	\$19,825
Toyota Tundra	Νο	\$7,065 <u>3</u>	\$11,600
Toyota Tacoma	Νο	\$7,710 <u>3</u>	\$12,755
Ford Bronco	Νο	\$7,730 <mark>3</mark>	\$11,460
Tesla Model Y	Νο	Not available 4	Not available 4

Pricing obtained from automakers' official websites in 2023.

1 Add BSW feature to base trim.

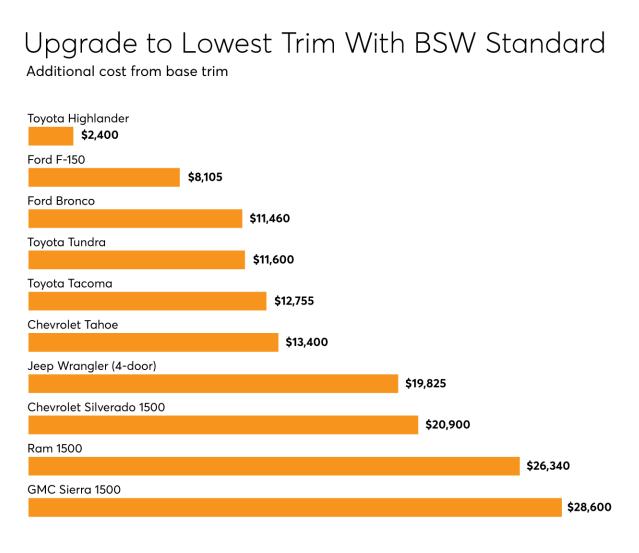
2 Upgrade trim to LE, which has BSW standard.

3 Upgrade trim and add BSW feature.

4 BSW as CR defines it is not available as an option on the Tesla Model Y or on any other Tesla model.

³² These six pickups are the Ford F-150, Chevrolet Silverado 1500, Ram 1500, GMC Sierra 1500, Toyota Tacoma, and Toyota Tundra.

Figure 1. This figure shows the difference in MSRPs between the lowest trim and the first trim where BSW is included as standard.



Pricing obtained from automakers' official websites in 2023.

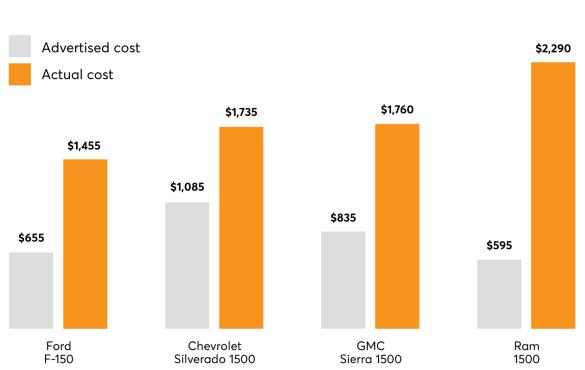
2) Confusing Pricing Practices

A common trend among vehicles with an option to add BSW as part of a package was that the advertised price of the package was sometimes significantly lower than the actual price at the checkout stage. The advertised price is what a consumer sees as they are clicking through the online build. For example, there are often numerous packages to choose from, or additional interior and exterior options a consumer can select. Prices are listed along with each of these items. In some cases, however, when adding the package that includes BSW, a pop-up will appear indicating that additional packages or features are required in order to add the original

item. When this happens, a consumer will face an additional price increase – leading to a higher actual price for BSW than originally indicated by the advertised package price. Some of these vehicles also had discounts that were applied in the checkout process, which impacts how much a consumer actually pays.³³

Of the five top-selling vehicles in our analysis, in only one — the Toyota Tacoma — did the advertised price for BSW match the actual price on the lowest trim level at which the feature was available. More details are listed in Figure 2, below.

Figure 2. This figure shows the advertised vs. actual prices of the package(s) a consumer must purchase to add BSW to the lowest trim where it is available. In some cases, a consumer must purchase an additional package to get the package that contains BSW. This figure only includes models where BSW is not included as standard, and where the advertised price of BSW does not match the actual price of the feature.



Advertised vs. Actual Cost to Add BSW

Additional cost from base trim

Pricing obtained from automakers' official websites in 2023.

³³ Discounts can be confusing, as they are sometimes applied in the form of "cash," and it's not clear why a particular amount is discounted or for how long the discount would apply for. They also tend to change with time, so it is often difficult or impossible for consumers to plan around them.

3) Convenience Features

CR has previously documented the practice of "bundling" safety features with convenience features, which means consumers who want the safety features have no choice but to pay for the convenience features as well–whether they want them or not.³⁴ This practice remains in place today, and was particularly common among the top-selling vehicles. The lowest-priced trim levels of the four top-selling vehicles in our analysis (Ford F-150, Chevrolet Silverado 1500, Ram 1500, and GMC Sierra 1500) all required consumers to pay for non-safety features in order to add BSW.

The top four sellers and the additional features that must be purchased to get BSW are outlined below.³⁵

- When building the **Ford F-150 XL**, the customer must purchase the Ford Co-Pilot 360 2.0 package to add Ford's Blind Spot Information System with Cross-Traffic Alert. At this time, the customer must also add Privacy Glass, Sideview Manual-Folding, Power Glass with Heat, Turn Signal and Black Skull Caps, and LED Side-Mirror Spotlights. This raises the net price change from \$655 for the Ford Co-Pilot 360 2.0 package to \$1,455.
- When building the **Chevrolet Silverado 1500 WT**, the customer must add the Work Truck Safety Package to get "Lane Change Alert with Side Blind Zone Alert," which is the name GM uses to refer to BSW. At this time, the customer must also add either the Work Truck Convenience Package for an additional \$650 or the Work Truck Value Package for \$955. Due to its lower price, we added the Work Truck Convenience Package. This includes cruise control, tinted glass, and rear-window defogger. We opted for a regular cab.
- When building the Ram 1500 Tradesman, the customer can add Blind Spot Monitoring with Rear Cross Path and Trailer Detection for \$595. To do so, however, they must also purchase the Tradesman Level 1 Equipment Group package for \$1,695 which includes Carpet Floor-Covering, Cloth 40/20/40 Bench Seat, Front and Rear Floor Mats, Rear Power-Sliding Window, and SiriusXM with 6-Month Radio.
- When building the **GMC Sierra 1500**, the customer must purchase the 1SA Safety Plus Package to get "Lane Change Alert with Side Blind Zone Alert" for \$835. This package includes chrome mirror caps, perimeter lighting, rear cross traffic braking, rear pedestrian alert, and black vertical recovery hooks. To get this package, the consumer must also purchase the Convenience Package for an additional \$925, which includes

³⁴ CR, "A High Price on Safety: How Automakers Require Consumers to Pay a Premium for Proven Vehicle Safety Features" (June 1, 2020) (online at: <u>https://advocacy.consumerreports.org/wp-content/uploads/2020/06/CR-A-High-Price-on-Safety-June-202</u> 0.pdf).

³⁵ CR is aware that these particular vehicles may be geared toward commercial customers rather than consumers, and that automakers are pricing these vehicles to appeal to a distinct and potentially more price-sensitive type of buyer. However, CR conducted a statistical analysis of purchase data from model years 2003 to 2021 and found no systemic, statistically significant increase in inflation-adjusted vehicle prices (online at: <u>https://advocacy.consumerreports.org/research/vehicle-price-trends-report/</u>). Thus we project that making BSW standard on these vehicles would not warrant meaningful price increases.

deep-tinted glass, rear window defogger, cruise control, tailgate with EZ Lift assist, and power lock & release.

Discussion

As was the case in our 2020 report, CR found that BSW is frequently sold as an add-on feature in top-selling vehicles. The findings from this report were particularly concerning given the widespread popularity and outsized risk that heavier vehicles pose to other road users.

None of the top 5 best-selling models 4,000 pounds or heavier that we examined included BSW as a standard feature on the lowest trim level. Had consumers who purchased these models paid for BSW on the lowest trim where it was available, they would have paid about \$1,600 extra for the feature, on average.

Moreover, adding the feature is often far more expensive than advertised in the online build process. Adding BSW to the #1 seller, the Ford F-150, is more than double the cost as advertised on the website in the build process. For the fifth-best seller in our list, the Toyota Tacoma, buyers cannot add BSW on the lowest trim at all, even for an additional fee.

This analysis did not look at the volume of specific trims sold for each model, or how many consumers opted to purchase BSW when it was not included as standard. In at least some of the models that do not include BSW with the lowest trim, installation rates of BSW are low. For example, the Chevrolet Silverado had installation rates of 22.6% in the 2022 model year, and the Ram Pick-Up 1500 had 28.8%.³⁶ It would be useful for future research to capture these metrics to get a more precise estimate of how much consumers are actually paying for safety features each year, and to further examine how much of a barrier pricing is to adoption of the technology.

For example, we know that approximately 654,000 F-Series trucks were sold in 2022. If each of these customers opted for the lowest trim on the F-150 and wanted Ford's equivalent of BSW, that would amount to approximately \$951,507,000 – or **nearly \$1 billion** – spent on a lifesaving feature that every new vehicle should come equipped with.

Forcing consumers to pay extra for lifesaving features can be costly in two ways. The additional cost is clear when consumers *do* opt to pay extra. The other cost is less obvious—but potentially far greater in magnitude—when they opt *not* to purchase safety features: lives lost, injuries suffered, and a myriad of costs incurred because of preventable crashes.

Some critics might argue that including more safety features as standard will raise prices for consumers. However, CR examined this question using a robust data set drawn from real-world vehicle purchases made for CR's testing program. We found that improvements in fuel efficiency and safety did *not* lead to a statistically significant increase in inflation-adjusted prices,

³⁶ Wards Intelligence, "% Factory Installed Electronic/ADAS Equipment on U.S. Cars and Light Trucks, '22 Model Year", (online at:

https://wardsintelligence.informa.com/WI967026/Factory-Installed-ElectronicADAS-Equipment-on-US-Car s-and-Light-Trucks-22-Model-Year, subscription required).

based on data from model years 2003 to 2021.³⁷ We therefore have reason to believe that including BSW as standard will not lead to materially higher costs for consumers.

Another important finding of this report concerns the confusing way pricing is presented during the online "build" process. Confusing and higher-than-advertised fees for safety technologies, convenience packages, and aesthetic features are examples of the broader proliferation of "junk fees" that have generated significant attention from the White House, federal agencies, and Congress. Hidden fees can cost Americans hundreds of dollars each month.³⁸ Car buying is already a complex process for consumers, and unnecessary and hard-to-understand fees compound the problem. Automakers should make the process more fair and transparent.

CR continues to advocate for consumers and is committed to the fight for safety on all vehicles. **We urge automakers to include this crucial safety feature as standard across all trim levels of their vehicles.** As we have previously argued, safety should not be a luxury. Now that vehicles are heavier, it is more crucial than ever that they be better equipped with safety features like BSW that can prevent needless injuries and deaths, as well as the huge economic costs associated with auto crashes.

³⁸ White House, "Fact Sheet: President Biden Highlights New Progress on His Competition Agenda" (February 1, 2023) (online at:

³⁷ CR, "Vehicle Price Trends: Fuel Economy and Safety Improvements Come Standard" (February 21, 2023) (online at: <u>https://advocacy.consumerreports.org/research/vehicle-price-trends-report/</u>).

https://www.whitehouse.gov/briefing-room/statements-releases/2023/02/01/fact-sheet-president-biden-hig hlights-new-progress-on-his-competition-agenda/).

Appendix

- 1. Ford F-Series 653,957 units sold in 2022 (F-150 was included in the analysis).
 - a. BSW is not included on the lowest trim. It is advertised at \$655, but the actual cost is \$1,455.
 - b. The price jump to the trim that includes BSW as standard is \$8,105.
- 2. Chevrolet Silverado 1500 513,354 units sold in 2022.
 - a. BSW is not included on the lowest trim. It is advertised as \$1,085 but the actual price is \$1,735.
 - b. The price jump to the trim that includes BSW as standard is \$20,900.
- 3. Ram 1500 468,344 units sold in 2022.
 - a. BSW is not included on the lowest trim. It is advertised at \$595, but the actual price is \$2,290.
 - b. The price jump to the trim that includes BSW as standard is \$26,340.
- 4. **GMC Sierra 1500** 241,522 units sold in 2022.
 - a. BSW is not included on the lowest trim. It is advertised at \$835 but the actual price is \$1,760.
 - b. The price jump to the trim that includes BSW as standard is \$28,600.
- 5. **Toyota Tacoma** 237,323 units sold in 2022.
 - a. BSW is not available on the lowest trim.
 - b. On the next trim up where it is available, it is advertised as \$800 and that is the actual price.
 - c. The price jump to the trim that includes BSW as standard is \$12,755.
- 6. Tesla Model Y 231,400 units sold in 2022.
 - a. BSW is not available on any trim of any model as CR defines it. The "Findings" section of the report contains more detail as to why CR does not recognize this system as a proper BSW system.
- 7. Jeep Grand Cherokee 223,345 units sold in 2022.
 - a. BSW is included on the lowest trim.
- 8. **Toyota Highlander** 222,805 units sold in 2022.
 - a. BSW is not available on the lowest trim, but it is included as standard on the next trim up.
 - b. The difference between the lowest trim and the trim where it is standard is \$2,400.
- 9. Ford Explorer 207,673 units sold in 2022.
 - a. BSW is included on the lowest trim.
- 10. Jeep Wrangler 181,409 units sold in 2022 (4-door was included in analysis).
 - a. BSW is not available on the lowest trim.
 - b. On the next trim up where it is available, it is advertised at \$1,395 and that is the actual package price.
 - c. The difference between the lowest trim and the trim where it is standard is \$19,825.

11. Toyota 4Runner - 121,023 units sold in 2022.

a. BSW is included as standard on the lowest trim.

12. Ford Bronco - 117,057 units sold in 2022.

- a. BSW is not available on the lowest trim.
- b. On the next trim up where it is available, it is advertised as \$3,490 and that is the actual price. This includes the addition of an automatic transmission.
- c. The difference between the lowest trim and the trim where it is standard is \$11,460.

13. Chevrolet Tahoe - 105,756 units sold in 2022.

- a. BSW is advertised as \$495 on lowest trim, which is also the actual price.
- b. The difference between the lowest trim and the trim where it is standard is \$13,400.

14. **Toyota Tundra** - 104,246 units sold in 2022.

- a. BSW is not available on the lowest trim.
- b. On the next trim up where it is available, it is advertised as \$1,560 and that is the actual price.
- c. The difference between the lowest trim and the trim where it is standard is \$11,600.