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## COMMENT

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### THE ROAD TO TRANSPORTATION JUSTICE: REFRAMING AUTO SAFETY IN THE SUV AGE

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*For the past fifty years, a singular focus on consumer protection has persistently prevented auto-safety regulators from addressing serious external hazards created by dangerous automobile designs.*

*Traffic violence is the second leading cause of death by injury in the United States. Beyond physical injury, traffic violence limits mobility and sends a powerful message about who does and does not belong on our streets. This toll is not unleashed at random; SUVs and pickups represent a disproportionate danger to other road users, particularly pedestrians and drivers of ordinary passenger cars. What's more, the resulting traffic violence disproportionately burdens women, people of color, and low-income communities. The result is a mounting crisis that threatens the safety and equity of our transportation system.*

*Despite growing criticism, federal auto-safety regulators at the National Highway Traffic Safety Administration (NHTSA) have yet to meaningfully respond to this crisis. The roots of this failure are deep. Drawing on original research, this Comment establishes that the exact design risks of SUVs and pickups that have contributed to our current crisis have been known to federal regulators since the mid-1970s. From its inception until the mid-1990s, NHTSA repeatedly attempted to issue regulations that could have addressed the enormous risks that SUVs and pickup trucks pose to other road users—but without success.*

*NHTSA's historic and ongoing failure is a product of a fundamentally consumer-protectionist vision of road safety. Over the past fifty years, federal policymakers have*

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centered the automobile purchaser as the appropriate beneficiary of auto-safety policy, regulating automobile safety primarily for the people inside them with little regard for equity or negative externalities for other road users.

Informed by this history, this Comment argues for a dramatic reframing of auto-safety policy, from one focused on consumer protectionism to an equity-oriented, distributional approach grounded in principles of transportation justice. This approach will finally align auto-safety scholarship and policy with trends in the distinct, but closely intertwined, field of transportation planning to advance a unified vision for road safety.

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## INTRODUCTION

In February 2003, Senator John McCain, Chairman of the Senate Committee on Commerce, Science and Transportation, convened a hearing to address troubling allegations that sport utility vehicles (SUVs) and pickup trucks were unsafe.<sup>1</sup> This was a serious concern: SUVs and pickups (together, “light trucks”<sup>2</sup>) represented the largest segment of new-vehicle sales at the

<sup>1</sup> *SUV Safety: Issues Relating to the Safety and Design of Sport Utility Vehicles, Hearing Before the S. Comm. on Com., Sci. & Transp.*, 108th Cong. 1 (2003) [hereinafter *2003 SUV Safety Hearing*].

<sup>2</sup> Neither “SUV” nor “pickup truck” is an official category in NHTSA’s safety regulations; instead, automobiles are generally divided into passenger cars or “multipurpose passenger vehicles,” defined as an automobile “designed to carry 10 persons or less which is constructed either on a truck

time, having outsold passenger cars every year since 1999.<sup>3</sup> The preceding year saw a national scandal involving defective tires on the rollover-prone Ford Explorer and an explosive *PBS Frontline* report on SUV safety.<sup>4</sup> Worse still were remarks by the nation's top auto-safety regulator, National Highway Traffic Safety Administration (NHTSA) Administrator Dr. Jeffrey Runge, that had set off a firestorm of media attention just a month before. In an off-script interview following a speech at the Automotive News World Congress, Dr. Runge told reporters he would not let his daughter drive an SUV "if it was the last one on earth."<sup>5</sup>

At the hearing, senators heard Dr. Runge and auto-safety advocate Joan Claybrook (herself a former NHTSA Administrator) identify two principal dangers of light trucks: rollovers and crash incompatibility, each responsible for roughly 2,000 deaths every year.<sup>6</sup> The rollover threat, a consequence of light trucks' high centers of gravity, mainly endangers the vehicle's occupants.<sup>7</sup> In contrast, crash incompatibility (the danger created when two vehicles of different size and weight, such as an SUV and a sedan, collide) is an *externalized* harm, and overwhelmingly endangers those outside the vehicle. Dr. Runge presented data to the committee that in head-on impacts between pickup trucks and cars, car occupants were 6.2 times more likely to die than those in the pickup, and 26 times more likely to die in a side impact.<sup>8</sup> Crucially, the committee also heard that consumers were purchasing light trucks for their perceived safety advantages; and aside from the rollover risk, light trucks indeed offered substantially more protection to their occupants.<sup>9</sup> As the president of the Insurance Institute of Highway Safety warned the

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chassis or with special features for occasional off-road operation" (encompassing SUVs and pickup trucks) and passenger cars. 49 C.F.R. § 571.3. Confusingly, NHTSA employs a different classification system for the purpose of fuel economy standards. *See* 49 C.F.R. § 523.2 ("Light truck means a non-passenger automobile as defined in § 523.5").

<sup>3</sup> 2003 *SUV Safety Hearing*, *supra* note 1, at 2 (statement of Sen. Barbara Boxer, Member, S. Comm. on Com., Sci. & Transp.).

<sup>4</sup> *See Rollover: The Hidden History of the SUV*, PBS: FRONTLINE, <https://www.pbs.org/wgbh/pages/frontline/shows/rollover> [<https://perma.cc/C2QZ-2MFC>] (reporting on the then-unknown rollover risks of SUVs).

<sup>5</sup> Cindy Skrzycki, *Regulator Assails Safety of SUVs*, WASH. POST (Jan. 16, 2003) <https://www.washingtonpost.com/archive/business/2003/01/16/regulator-assails-safety-of-suvs/22a87b47-40f9-4d30-9d10-fefc3c998eeb> [<https://perma.cc/FHE4-J6AT>].

<sup>6</sup> 2003 *SUV Safety Hearing*, *supra* note 1, at 5–8 (statement of Jeffrey W. Runge, Administrator National Highway Traffic Safety Administration); *id.* at 29–37 (statement of Joan B. Claybrook, President, Public Citizen).

<sup>7</sup> *Id.* at 33–34 (explaining that SUVs are susceptible to rolling over during emergency maneuvers due to their high center of gravity).

<sup>8</sup> *Id.* at 7 (statement of Jeffrey W. Runge, Administrator National Highway Traffic Safety Administration).

<sup>9</sup> *Id.* at 69 (statement of Robert C. Lange, Executive Director, Vehicle Structure & Safety Integration, General Motors Corporation).

committee, there was a very real risk that the safety gains for light-truck occupants was coming “at the expense of increased risks for occupants travelling in other vehicles.”<sup>10</sup>

Based on the information presented at the hearing, one might reasonably conclude that crash compatibility was the more pressing of the two issues, at least from the standpoint of regulatory intervention. After all, the safety-conscious consumer might be expected to shop around to find a light truck equipped with anti-rollover electronic stability control (ESC) technology.<sup>11</sup> But what incentive does the consumer have to pass on an ESC-equipped light truck in favor of a sedan that offers less occupant protection for the consumer and their loved ones? The increased risk of injury or death to a random stranger seems like a worthwhile tradeoff for greater protection for one’s family—a classic case of market failure.<sup>12</sup> In that scenario, quick action to protect those not represented in consumer decisionmaking seems warranted. But in fact, almost the exact opposite happened.

Within two years of the hearings, Congress passed the omnibus Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Transportation Bill,<sup>13</sup> which included a directive to NHTSA to institute rulemaking on rollover prevention standards.<sup>14</sup> In just a year and a half, NHTSA issued its final rule on Federal Motor Vehicle Safety Standard (FMVSS) 126, requiring ESC to be installed on all automobiles by 2011.<sup>15</sup>

Crash compatibility received a very different treatment. Rather than engaging in any rulemaking, NHTSA permitted the major automakers to adopt voluntary standards to improve outcomes in light-truck-on-car collisions, despite objections from advocacy groups.<sup>16</sup> According to research conducted by both NHTSA and the Insurance Institute for Highway Safety

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<sup>10</sup> *Id.* at 62 (statement of Brian O’Neill, President, Insurance Institute for Highway Safety).

<sup>11</sup> *Id.* at 11 (statement of Jeffrey W. Runge, Administrator National Highway Traffic Safety Administration) (noting the increased availability of ESC on the market).

<sup>12</sup> Particularly so when seventy-three percent of American motorists consider themselves above-average drivers; even if the consumer considers the chance of a fatal accident, he or she may assume it will be the other driver’s fault. *See* AM. AUTOMOBILE ASS’N INC., AUTOMOTIVE ENGINEERING FACT SHEET: VEHICLE TECHNOLOGY SURVEY—PHASE III (2018).

<sup>13</sup> Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. No. 109-59, 119 Stat. 1144 (2005) (codified at 49 U.S.C. § 30126).

<sup>14</sup> *Id.* § 10301, 119 Stat. at 1939 (instructing the Secretary to begin efforts to establish standards aimed to reduce rollover crashes).

<sup>15</sup> Electronic Stability Control Systems, Controls and Displays, 72 Fed. Reg. 17,236 (Apr. 6, 2007) (codified at 49 C.F.R. § 571.126).

<sup>16</sup> Letter from Laura MacCleery, Counsel for Auto Safety & Regul. Affs., Pub. Citizen, to Dr. Jeffrey Runge, Adm’r, Nat’l Highway Traffic Safety Admin. (Aug. 22, 2003) (available at [https://www.citizen.org/wp-content/uploads/compatibility\\_report\\_comments.pdf](https://www.citizen.org/wp-content/uploads/compatibility_report_comments.pdf)) [<https://perma.cc/5KEZ-WQYX>] (arguing that crash compatibility standards should be mandatory).

(IIHS), these voluntary standards have been, at best, only moderately effective for light-truck-on-car fatality rates and insignificant for pickup-on-car fatalities.<sup>17</sup>

The stark contrast between the regulatory response to rollovers and crash compatibility is in many ways a microcosm of our auto-safety regime. But for all its illustrative value, this story only partially captures the magnitude of our current failures. There is another mounting catastrophe that eclipses the crash-compatibility issue in both its human toll and the scandal of NHTSA's inaction: the pedestrian fatality crisis.

Over the past decade, pedestrian fatalities in the U.S. have increased more than fifty percent, surpassing 6,500 deaths in 2019 (despite a decrease in the overall traffic death rate)—a thirty-year high.<sup>18</sup> If taken as a separate category, automobile-on-pedestrian strikes would rank as the eighth-most-common cause of injury death in the country.<sup>19</sup> This death toll has hardly slowed, even in the midst of the COVID-19 pandemic. Despite a national double-digit percentage decrease in miles driven, pedestrian fatalities actually *increased* in the first half of 2020, resulting in the greatest single-year increase in the pedestrian fatality rate ever recorded.<sup>20</sup> And while NHTSA was at least able to secure a voluntary agreement from automakers to address compatibility, the regulatory response to this decade-long crisis has been virtually nonexistent—drawing criticism from two separate federal oversight agencies.<sup>21</sup>

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<sup>17</sup> NATHAN K. GREENWELL, U. S. DEP'T OF TRANSP., DOT HS 811 621, EVALUATION OF THE ENHANCING VEHICLE-TO-VEHICLE CRASH COMPATIBILITY AGREEMENT: EFFECTIVENESS OF THE PRIMARY AND SECONDARY ENERGY-ABSORBING STRUCTURES ON PICKUP TRUCKS AND SUVs, at iv (2012) (finding an average reduction of 8% for light trucks as a whole through 2010, but a 5% increase for pickups and no reduction for more than half of vehicles studied); Samuel S. Monfort & Joseph M. Nolan, Ins. Inst. for Highway Safety, *Trends in Aggressivity and Driver Risk for Cars, SUVs, and Pickups: Vehicle Incompatibility From 1989 to 2016*, 20 TRAFFIC INJ. PREVENTION 592, 592 (2019) (finding SUVs were still 28% more likely to cause a fatality in a collision with a car as of 2016, and that pickup trucks were just as incompatible as they were before the standards were adopted). By 2010, every LTV for sale in the United States had been self-certified as compliant with the voluntary standards. GREENWELL, *supra*, at 1.

<sup>18</sup> See GOVERNORS HIGHWAY SAFETY ASS'N, PEDESTRIAN TRAFFIC FATALITIES BY STATE: 2019 PRELIMINARY DATA 5 tbl.1, 12 (2020) (showing an increase in fatalities since 2009 and noting that 2019 was the deadliest year since 1988).

<sup>19</sup> See CTRS. FOR DISEASE CONTROL, 10 LEADING CAUSES OF INJURY DEATHS BY AGE GROUP (2018) (showing 6,237 suicide poisoning deaths as the eighth leading cause of death).

<sup>20</sup> Press Release, Governor's Highway Safety Ass'n, Projected 2020 U.S. Pedestrian Death Rate on Pace for Record High Despite Significant Drop in Driving (Mar. 23, 2021), <https://www.ghsa.org/resources/news-releases/pedestrians21> [<https://perma.cc/MKY8-FSXA>] (noting a 20% increase over 2019 in the pedestrian fatality rate per vehicle mile travelled).

<sup>21</sup> U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-419, PEDESTRIAN SAFETY: NHTSA NEEDS TO DECIDE WHETHER TO INCLUDE PEDESTRIAN SAFETY TESTS IN ITS NEW CAR ASSESSMENT PROGRAM (2020) [hereinafter GAO PEDESTRIAN REPORT] (noting that, as a result NHTSA's inaction in including pedestrian safety data in NCAP updates, "the public lacks clarity on NHTSA's efforts to address [pedestrian] safety risks"); NAT'L TRANSP. SAFETY BD., NTSB/SIR-18/03, PEDESTRIAN SAFETY: SPECIAL INVESTIGATION REPORT 22 [hereinafter NTSB

These twin issues—pedestrian safety and crash incompatibility—share similar pathologies. Both have significant and alarming equity implications, disproportionately burdening women, low-income communities, and people of color. And, crucially, both are exacerbated by vehicle design choices that are closely tied to the American appetite for SUVs and pickups.<sup>22</sup> While a global “Vision Zero” movement to eliminate traffic fatalities has put forward a compelling roadmap to address traffic violence from a transportation-planning systems approach,<sup>23</sup> relatively little attention has been paid to the *design* of the vehicles moving within those systems. As light trucks capture a growing portion of the market, including nearly three out of every four sales in 2020,<sup>24</sup> unaddressed vehicle design issues will continue to stymie efforts to reduce the avoidable human toll imposed by our transportation system.

To explain these two failures, this Comment presents original research from a half-century of federal auto-safety policy, from the origins of NHTSA and the National Traffic and Motor Vehicle Safety Act (MVSA)<sup>25</sup> to the present. Drawing on that history, I connect NHTSA’s ongoing failures to an unduly narrow, consumer-centered regulatory approach that struggles to address equity concerns or externalized dangers. Addressing this crisis, I argue, requires us to reframe auto safety not as a consumer protection issue but as a matter of “transportation justice”—to explicitly consider equity and the distributional consequences of vehicle designs in safety policymaking.<sup>26</sup>

This Comment begins with an evaluation of the current state of auto safety. Part I makes the case that growing light truck sales represent not only a safety crisis, but a serious threat to equity in transportation. This crisis is a product of the unaddressed, externalized safety risks that light trucks create for other road users. Part II examines the statutory toolkit at NHTSA’s

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PEDESTRIAN REPORT] (noting that NHTSA “has not yet acted” to incorporate a decade-old international pedestrian safety standard into the FMVSS).

<sup>22</sup> See *infra* Part I.

<sup>23</sup> VISION ZERO NETWORK, CORE ELEMENTS FOR VISION ZERO COMMUNITIES 2(2018) (outlining ten elements of the Vision Zero strategy). The Vision Zero movement originated in Sweden and has since gained significant traction in U.S. cities and even the U.S. Department of Transportation. See, e.g., CITY OF PHILA., VISION ZERO: THREE-YEAR ACTION PLAN 4 (2017) (announcing a goal of zero road fatalities in Philadelphia by 2030); FED. HIGHWAY ADMIN., U.S. DEP’T OF TRANSP., FHWA-SA-18-024, TRANSPORTATION SAFETY PLANNING AND THE ZERO DEATHS VISION: A GUIDE FOR METROPOLITAN PLANNING ORGANIZATIONS AND LOCAL COMMUNITIES (2018) (presenting model policies to aid city leaders in achieving zero road fatalities).

<sup>24</sup> See Tom Voelk, *Rise of S.U.V.s: Leaving Cars in Their Dust, With No Signs of Slowing*, N.Y. TIMES (May 21, 2020), <https://www.nytimes.com/2020/05/21/business/suv-sales-best-sellers.html> [<https://perma.cc/5QLX-VEEB>] (quoting an automotive analyst’s prediction that light-truck sales would rise from 72% of sales in 2020 to 78% by 2025).

<sup>25</sup> National Traffic and Motor Vehicle Safety Act of 1966, Pub. L. No. 89-563, 80 Stat. 718 (codified as amended at 49 U.S.C. § 301).

<sup>26</sup> See *infra* Section IV.A.

disposal and explains why the FMVSS must be the cornerstone of any effort to address these externalized dangers.

Part III explores five decades of NHTSA research and rulemaking on pedestrian safety and crash incompatibility. I show that these threats were diagnosed as early as the mid-1970s by NHTSA researchers, but rulemaking initiatives were repeatedly postponed, deprioritized, and ultimately abandoned. These failures, I argue, are the product of a consumer-protectionist vision that came to dominate auto-safety policy across the federal government, from NHTSA to the halls of Congress. This approach regulates automobile design chiefly for the safety and benefit of the people who buy them while leaving other road users unprotected against the externalized dangers of those designs.

Three decades into the light-truck boom, it is evident that addressing those dangers and the dramatic equity issues that they create will require a fundamental reconceptualization of auto safety. Part IV concludes that this transformation will require NHTSA to adopt a new vision that places transportation justice principles above consumer protection. NHTSA, however, is not likely to achieve this on its own, and Congressional intervention may be necessary to secure the full promise of auto safety.

## I. A LIGHT-TRUCK CRISIS: SAFETY AND EQUITY

Automobiles are deadly—traffic violence was the second leading cause of unintentional death by injury in the United States.<sup>27</sup> This violence is not inflicted at random, however. Not only do light trucks exact an outsized toll on other road users, but those on the receiving end of this threat are disproportionately low-income, people of color, and women. The dramatic growth of the light-truck segment has had serious consequences for roadway safety and has contributed to an equity gap at the heart of our transportation system. Absent intervention, this crisis is likely to continue unabated.

### A. *The Light-Truck Crisis in Numbers*

Although the outsized safety risk posed by light trucks has been widely acknowledged for decades,<sup>28</sup> the specific connections between light trucks, crash incompatibility, and pedestrian safety are worth examining in detail.

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<sup>27</sup> As of 2015. See NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., DOT HS 812 499, MOTOR VEHICLE TRAFFIC CRASHES AS A LEADING CAUSE OF DEATH IN THE UNITED STATES, 2015 at 4-5 (2018).

<sup>28</sup> See Michelle White, *The "Arms Race" on American Roads: The Effect of SUVs and Pickup Trucks on Traffic Safety*, 47 J. L. & ECON. 333 (2004) (describing the dangers SUVs pose to pedestrians and occupants of smaller cars); Kevin Case, Note, *Tanks in the Streets: SUVs, Design Defects, and Ultrahazardous Strict Liability*, 81 CHI.-KENT L. REV. 149-50 (noting the same and emphasizing the

“Crash incompatibility” refers to the unequal distribution of injury risk that results when a heavier, taller (or more “aggressive”) vehicle collides with a smaller one. The greater mass of a light truck transfers more crash energy to the struck car, while its high ride height results in misaligned crumple zones and greater force on the passenger compartment of the smaller car.<sup>29</sup> Despite the adoption of voluntary compatibility standards, as of 2016 SUVs and pickups remain 28% and 158% more likely (respectively) to kill passenger-car occupants in a collision.<sup>30</sup> In fact, because the increased risk to those in passenger cars is far greater than the safety benefits light trucks provide to their occupants, light-truck-on-car collisions are deadlier as a whole compared to car-on-car collisions.<sup>31</sup>

The pedestrian-safety crisis is likewise a product of the light-truck boom. Not only has the frequency of pedestrian strikes increased since 2009 (despite overall traffic fatalities remaining steady and no increase in walking) but crashes themselves have become deadlier<sup>32</sup>—a direct consequence of the proliferation of light trucks.<sup>33</sup> Their higher mass and tall, blunt front ends

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danger posed to children). Although this Comment focuses on road safety, the externalized harms of the light-truck boom are legion. See Laura Cozzi & Apostolos Petropoulos, *Growing Preference for SUVs Challenges Emissions Reductions in Passenger Car Market*, INT’L ENERGY AGENCY (Oct. 15, 2019), <https://www.iea.org/commentaries/growing-preference-for-suvs-challenges-emissions-reductions-in-passenger-car-market> [<https://perma.cc/5FXH-DP45>] (noting that the SUV boom negated any climate emissions gains in the transportation sector and identifying SUVs as the second largest contributor to CO<sub>2</sub> increases since 2010).

<sup>29</sup> See Monfort & Nolan, *supra* note 17, at 592-93 (noting that incompatibility is a result of “conservation of momentum” and the compounding effect of “vertical misalignment between energy-absorbing structures”); Michael Anderson & Maximilian Auffhammer, *Pounds that Kill: The External Costs of Vehicle Weight 3* (Nat’l Bureau of Econ. Rsch., Working Paper No. 17170, 2011) (“[A] 1,000 pound increase in striking vehicle weight raises the probability of a fatality in the struck vehicle by 47%.”).

<sup>30</sup> See Monfort & Nolan, *supra* note 17, at 592. But see Mack Hogan, *SUVs Are 28 Percent More Likely to Kill Other Drivers in a Crash*, JALOPNIK (Oct. 12, 2019, 11:40 AM), <https://jalopnik.com/suvs-are-28-percent-more-likely-to-kill-other-drivers-i-1838994674> (suggesting that the improvement in SUV compatibility may be less significant than it looks).

<sup>31</sup> Eric M. Ossiander, Thomas D Koepsell & Barbara McKnight, *Crash Fatality and Vehicle Incompatibility in Collisions Between Cars and Light Trucks or Vans* 20 INJ. PREVENTION 373, 378 (2014) (“Although [light trucks] protect their own occupants better than cars do, [light trucks] are associated with an excess total risk of death in crashes with cars or other [light trucks].”).

<sup>32</sup> Wen Hu & Jessica B. Cicchino, *An Examination of the Increases in Pedestrian Motor-Vehicle Crash Fatalities During 2009–2016*, 67 J. SAFETY RSCH. 37, 38-39 (2018) (finding an increase in the number of pedestrian crashes and a 29% increase in the crash fatality rate); NAT’L COMPLETE STS. COAL., DANGEROUS BY DESIGN 2021, at 9 (2021) (noting a 45% increase in the number of people struck and killed by cars between 2010 and 2017 compared to a 3.7% increase in traffic deaths among motor vehicle occupants during the same period, and no change in walking rates since 2009).

<sup>33</sup> See Eric D. Lawrence, Nathan Bomey & Kristi Tanner, *Death on Foot: America’s Love of SUVs Is Killing Pedestrians*, DETROIT FREE PRESS, <https://www.freep.com/story/money/cars/2018/06/28/suvs-killing-americas-pedestrians/646139002> (Dec. 16, 2019, 12:24 AM) [<https://perma.cc/S6HJ-FW4B>] (“[Our] investigation found that the SUV revolution is a key, leading cause of escalating pedestrian deaths nationwide . . .”). Other common factors, such as jaywalking at night or alcohol use, do not account for the growth. *Id.* According to one recent study, over 8,000 pedestrian fatalities could have



direct greater impact forces to heads and chests; as a result, NHTSA researchers estimate that pedestrians are up to three times more likely to be killed when struck by a light truck than a passenger car.<sup>34</sup> This heightened risk has led to an incredible 81% increase in pedestrian fatalities involving SUVs between 2009 and 2016.<sup>35</sup> With declining occupant fatalities, the portion of traffic victims outside vehicles (including both pedestrians and bicyclists) has risen from 20% in 1996 to 34% in 2019—the highest percentage since NHTSA began collecting fatality data.<sup>36</sup>

### B. *The Light-Truck Crisis as an Equity Issue*

As alarming as the light-truck crisis is in absolute terms, another facet provides even greater reason for alarm. A mountain of research suggests that the risks posed by our light-truck-dominated passenger vehicle fleet are distributed in ways that reinforce inequalities. Women, low-income communities, and people of color disproportionately suffer the consequences of crash incompatibility and pedestrian strikes.

Not only are light-truck owners wealthier and more likely to be white, but lower-income people tend to drive older automobiles with lower crash-test ratings<sup>37</sup>—making them particularly vulnerable to crash incompatibility dangers. And when they do buy new vehicles, both low-income people and people of color have less access to light trucks: racial and ethnic minorities are significantly underrepresented in light-truck ownership,<sup>38</sup> and the ten

been averted since 2000 if all light trucks were replaced by cars. Justin Tyndall, *Pedestrian Deaths and Large Vehicles*, 26 *ECON. OF TRANSP.* 1, 9 fig.6 (2021).

<sup>34</sup> See Tyndall, *supra* note 33, at 1-2 (estimating that pedestrians struck by light trucks are two to three times more likely to die than pedestrians struck by cars); Lawrence et al., *supra* note 33 (quoting a biomechanical engineer on the physics of pedestrian strikes); New Car Assessment Program, 80 *Fed. Reg.* 78,522, 78,547 (Dec. 16, 2015).

<sup>35</sup> See Hu & Cicchino, *supra* note 32, at 41 tbl.6 (showing data, including raw numbers and percentage change, of fatal single-vehicle pedestrian crashes by vehicle type).

<sup>36</sup> See NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., DOT HS 813 060, *OVERVIEW OF MOTOR VEHICLE CRASHES IN 2019* at 4 fig.4 (2020) (showing the proportion of vehicle occupant to non-occupant fatalities from 1975 to 2019).

<sup>37</sup> See Zeenat Kotval & Igor Vojnovic, *A Socio-ecological Exploration into Urban Form: The Environmental Costs of Travel*, 128 *ECOLOGICAL ECON.* 87, 94 (2016) (noting that more than half of higher-income residents' car fleets are SUVs, minivans, and trucks, compared to less than a quarter of low-income residents' fleets); Kea Wilson, *SUV and Pickup Purchases Soar—But Who's Buying?* *STREETSBLOG* (Apr. 21, 2021), <https://usa.streetsblog.org/2021/04/21/suv-and-pickup-purchases-soar-but-whos-buying> [<https://perma.cc/F23D-Y3Z6>] (citing research that light-truck buyers are “disproportionately white” and “relatively wealthy”); Kristina B. Metzger, Emma Sartin, Robert D. Foss, Nina Joyce & Allison E. Curry, *Vehicle Safety Characteristics in Vulnerable Driver Populations*, 21 *TRAFFIC INJ. PREVENTION* 54, 54 (2020) (“[A]cross all age groups[,] drivers of higher [socioeconomic status] were in newer and safer vehicles compared with those of lower [socioeconomic status].”).

<sup>38</sup> Wilson, *supra* note 37.

cheapest new vehicles for sale in the U.S. are all sedans or hatchbacks.<sup>39</sup> The differential consequences of crash incompatibility also play out along gender lines. Women occupants are 28% more likely to die (and up to 73% more likely to be injured) in a crash than men, a disparity that is directly related to the higher rates of light-truck ownership among men.<sup>40</sup>

Pernicious inequities are even more startling in the context of the pedestrian crisis. The crisis is defined by significant spatial inequalities—neighborhoods with the highest rates of pedestrian strikes often have the lowest rates of automobile ownership<sup>41</sup>—and those inequalities disproportionately burden poor and minority neighborhoods.<sup>42</sup> Local disparities also play out at the national level: Black, American Indian, Pacific Islander, and Hispanic people are significantly overrepresented in pedestrian fatalities, with Black and Native people each killed at a rate nearly double their population share.<sup>43</sup>

Finally, it is important to highlight that the human toll of the light-truck crisis is not exacted in a vacuum, but in the context of transportation systems and public space. The burden of this crisis is not only in the death and injury it visits on victims, but also in the limitations it places on the right to mobility and to simply exist on public streets. Pedestrians (and to a lesser extent car-drivers) must regulate their mobility in ways that are not required of light-

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<sup>39</sup> Austin Irwin, *10 Cheapest New Cars for 2021*, CAR & DRIVER (Dec. 23, 2020), <https://www.caranddriver.com/features/g34908888/10-cheapest-new-cars-for-2021> [<https://perma.cc/DD8S-RT6Q>]. This is true even as automakers drop passenger cars from their model lineups in favor of SUVs. See Patrick Olsen, *GM Becomes Latest Car Company to Drop Some Sedans*, CONSUMER REPS. (Nov. 26, 2018), <https://www.consumerreports.org/general-motors/gm-to-drop-some-sedans> [<https://perma.cc/ZD7P-FKSA>] (explaining that GM is the third car company to drop sedans from its lineup in favor of more profitable SUVs and pickup trucks).

<sup>40</sup> *Vehicle Choice, Crash Differences Help Explain Greater Injury Risks for Women*, INS. INST. FOR HIGHWAY SAFETY (Feb. 11, 2021), <https://www.iihs.org/news/detail/vehicle-choice-crash-differences-help-explain-greater-injury-risks-for-women> [<https://perma.cc/7L3L-RKJM>] (describing the results of a recent study attributing differential injury rates between men and women to lower incidence of LTV ownership).

<sup>41</sup> Charlotte Lee Jackson, *Who Drives Cars, Who Gets Hit by Cars, and Why*, GREATER GREATER WASH. (Feb. 17, 2021), <https://ggwash.org/view/80438/who-drives-cars-who-gets-hit-by-cars-and-why> [<https://perma.cc/DQS8-65MD>] (finding pedestrian death disparities in Washington, D.C. even after accounting for increased walking rates).

<sup>42</sup> Mike Maciag, *Mean Streets*, GOVERNING, Aug. 2014, at 34, 36 (finding that the bottom third of census tracts by per-capita income have double the pedestrian fatality rate of higher per-capita income groups and noting disproportionate impacts on minority communities).

<sup>43</sup> See GOVERNORS HIGHWAY SAFETY ASS'N, PEDESTRIAN TRAFFIC FATALITIES BY STATE: 2020 PRELIMINARY DATA 15-16 (2021) (presenting the percent of total pedestrian fatalities between 2015 and 2019 by race). This disparity holds, at least for Black and Hispanic men, even when controlling for socioeconomic status and traffic exposure. Tara Goddard, Kimberly Barsamian Kahn & Arlie Adkins, *Racial Bias in Driver Yielding Behavior at Crosswalks* 33 Transp. Rsch. Part F 1, 2 (2015). A possible contributing factor is that drivers are less likely to yield to Black pedestrians. *Id.* at 4.

truck drivers to avoid death or injury,<sup>44</sup> while the presence of destructive vehicles sends a message that some road users have a greater right to exist safely in those spaces than others.<sup>45</sup> And as these harms fall disproportionately on already-vulnerable groups, they further reinforce inequalities in society.

### C. A Permanent Crisis

There is little reason to assume that the light-truck boom and its attendant dangers and inequities will disappear on their own.<sup>46</sup> Not only is the shift to light trucks being promoted by automakers themselves,<sup>47</sup> the shift is also self-reinforcing, as car drivers increasingly feel unsafe on roads dominated by light trucks.<sup>48</sup> Nor are technological and design changes within the light-truck segment likely to resolve the issue completely. Emerging crash-avoidance and autonomous technologies are only marginally effective,<sup>49</sup> and the fact remains that pedestrian safety and crash incompatibility issues are largely products of vehicle height and weight—inherent features of the light-truck segment which may not be fixable with simple redesigns.

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<sup>44</sup> For instance, pedestrians are expected to “look both ways” before crossing the street, even in a marked crosswalk where they have the right-of-way over oncoming traffic. See, e.g., *Pedestrian Safety*, PA. DEP’T OF TRANSP., <https://www.penndot.gov/TravelInPA/Safety/TrafficSafetyAndDriverTopics/Pages/Pedestrian-Safety.aspx> [<https://perma.cc/9VUJ-Z7SS>]. Drivers of SUVs, on the other hand, are more likely to engage in more reckless behavior. See Peter Wallner, Anna Wanka & Hans-Peter Hutter, *SUV Driving “Masculinizes” Risk Behavior in Females: A Public Health Challenge*, 129 WIENER KLINISCHE WOCHENSCHRIFT 625, 625, 628 (2017) (noting riskier traffic behavior associated with SUV drivers and finding that women who drive SUVs break certain traffic rules at rates typically associated with male drivers).

<sup>45</sup> See Gregg Culver, *Death and the Car: On (Auto)Mobility, Violence, and Injustice*, 17 ACME 144, 162 (2018) (“Vehicular violence produces landscapes of fear and anxiety, and hence social and physical exclusion, marginalization, and immobilization. . . . [I]t also has a constitutive role in shaping unequal urban geographies.”).

<sup>46</sup> Voelk, *supra* note 24 (“[E]xperts expect [SUV sales] will only grow.”).

<sup>47</sup> See Keith Naughton, Jamie Butters, David Welch & Tommaso Ehardt, *The American Sedan is Dying. Long Live the SUV*, BLOOMBERG (Jan. 16, 2018, 5:01 AM), <https://www.bloomberg.com/news/features/2018-01-16/why-the-american-sedan-is-marked-for-death> [<https://perma.cc/8T9E-J5CL>] (“[A]utomakers are racing to ditch slow-selling cars in favor of the big rigs that mint them money.”).

<sup>48</sup> Henry Grabar, *The SUV Arms Race*, SLATE (Nov. 30, 2018, 12:11 PM), <https://slate.com/technology/2018/11/suv-arms-race-pick-up-car-safety-headlights-visibility-crash.html> [<https://perma.cc/LW2W-XFXP>] (“One reason to buy a bigger vehicle? Everyone else is.”).

<sup>49</sup> Five times as many pedestrian fatalities occur at night as in the daytime, but current crash-avoidance technologies are minimally effective at night. GAO PEDESTRIAN REPORT, *supra* note 21, at 51 Fig. 11 (showing pedestrian fatalities by light conditions); AM. AUTOMOBILE ASS’N INC., AUTOMATIC EMERGENCY BRAKING WITH PEDESTRIAN DETECTION 47 (2019) (concluding from field tests of crash avoidance systems that such systems were “ineffective during nighttime conditions”). In addition, advanced crash-avoidance technologies add considerably to the sticker price of vehicles, placing new, safer automobiles further out of reach of low-income buyers. See ETHAN DOUGLAS, CONSUMER REPS., A HIGH PRICE ON SAFETY 1 (2020) (concluding that crash-avoidance technologies increase the cost of vehicles by thousands of dollars).

## II. THE AUTO SAFETY FRAMEWORK

That the externalized harms and inequities created by light trucks have gone unchecked is all the more surprising given the extensive federal involvement in auto-safety regulation. Indeed, auto safety is the *raison d'être* of an entire operating agency of the U.S. Department of Transportation: the National Highway Traffic Safety Administration. Since its formation in 1970, NHTSA has been charged with administering the auto-safety provisions of the 1966 Motor Vehicle Safety Act (MVSA), the groundbreaking statute that for the first time subjected auto design to comprehensive federal regulation in the name of road safety.<sup>50</sup> Crucially, the MVSA unequivocally tasks NHTSA with the safety of *the public*, both occupants and non-occupants alike.<sup>51</sup>

Since NHTSA's inception, Congress has expanded not only its administrative toolkit for influencing vehicle safety, but the agency's responsibility for a number of auto-design issues unrelated to safety.<sup>52</sup> Today, NHTSA can choose to address vehicle design by setting safety standards, by ordering recalls of defective vehicles, and by distributing information to consumers on vehicle crashworthiness. But only one of these tools—mandatory vehicle performance requirements set in the Federal Motor Vehicle Safety Standards (FMVSS)—is adequate to the task of addressing the externalized dangers and equity issues created by light trucks.

*Safety Standards.* At the heart of the MVSA is the idea that the federal government should directly regulate vehicle design through the FMVSS.<sup>53</sup> Under the rulemaking authority created by the Act, NHTSA can propose minimum safety performance and equipment requirements for automobiles,

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<sup>50</sup> Highway Safety Act of 1970, Pub. L. No. 91-605, 84 Stat. 1739, 1739-40.

<sup>51</sup> 49 U.S.C. § 30102(a)(9) (defining “motor vehicle safety” as vehicle performance that “protects *the public* against unreasonable risk”) (emphasis added). *See also infra* note 87 and accompanying text (noting that one of the first safety standards ever issued involved non-occupant safety).

<sup>52</sup> These include theft-prevention and odometer-fraud regulations, 49 C.F.R. §§ 541, 580; bumper performance requirements to minimize repair costs, 49 C.F.R. § 581.5; and the Corporate Average Fuel Economy (CAFE) standards, administered jointly with the Environmental Protection Agency. 49 C.F.R. § 541. *See* 49 U.S.C. § 32902. Enacted in response to the OPEC crisis, CAFE was originally designed to simply reduce fuel consumption and provide consumers with fuel-efficient vehicle choices; it has since become an imperfect proxy for controlling automotive greenhouse gas emissions. *See* Energy Policy and Conservation Act, Pub. L. No. 94-163, 89 Stat. 871, 874 (1975) (“The purposes of this Act are . . . to provide for improved energy efficiency of motor vehicles.”). Many commenters have posited that loopholes within CAFE for larger vehicles have encouraged the proliferation of light trucks. *See, e.g.,* Ryan Beene, *Is CAFE Making Cars Bigger?* AUTO. NEWS (Aug. 14, 2016, 1:00 AM), <https://www.autonews.com/article/20160814/OEM11/308159946/is-cafe-making-cars-bigger> [<https://perma.cc/ALM4-D6L5>].

<sup>53</sup> *See* JERRY L. MASHAW & DAVID L. HARFST, *THE STRUGGLE FOR AUTO SAFETY* 47 (1990) [hereinafter *THE STRUGGLE FOR AUTO SAFETY*] (describing the centrality of rulemaking to the MVSA).

provided that those requirements are “practicable, meet the need for motor vehicle safety, and [are] stated in objective terms.”<sup>54</sup> As long as the agency considered whether the proposed standard was “reasonable, practicable, and appropriate” for the specific type of vehicle, the standard may reach every new automobile sold in the U.S.<sup>55</sup> By prescribing minimum performance requirements that all new vehicles must meet, the FMVSS provide the most straightforward means of addressing both pedestrian impact protection and crash compatibility.<sup>56</sup>

*Recalls.* Dating to the original MVSA, NHTSA’s recall authority allows the agency to address safety defects in automobiles on a case-by-case basis.<sup>57</sup> When a manufacturer learns of a safety defect (either on notice from NHTSA or uncovered on its own initiative), it must notify all owners and, if the owner chooses, repair the defect free of charge.<sup>58</sup> This provision essentially authorizes NHTSA to enforce implied warranties; crucially, it applies only to defects, which (as in product liability law) require the *failure* of some component measured relative to the likelihood of failure in other vehicles.<sup>59</sup>

NHTSA’s recall authority is not a viable avenue to addressing the dangers of light trucks. First, any road-safety benefits of the recall program are entirely dependent on individual owners electing to have the defect addressed.<sup>60</sup> Because NHTSA has no ability to compel owners to respond to recalls, more than 20% of recalled vehicles never remedied; worse, light-truck owners are the least likely to respond to recall notices.<sup>61</sup> And given that light-truck owners are not the primary victims of crash incompatibility and

<sup>54</sup> 49 U.S.C. § 30111(a).

<sup>55</sup> *Id.* § 30111(b)(3).

<sup>56</sup> For example, a pedestrian protection standard might require that, for any automobile sold in the U.S., a pedestrian dummy struck at  $x$  speed will experience no more than  $y$  force to the head. *Cf.* 49 C.F.R. § 571.201 (setting performance requirements for interior protection using test dummies under FMVSS 201).

<sup>57</sup> 49 U.S.C. §§ 30118-20.

<sup>58</sup> 49 U.S.C. §§ 30118(b)(2), (c), 30120(a).

<sup>59</sup> *United States v. Gen. Motors. Corp.*, 841 F.2d 400, 404 (D.C. Cir. 1988) (“[A] vehicle contains a defect if it is subject to a significant number of failures in normal operation.” (citation and internal quotation marks omitted)); *id.* at 415 (upholding dismissal of NHTSA enforcement action based on finding that the subject vehicle “was no more likely than other vehicles to be involved” in failures); *see also* THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 167 (summarizing a number of circuit court opinions to define “defect” as “a failure of some part of a vehicle to perform up to the usual standards expected” (emphasis added)); *id.* at 129 (noting that NHTSA did not consider vehicles defective if they conformed to industrywide standards).

<sup>60</sup> Whether the recall program has any road safety benefits *at all* is unknown; NHTSA has never conducted a cost-benefit analysis on rulemaking, and vehicle component failures are responsible for less than one percent of accidents. Jerry L. Mashaw & David L. Harfst, *From Command and Control to Collaboration and Deference: The Transformation of Auto Safety Regulation*, 34 *YALE J. ON REGUL.* 167, 251-52 (2017) [hereinafter *Command and Control*].

<sup>61</sup> *See* NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP’T OF TRANSP., REPORT TO CONGRESS: “VEHICLE SAFETY RECALL COMPLETION RATES REPORT” 26, 28 (2017).

pedestrian strikes, it seems unlikely that owners would prioritize recalls addressing those issues. On a more fundamental level, the dangers that light trucks pose to other road users are by and large due to features inherent to the class—vehicles' height and weight.<sup>62</sup> This increased danger exists whether or not any component or system has malfunctioned and exists in all light trucks regardless of manufacturer. Just as courts have been unwilling to find light trucks categorically “defective” in the products liability context,<sup>63</sup> NHTSA's recall authority will not reach these dangers.

*Consumer Education.* Since 1978, NHTSA has provided consumers with information on the safety of specific models through the New Car Assessment Program (NCAP).<sup>64</sup> Under this program, NHTSA subjects new automobiles to four different crash tests, and assigns a 1 to 5 Star rating to the model based on its performance.<sup>65</sup> This is simply a consumer-education service, though, and carries no legal force: A vehicle that scores zero out of five possible stars may still be sold in the U.S. so long as it complies with the FMVSS. The NCAP's influence on road safety therefore depends *entirely* on the weight that consumers and manufacturers give to the ratings. Despite these limitations, the NCAP program has recently been proposed as a potential fix to the pedestrian safety crisis, with both government and private advocates urging NHTSA to include a pedestrian safety test in the NCAP.<sup>66</sup>

However, there is good reason to doubt that the NCAP program can meaningfully address the light-truck crisis. First, it assumes a certain level of safety-consciousness among light-truck consumers—but many light-truck owners take an oppositional approach to road-safety concerns.<sup>67</sup> More importantly, since vehicle height and weight *negatively* correlate with increased pedestrian safety and crash compatibility but *positively* correlate with increased occupant protection, neither consumer self-interest nor rating systems themselves will fully guard against externalized risks. If pedestrian safety is listed as a standalone category alongside the occupant-protection score, it seems naïve to imagine even the most safety-conscious

<sup>62</sup> See *supra* note 29 and accompanying text.

<sup>63</sup> Kevin Case, Note, *Tanks in the Streets: SUVs, Design Defects, and Ultrahazardous Strict Liability*, 81 CHI.-KENT L. REV. 149, 196-97 (noting that product liability suits against SUV manufacturers have failed).

<sup>64</sup> 49 C.F.R. §§ 575.301-302.

<sup>65</sup> See *Ratings*, NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., <https://www.nhtsa.gov/ratings> [<https://perma.cc/QB9Z-SGS8>] (describing the four tests NHTSA conducts).

<sup>66</sup> See GAO PEDESTRIAN REPORT, *supra* note 21; *Testimony of Joan Claybrook on Suggestions for Enhancements to the New Car Assessment Program*, PUB. CITIZEN (Mar. 7, 2007), <https://www.citizen.org/article/testimony-of-joan-claybrook-on-suggestions-for-enhancements-to-the-new-car-assessment-program-ncap-at-the-nhtsa-public-meeting> [<https://perma.cc/BNL8-JQ3R>] (“I challenge NHTSA to follow the lead of the rest of the world by taking a far more aggressive stand against the dangers vehicles pose to pedestrians . . .”).

<sup>67</sup> See NAT'L SAFETY COUNCIL, SEAT BELTS: SAFETY BY THE NUMBERS (2020) (noting that pickup truck drivers and passengers had a lower rate of seatbelt usage).

consumer forgoing the significant occupant-protection benefits of light trucks simply because of the potential threat they pose to strangers.<sup>68</sup> And even when existing safety ratings incorporate pedestrian safety into comprehensive, single-variable scores, the offsetting occupant-protection benefits of light trucks may cancel out any score penalty for external harms.<sup>69</sup> Finally (and most fundamentally), the alarming inequalities of the light-truck crisis should lead us to question whether it is morally defensible to allow whiter, wealthier light-truck consumers to decide the level of safety and protection that other road users receive.

Despite the limitations of both the recall program and the NCAP in addressing design-safety issues, they have become increasingly prominent aspects of the auto-safety framework.<sup>70</sup> The reasons for this shift will be explored in subsequent sections, but it is worth noting here that a recent report from the Government Accountability Office (GAO) critiquing NHTSA's pedestrian safety efforts did not even discuss rulemaking as a potential solution.<sup>71</sup>

### III. FIFTY YEARS OF AUTO SAFETY

Understanding the origins and extent of NHTSA's failure to respond to the light-truck crisis allows us both to contextualize our present situation and, more importantly, gauge the ability of our auto safety regime to meet the historic moment. This section traces the heretofore-untold history of NHTSA's engagement with pedestrian safety and crash incompatibility in the postwar era, a history spanning more than fifty years of government research, rulemaking initiatives, and proposed rules without a single entry

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<sup>68</sup> This is especially doubtful given that news media and safety education narratives frequently portray pedestrian victims as responsible for pedestrian strikes—why should the consumer sacrifice protection for themselves and their own family to avoid injuring someone whose own misconduct puts them in harm's way? See Richard Florida, *How Media Coverage of Car Crashes Downplays the Role of Drivers*, BLOOMBERG CITYLAB (Dec. 10, 2019, 11:35 AM), <https://www.bloomberg.com/news/articles/2019-12-10/why-news-coverage-of-car-crashes-favors-drivers> [<https://perma.cc/69AR-2SVH>] (describing research showing news coverage of traffic violence “overwhelmingly . . . shift[s] blame onto pedestrians and cyclists . . .”).

<sup>69</sup> For example, pedestrian avoidance technologies are currently factored into IIHS safety ratings. However, the Acura RDX SUV received IIHS' highest rating, “Top Safety Pick+,” despite striking a child-sized mannequin at 20 mph. 2020 Acura RDX, INS. INST. FOR HIGHWAY SAFETY, <https://www.iihs.org/ratings/vehicle/acura/rdx-4-door-suv/2020> [<https://perma.cc/5DYQ-5Z7B>]. In addition, five out of six IIHS pedestrian-avoidance tests are conducted at twenty-five mph or below, even though collisions above thirty mph are responsible for five times as many pedestrian fatalities. GAO PEDESTRIAN REPORT, *supra* note 21, at 17, fig.7.

<sup>70</sup> *Command and Control*, *supra* note 60, at 173 (“NHTSA is now predominantly a provider of consumer safety information (NCAP), an enforcer of implied warranties (product recalls), a codifier of industry practice, a broker of voluntary agreements, and a promoter of best practices and guidelines.”).

<sup>71</sup> GAO PEDESTRIAN REPORT, *supra* note 21, at 39 (recommending that NHTSA document an evaluation plan, document the process for making changes to NCAP, and decide whether to include pedestrian safety tests in NCAP).

in the current Code of Federal Regulations to show for it. Indeed, the day the first Ford Explorer rolled off the line at Louisville Assembly in 1990 to kick off the SUV boom, NHTSA had fifteen years' worth of research on pedestrian impacts and crash compatibility to predict the exact threats the new model would pose. Federal regulators' failure to act allowed an obvious problem to fester into a full-blown crisis.

### A. Setting Safety Standards

Before exploring in detail the twin histories of pedestrian-safety and crash-incompatibility standards, it is worth tracing briefly the general trajectory of rulemaking within NHTSA. After all, this Comment is far from the first to point out that our auto safety regime has fallen short of its founding vision.<sup>72</sup>

In their seminal book *The Struggle for Auto Safety*, Jerry Mashaw and David Harfst explore a theory of legal culture in the administrative state using the history of NHTSA as a backdrop.<sup>73</sup> Looking primarily at the two policy-making tools created by the original MVSA—recalls and the FMVSS—the authors trace the decline of significant rulemaking at NHTSA from its inception to the late 1980s, accompanied by a corresponding expansion of recall activity.<sup>74</sup> Following a brief era of rulemaking productivity between 1966 and 1974, the authors contend that NHTSA abandoned rulemaking in the face of judicial and congressional hostility.<sup>75</sup> At the same time, Congress and courts repeatedly upheld and expanded NHTSA's recall authority.<sup>76</sup> Mashaw and Harfst diagnose this trend as the result of an American legal culture that strongly disfavors broad-stroke, forward-looking rules (like the FMVSS) compared to case-by-case, retroactive adjudications (like recalls).<sup>77</sup> Though sweeping in its coverage, neither *The Struggle for Auto Safety* nor the

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<sup>72</sup> See, e.g., Sarah C. Bronin, *Rules of the Road: The Struggle for Safety & the Unmet Promise of Federalism*, 106 IOWA L. REV. 2153, 2184 (2021) (describing the dominance of NHTSA in auto-design regulation as a failure of federalism); Gregory H. Shill, *Should Law Subsidize Driving?* 95 N.Y.U. L. REV. 498, 564 (2020) (noting how lax safety regulations act as an indirect subsidy for automobility).

<sup>73</sup> THE STRUGGLE FOR AUTO SAFETY, *supra* note 53.

<sup>74</sup> *Id.* at 10-12.

<sup>75</sup> See *id.* at 11-12 (describing the productive years); *id.* at 95-103 (describing the impact of judicial review); *id.* at 131-140 (describing Congress' repudiation of NHTSA's ignition interlock standard). But see LEE VINSEL, MOVING VIOLATIONS: AUTOMOBILES, EXPERTS, AND REGULATIONS IN THE UNITED STATES 129-48 (2019) (examining the interior protection standard and concluding that NHTSA was "from the beginning, weak and unable to push safety technologies forward"). By the Reagan administration, rulemaking was enthusiastically abandoned in the name of deregulation. THE STRUGGLE FOR AUTO SAFETY at 11; see also MARISSA MARTINO GOLDEN, WHAT MOTIVATES BUREAUCRATS? POLITICS AND ADMINISTRATION DURING THE REAGAN YEARS 42-44, 46 (2000) (describing attempts to derail rulemaking under Reagan).

<sup>76</sup> See THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 110 (describing Congressional expansion of recall authority in 1974); *id.* at 149-56 (describing courts' approval of NHTSA recalls).

<sup>77</sup> *Id.* at 24-25 (describing their theory of legal culture).



authors' 2017 follow-up article<sup>78</sup> are comprehensive: Pedestrians are almost completely absent from their narrative, and vehicle incompatibility receives only passing mention.

The extent and significance of this alleged retreat from rulemaking has also been disputed.<sup>79</sup> And whatever the quantitative scope of rulemaking activity, it is incontrovertible that *some* significant rules have been issued since the 1970s. In 1984, in the middle of Mashaw and Harfst's "ice age" of rulemaking, NHTSA issued a monumental rule on airbags and automated seatbelts.<sup>80</sup> And since the 1980s, NHTSA has promulgated and revised standards on a regular basis, often at Congressional insistence. A half-dozen transportation omnibus bills—ISTEA, TREAD, KTSA, SAFETEA-LU, and MAP-21—have resulted in new or revised standards on everything from the aforementioned ESC requirement to power-window switches.<sup>81</sup> Everything, of course, but pedestrian impact protection or crash compatibility.

Whatever the merits of Mashaw and Harfst's thesis, it is clear that rulemaking has continued in some areas, while the most significant externalized threats posed by the light-truck boom have gone unaddressed. According to NHTSA's own analyses of the lifesaving impact of rulemaking, FMVSS-mandated design and technology changes have saved the lives of more than 600,000 car and light-truck occupants from 1960 to 2012, but fewer than 3,000 pedestrian, cyclist and motorcyclist lives combined.<sup>82</sup>

This trend defies explanation solely by reference to broad rulemaking trends. Nor is this a plausible result of lack of knowledge of the dangers or lack of foresight on the part of NHTSA regulators; light trucks did not

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<sup>78</sup> *Command and Control*, *supra* note 60.

<sup>79</sup> See *Justice Denied: Rules Delayed on Auto Safety and Mental Health*, Hearing Before the Subcomm. on Oversight, Fed. Rights & Agency Action, 113th Cong. 24-25 (2013) (testimony of Cary Coglianese, Professor of Law, University of Pennsylvania) (arguing that Mashaw and Harfst's claims have "little empirical support"). But see *Command and Control*, *supra* note 60, at 182-85 (citing data showing that the most substantial safety standards in terms of cost and weight imposed and lives saved were all rules in effect in 1974 or modifications of rules in effect in 1974).

<sup>80</sup> See THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 209-211 (discussing the final rule issued on July 17, 1984 related to seat belts and airbags). This was only after the Supreme Court struck down NHTSA's attempt to completely withdraw the rule in *Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 34 (1983).

<sup>81</sup> See *Command and Control*, *supra* note 60, at 199-202, 214 (summarizing these statutes). Mashaw and Harfst describe this recent spate of rulemaking as a "co-regulatory rebound," suggesting that many standards are simply codifying industry practice. *Id.* at 216-17. Notably, however, the "co-regulatory rebound" failed to result in the codification into the FMVSS of the industry's voluntary crash-compatibility standards.

<sup>82</sup> CHARLES J. KAHANE, U.S. DEP'T OF TRANSP., DOT HS 812 069, LIVES SAVED BY VEHICLE SAFETY TECHNOLOGIES AND ASSOCIATED FEDERAL MOTOR VEHICLE SAFETY STANDARDS, 1960 TO 2012: PASSENGER CARS AND LTVS, at xxxii-xxxiii (2015).

emerge without warning in the 1990s.<sup>83</sup> And as the following sections show, NHTSA has conducted extensive research over five decades on pedestrian safety and incompatibility; by the mid-1970s, the agency was well aware of the role that vehicle height and weight play in those externalized threats.

### B. Pedestrian Safety

Perhaps surprisingly, pedestrian safety was a fairly visible part of the auto-safety movement that culminated in the Motor Vehicle Safety Act. No less than Ralph Nader—herald of the auto-safety movement, responsible more than any other individual for the Act’s passage—latched on to pedestrian safety in his multi-front assault on the automotive industry.<sup>84</sup> Particularly critical of automakers’ elevation of styling over safety, in *Unsafe at Any Speed* Nader zeroed in on the decorative excess of Detroit, recounting grisly tales of inattentive cyclists impaled on Cadillac tailfins.<sup>85</sup>

This approach, focused on ornaments and styling rather than hood height and mass, would be the near-exclusive focus of pedestrian safety for regulators over the next ten years.<sup>86</sup> Among the first twenty standards issued under the new act was FMVSS 211, which prohibited protruding wheel nuts and hubcaps that could injure pedestrians and cyclists.<sup>87</sup> Though no longer in force,<sup>88</sup> it remains the only safety standard ever directly addressed to pedestrian impact protection. On the heels of FMVSS 211, the Federal Highway Administration moved on to the next logical step, publishing in 1967 a proposed rule to ban all “decorative” protrusions hazardous to pedestrians.<sup>89</sup> When the newly-formed NHTSA issued its first comprehensive rulemaking plan in 1971, it confidently predicted a pedestrian-protection rule on exterior projections by the end

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<sup>83</sup> Light trucks represented 15% of the market as early as 1971, rising to 31% by 1988. U.S. GEN. ACCT. OFF., GAO/RCED-90-56, MOTOR VEHICLE SAFETY: PASSIVE RESTRAINTS NEEDED TO MAKE LIGHT TRUCKS SAFER 2 (1989) [hereinafter 1989 GAO REPORT]. By the mid-1970s, at least six different automakers were offering SUVs: the Toyota Land Cruiser, Ford Bronco, IH Scout, Chevrolet Blazer (GM), Dodge Ramcharger (Chrysler) and Jeep Cherokee (AMC).

<sup>84</sup> RALPH NADER, UNSAFE AT ANY SPEED: THE DESIGNED-IN DANGERS OF THE AMERICAN AUTOMOBILE 221-25 (1965).

<sup>85</sup> *Id.*

<sup>86</sup> This is not to say that hood ornaments posed no danger to pedestrians, but focusing on a single styling element rather than a holistic look at crash kinematics is not sufficient to address the height and weight factors that drive pedestrian mortality.

<sup>87</sup> Initial Federal Motor Vehicle Safety Standards, 32 Fed. Reg. 2408, 2416 (Feb. 3, 1967) (codified at 23 C.F.R. pt. 255). These standards were issued by the U.S. Department of Commerce; the Department of Transportation would not be established until later that year.

<sup>88</sup> FMVSS No. 211 was rescinded in 1996 after NHTSA concluded it had not had any safety impact. Federal Motor Vehicle Safety Standards; Wheel Nuts, Wheel Discs, and Hub Caps, 61 Fed. Reg. 20,171, 20,172 (May 6, 1996) (codified at 49 C.F.R. pt. 571).

<sup>89</sup> Federal Motor Vehicle Safety Standards, 32 Fed. Reg. 20,865, 20,865-66 (proposed Dec. 28, 1967).

of 1972.<sup>90</sup> But that year, a pair of embarrassing losses before the Sixth and Seventh Circuits significantly disrupted the agency’s rulemaking plans, forcing NHTSA to drastically reassess its regulatory approach.<sup>91</sup>

The delay had a silver lining, however. In support of its rulemaking initiative, NHTSA had commissioned several research programs on pedestrian injury. While the research initially seemed to confirm the soundness of the ornament-focused approach,<sup>92</sup> a subsequent study published in 1975 highlighted for the first time the immense importance of vehicle height and weight in pedestrian strikes.<sup>93</sup> Using actual crash reports, lab tests on dummies, and computer models, the authors found among the “most significant injury causing parameters” were vehicle mass, vehicle height, and the ratio of vehicle height to pedestrian height; no reference to ornaments appears in their summary.<sup>94</sup> For perhaps the first time, NHTSA had a clear picture of pedestrian impact threats.

Written in the shadow of this research, NHTSA’s next rulemaking plan sets out a curious approach to pedestrian protection. In addition to a new pedestrian education and enforcement effort,<sup>95</sup> this 1978 plan presented two rulemaking paths.<sup>96</sup> First was a “near term” rulemaking goal, with a draft rule set to be finalized by the end of the year, targeted—unsurprisingly—at exterior projections.<sup>97</sup> Far more promising was the second goal, which proposed a comprehensive pedestrian impact rule designed to “attenuate severity of head impact,” covering both hoods and bumpers.<sup>98</sup> But in contrast

<sup>90</sup> See NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., DOT/HS 820-163, PROGRAM PLAN FOR MOTOR VEHICLE SAFETY STANDARDS at A-12 (1971).

<sup>91</sup> This story is detailed in THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 95-103 (noting the decisions left the 1971 plan and its comprehensive, performance-oriented approach “in a shambles” and drove NHTSA to focus on system-level rulemaking).

<sup>92</sup> TRANSP. RSCH. DEP’T, CORNELL AERONAUTICAL LAB’Y, RESEARCH IN IMPACT PROTECTION FOR PEDESTRIANS AND CYCLISTS 182 (1971) (finding that “it is obvious . . . that non-functional sharp-pointed objects” and “pointed edges of hoods and fender corners” should be eliminated from vehicle exterior design for safety-related purposes).

<sup>93</sup> HAYES E. ROSS, JR. RONALD D. YOUNG, ADIL M. MAYYASI & THOMAS A. KROUSKOP, DOT/HS 801-541, VEHICLE EXTERIORS AND PEDESTRIAN INJURY PREVENTION, VOLUME, 1, 4 (1975).

<sup>94</sup> *Id.*

<sup>95</sup> Five Year Plan for Motor Vehicle Safety and Fuel Economy Rulemaking, 43 Fed. Reg. 11,100, 11,105 (Mar. 16, 1978) [hereinafter 1978 Plan]. This approach has historically contributed to victim-blaming narratives and overpolicing of pedestrians. See ANGIE SCHMITT, RIGHT OF WAY: RACE, CLASS, AND THE SILENT EPIDEMIC OF PEDESTRIAN DEATHS IN AMERICA 49-52 (2020) (describing how safety officials, including NHTSA, “emphasize pedestrians’ safety responsibilities to an extreme degree while minimizing the responsibilities of drivers”); *id.* at 66 (noting that criminalization of pedestrians has led to racially-biased enforcement).

<sup>96</sup> 1978 Plan, *supra* note 95, at 11,102. Ironically, the plan’s discussion of pedestrian safety is inserted directly below a paragraph highlighting an “enormous increase” in light-truck use.

<sup>97</sup> *Id.* at 11,102, 11,1104.

<sup>98</sup> NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., APPENDICES TO THE NHTSA MOTOR VEHICLE SAFETY RULEMAKING PLAN 54 (1978) [hereinafter 1978 PLAN APPENDIX].

to the short timeline of the protrusion standard, this approach—the only one conceivably able to address the kinematics of pedestrian strikes—had no specific deadlines or concrete milestones. Instead, it was relegated to “exploratory rulemaking” with a rulemaking schedule “to be determined.”<sup>99</sup> Ultimately, neither approach saw any meaningful progress under the Carter administration. The vague “[e]xploratory [r]ulemaking” plan, perhaps predictably, bore no fruit.<sup>100</sup> And despite the 1978 target date for the hood ornament standard, by 1979 nothing had been published except a simple meeting notice announcing a hearing on the issue.<sup>101</sup> That meeting notice is the only entry ever to appear on the exterior protrusion rulemaking docket; after 1979, NHTSA effectively abandoned the protrusion rule to focus its efforts on occupant protection.<sup>102</sup>

If the 1978 plan’s approach seems incongruous, obvious explanations are elusive. Industry capture appears unlikely. The plan was issued under President Carter’s new administrator, Joan Claybrook. Not only was Claybrook a longtime associate of Ralph Nader and ardent safety partisan, she had worked on the MVSA as a congressional intern and had served as an assistant to NHTSA’s first administrator.<sup>103</sup> Neither can the fate of the vaguely worded comprehensive standard under the Reagan administration be handily explained by reference to deregulatory ideology. In the face of the incoming administration’s scorched-earth approach, which saw more than a dozen pending safety standards abandoned,<sup>104</sup> the comprehensive standard survived.<sup>105</sup>

1981 saw the first fruit of Claybrook’s plan, in the form of a new proposed rule.<sup>106</sup> It is the most recent NPRM on pedestrian impact protection that NHTSA has issued to date. It is now forty years old. Like the 1978 plan, this NPRM set forth a two-pronged approach to pedestrian protection. For the near term, it proposed a “soft bumper” standard for front ends that would

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<sup>99</sup> *Id.* at 38, 54.

<sup>100</sup> *Id.* at 38.

<sup>101</sup> Notice of Public Meeting, 44 Fed. Reg. 51,623 (Sept. 4, 1979).

<sup>102</sup> In a recent interview, then-Administrator Joan Claybrook describes her decision to focus on airbags and side impact protection instead of hood ornaments, noting that she sent an “unofficial letter” to industry leaders asking them to address it on their own. Kea Wilson, *The Auto Industry Went Berserk: Five Questions with Joan Claybrook, Former Head of NHTSA*, STREETS BLOG USA (Oct. 16, 2020), <https://usa.streetsblog.org/2020/10/16/the-auto-industry-went-beserk-five-questions-with-joan-claybrook-former-head-of-nhtsa> [<https://perma.cc/349C-S5AP>].

<sup>103</sup> THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 58, 194.

<sup>104</sup> OFF. OF THE PRESS SEC’Y, THE WHITE HOUSE, ACTIONS TO HELP THE U.S. AUTO INDUSTRY, 41-57 (1981) (listing seventeen deregulatory actions planned by NHTSA).

<sup>105</sup> U.S. REGUL. COUNCIL, THE AUTOMOBILE CALENDAR: RECENT AND PENDING FEDERAL ACTIVITIES AFFECTING MOTOR VEHICLES 309-11 (1981) (describing ongoing efforts to establish a pedestrian protection standard).

<sup>106</sup> See Federal Motor Vehicle Safety Standards; Pedestrian Impact Protection, 46 Fed. Reg. 7,015 (proposed Jan. 22, 1981) (to be codified at 49 C.F.R. pt. 571).

address lower-body impact injuries.<sup>107</sup> In contrast, deadly upper-body injuries were again relegated to future rulemaking—despite NHTSA’s acknowledgment that “vast amounts of data from numerous tests and studies” supported a standard.<sup>108</sup> But efforts to address pedestrian safety stalled yet again. By the end of Reagan’s second term, no progress had been made on the proposed soft bumper rule, let alone an upper-body standard.<sup>109</sup> In a now-familiar pattern, the 1988 NHTSA Status Report once again proposed a multi-year research program to support a pedestrian-impact protection standard, even as it acknowledged the mountain of research showing “significant safety improvement” from redesigned vehicle front-ends.<sup>110</sup>

Finally, in 1991—one year after the debut of the Ford Explorer<sup>111</sup>—NHTSA officially terminated the 1981 rulemaking, ending the agency’s last concrete attempt at a pedestrian-impact protection rule.<sup>112</sup> Justifying the action, NHTSA noted that the passenger-car fleet had shifted dramatically over the past decade as full-size, steel-bodied sedans of the late 1970s were replaced with light-weight, low-profile compact cars; because these cars posed far less danger to pedestrians, NHTSA concluded that the leg injury rule would be ineffective.<sup>113</sup> Notably absent from the five-paragraph explanation is any mention of light trucks, by then a rapidly-growing segment of the market that embodied the same pedestrian dangers the agency had been studying for the preceding fifteen years. Although the rulemaking was terminated, the agency promised that the long-term upper body standard was still under consideration; “ongoing research” might one day support a rule.<sup>114</sup>

Since 1991, NHTSA has continued to drag its feet in a predictable pattern. Despite being a lead signatory to a 1998 UN agreement on globalized auto-safety regulations, NHTSA has made no significant progress

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<sup>107</sup> *Id.*

<sup>108</sup> *Id.* at 46 Fed. Reg. 7019.

<sup>109</sup> In contrast, NHTSA’s proposal to require a third brake light on all automobiles—the “[C]enter [H]igh-[M]ounted [S]toplamp” rule—was issued just two weeks before the soft bumper NPRM and had already been promulgated as a final rule by 1983. Federal Motor Vehicle Safety Standards; Lamps, Reflective Devices, and Associated Equipment, 46 Fed. Reg. 2132 (proposed Jan. 8, 1981); Federal Motor Vehicle Safety Standards; Lamps, Reflective Devices, and Associated Equipment, 48 Fed. Reg. 48,235 (Oct. 18, 1983) (codified at 49 C.F.R. pt. 571.108).

<sup>110</sup> NAT’L HIGHWAY TRAFFIC SAFETY ADMIN, STATUS REPORT ON PRIORITY PROGRAMS 50, 51 (1988) [hereinafter 1988 STATUS REPORT] (describing the results of recent research and the agency’s “consolidated, 3-5 year research program plan”). The report also reflects the agency’s increasing emphasis on “pedestrian safety outreach”—an approach that has contributed to overpolicing pedestrians and blaming them for their own deaths. *Id.* at 51; *see also* SCHMITT, *supra* note 95, at 49-52 (describing the perpetuation of victim-blaming narratives).

<sup>111</sup> Voelk, *supra* note 24

<sup>112</sup> Notice of Termination of Rulemaking, 56 Fed. Reg. 14,495, 14,495-96 (Apr. 10, 1991).

<sup>113</sup> *See id.* at 14,496 (comparing the 1978 Pontiac LeMans with the 1984 Mazda 626).

<sup>114</sup> *Id.*

on adopting the resulting international standard for pedestrian impact protection known as Global Technical Regulation 9 (GTR-9).<sup>115</sup> More than a decade after GTR-9 was first written, and despite successful adoption in the EU, Japan, and elsewhere, NHTSA has yet to issue even an advanced rulemaking notice on incorporating the standard.<sup>116</sup> In successive priority plans issued between 2009 and 2015, NHTSA repeatedly indicated its intent to begin rulemaking on GTR-9, but each new plan delayed the rulemaking timeline further.<sup>117</sup> And just last year, NHTSA confirmed to GAO officials that it still had not initiated any rulemaking.<sup>118</sup> Unsurprisingly, the agency contended that additional data was required and touted a new pedestrian safety research program.<sup>119</sup>

The story outlined in this section is one of endless rounds of research and re-research, missed deadlines, and narrow, equipment-specific visions of pedestrian protection in the face of clear evidence of the holistic nature of the threat and its relationship to vehicle height and weight. Moreover, at no point in their rulemaking discussions did NHTSA even acknowledge any racial or socioeconomic disparity in pedestrian fatalities. But far from being an isolated series of missteps, the next section shows that the story of the pedestrian-impact standards embodies the problematic approach that federal auto-safety regulators have taken to *any* externally-facing safety threat.

### C. Crash Compatibility

In contrast to pedestrian safety, issues of crash compatibility did not feature significantly in the discussions surrounding the enactment of the Motor Vehicle Safety Act.<sup>120</sup> Within ten years, however, NHTSA would gain a full picture of the outsized dangers in mismatched vehicle collisions. But as with pedestrian impacts, the next three decades passed without meaningful progress.

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<sup>115</sup> United Nations Econ. Comm'n for Europe, Global Technical Regulation No. 9: Pedestrian Safety, ECE/TRANS/180/Add.9 (Nov. 12, 2008).

<sup>116</sup> See World Health Organization [WHO], *Global Status Report on Road Safety 2018*, at 281, 398-403 tbl.A12 (2018) (listing countries that have adopted GTR-9).

<sup>117</sup> NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., NHTSA VEHICLE SAFETY RULEMAKING AND RESEARCH PRIORITY PLAN 2009–2011, 16-17 (2009) (targeting an ANPRM by 2009); NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., VEHICLE SAFETY RULEMAKING AND RESEARCH PRIORITY PLAN 2010–13, 18 (2010) (targeting an NPRM by 2011); NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., OVERVIEW OF NHTSA PRIORITY PLAN FOR VEHICLE SAFETY AND FUEL ECONOMY, 2015 TO 2017, 12 (2015) (targeting an NPRM by 2016).

<sup>118</sup> See GAO PEDESTRIAN REPORT, *supra* note 21, at 10.

<sup>119</sup> *Id.* at 18-22 (identifying data limitations and discussing a pilot program for new data collection procedures for pedestrian fatality reporting).

<sup>120</sup> This is likely due to the relative homogeneity of the passenger car fleet of the mid-1960s, which was dominated by full-size, V8 sedans and station wagons. See JAMES J. FLINK, *THE AUTOMOBILE AGE* 283-87 (1990) (describing the increasing size and engine power of domestic automobiles and contemporary dissatisfaction with the “dinosaur in the driveway”).

Crash compatibility first gained visibility in the wake of the energy crisis of the early 1970s, which dramatically reshaped the landscape of the auto market as efficient compact cars flooded roadways previously dominated by large, V8 sedans.<sup>121</sup> It did not take long for the implications of this newfound fleet diversity to catch the attention of safety regulators. Testimony before the 1974 Senate Commerce Committee oversight hearing on NHTSA laid out in unequivocal terms both the coming danger of crash incompatibility and the required solution.<sup>122</sup> “If we have a system of small cars and then introduce larger cars into this system,” testified Dr. Patrick Miller, a leading traffic safety researcher, “the result is greater safety for the occupants of the larger cars . . . at the expense of less safety for the occupants of the smaller cars.”<sup>123</sup> According to the Volkswagen R&D chief, this threat required new regulations for crash compatibility to avoid both “unfair” safety penalties on small cars and to make sure that larger automobiles did their “share” in managing impact energies.<sup>124</sup> NHTSA’s own research soon confirmed this message; as one 1974 study concluded, the higher rates of injury in smaller cars required that “efforts be made to reduce the aggressiveness practiced by large cars.”<sup>125</sup> From the 1980s to the early 2000s, a steady stream of crash compatibility research would solidify and reinforce the risk disparity, time and again, as the compatibility risk evolved from sedan-on-subcompact crashes to light-truck-on-car crashes.<sup>126</sup>

NHTSA’s early rulemaking plans followed the research, at least to an extent, and crash compatibility first made an appearance in the 1978 Program Plan. Describing the agency’s rulemaking priorities, the plan acknowledged that the “enormous increase in the use of [light trucks] in lieu of conventional passenger cars” had created new safety risks.<sup>127</sup> But as with the comprehensive

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<sup>121</sup> See *id.* at 389-90 (noting high demand for smaller cars and significant downsizing efforts by domestic automakers); Valerie A. Ramey & Daniel J. Vine, *Oil, Automobiles and the U.S. Economy: How Much Have Things Really Changed?* in 25 NBER MACROECONOMICS ANN. 333, 352 fig.8a (2011) (providing data on this shift).

<sup>122</sup> *Second Session on Motor Vehicle Safety Oversight, Hearing Before the S. Comm. on Com.*, 93d Cong. 6-17 (1974) (statement of Dr. Patrick M. Miller, Head of Structural Dynamics Section, Calspan Corporation); *id.* at 248 (statement of Ernst Fialla, Board of Managements, Volkswagenwerk).

<sup>123</sup> *Id.* at 8 (statement of Patrick M. Miller, Head of Structural Dynamics Section, Calspan Corporation).

<sup>124</sup> *Id.* at 248 (statement of Ernst Fialla, Board of Managements, Volkswagenwerk).

<sup>125</sup> Jerome M. Kossar, *Big and Little Car Compatibility*, in FIFTH INTERNATIONAL TECHNICAL CONFERENCE ON EXPERIMENTAL SAFETY VEHICLES 620, 620 (Nat’l Highway Traffic Safety Admin. ed. 1974).

<sup>126</sup> See PUBLIC CITIZEN, AGGRESSIVITY AND VEHICLE COMPATIBILITY – THREE DECADES OF RESEARCH: GROWING KNOWLEDGE REQUIRES GOVERNMENT ACTION 1 (providing a timeline of crash incompatibility research from the 1970s to the mid-2000s).

<sup>127</sup> 1978 Plan, *supra* note 95, at 11,102. Within three years, the Ford F-150 pickup would become the best-selling vehicle in the country—a title held for four straight decades. Stephen Wilmot, *Cars Are Going Digital, but Detroit Has a Long Road Ahead*, WALL ST. J. (Nov. 27, 2020, 5:30 AM),

pedestrian impact protection standard, the aggressiveness issue was slated only for “exploratory rulemaking” with no definitive timeline.<sup>128</sup> Rather than the externalized risk of crash compatibility, it was the increased threat to light-truck *occupants* that captured NHTSA’s attention. At the time, many of the FMVSS applied only to passenger cars, not light trucks, and the agency emphasized the increasing number of preventable light-truck occupant fatalities.<sup>129</sup> Rising to the challenge, the 1978 plan proposed extending the existing passenger-car occupant-protection standards in the “near future” to cover light trucks.<sup>130</sup> And unlike the abortive plans on crash compatibility (and pedestrian protection, for that matter), the agency stuck to the task: Over the next decade, nine different passenger-car standards were extended to cover light trucks.<sup>131</sup>

Despite clear evidence of the crash-compatibility risk posed by a growing light-truck segment,<sup>132</sup> the issue essentially disappeared from NHTSA’s regulatory agenda until the late 1990s. In its 1988 status report, NHTSA devoted an entire category to “light truck safety,” highlighting its recent work universalizing the FMVSS, but made no mention anywhere of crash compatibility.<sup>133</sup> Nor is it discussed in a 1990 report to Congress specifically focused on light-truck safety;<sup>134</sup> two years later, fatalities in light-truck-on-car collisions would surpass car-on-car collision fatalities for the first time.<sup>135</sup> Only in 1998 did NHTSA issue a brief report, published on the agency’s new website, highlighting light-truck aggressiveness as a safety issue; but once

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<https://www.wsj.com/articles/cars-are-going-digital-but-detroit-has-a-long-road-ahead-11606473031> [<https://perma.cc/BM9A-JTZT>].

<sup>128</sup> See 1978 Plan, *supra* note 95, at 11,105 (“Reduced aggressiveness of certain vehicles in vehicle-to-vehicle-crashes would be incorporated into [occupant-protection exploratory rulemaking.]”); see also 1978 PLAN APPENDIX, *supra* note 98 (describing the rulemaking schedule “to be determined”). Unsurprisingly, no further action is taken on this exploratory plan in the next two decades, despite the steady increase in light-truck sales.

<sup>129</sup> 1978 Plan, *supra* note 95, at 11,102. NHTSA specifically noted 25,000 light-truck-occupant fatalities in 1976; just one paragraph later, the agency acknowledged 7,000 pedestrian fatalities that same year. *Id.* Those numbers only highlight the contrast between NHTSA’s subsequent efforts to protect light-truck occupants and its inaction on the 1978 plan’s pedestrian safety goals (described *supra*).

<sup>130</sup> *Id.*

<sup>131</sup> See 1989 GAO REPORT, *supra* note 83, at 31 tbl.3.1 (listing the standards extended to light trucks between 1979 and 1989).

<sup>132</sup> NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., INITIATIVES TO ADDRESS VEHICLE COMPATIBILITY 8 (2003) (noting a “strong upward trend” in light-truck-on-car collision fatalities beginning in 1983).

<sup>133</sup> See 1988 STATUS REPORT, *supra* note 109, at 30-34.

<sup>134</sup> NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., SAFETY PROGRAMS FOR LIGHT TRUCKS AND SPORT UTILITY VEHICLES 2 (1990).

<sup>135</sup> NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., DOT HS 808 569, RELATIONSHIP OF VEHICLE WEIGHT TO FATALITY AND INJURY RISK IN MODEL YEAR 1985-93 PASSENGER CARS AND LIGHT TRUCKS 1 (1997).



more, no new rulemaking initiatives were suggested.<sup>136</sup> Within five years, the agency would be before Senator McCain's committee, describing the same issue the same committee had heard back in 1974.<sup>137</sup> Despite three decades of research, NHTSA still had no concrete plans to address compatibility.

As with pedestrian safety, NHTSA spent decades sitting on research and recommendations with nothing to show for it but a single vague, unfulfilled commitment to "exploratory rulemaking."<sup>138</sup> The aftermath of the hearings, described in the introduction, fit this now-familiar pattern. NHTSA and Congress have always been quickest to move to protect drivers from the negative consequences of their purchases, whether by extending FMVSS occupant-protection standards to light trucks or mandating stability-control systems to prevent rollovers.<sup>139</sup> But when it comes to the *externalities* that automobile buyers' choices impose on other groups, and the gender and economic disparities that ensue, regulators have been unable to address the issue in concrete terms, instead merely calling for research and making earnest but unfulfilled commitments.

#### D. Making Sense of Maladministration: Our Consumer Protection Obsession

A further examination of NHTSA's history suggests one factor that can explain not only why some regulations succeed while others spend decades in rulemaking purgatory, but why NHTSA has retreated from rulemaking in the first place. Since the passage of the MVSA, NHTSA, the White House, and Congress have all come to embrace a vision of auto safety that is essentially one of consumer protection. This vision exalts the interests of automobile owners in determining where, when, and how to address roadway-safety concerns, leaving those most threatened by consumers' choices unprotected.<sup>140</sup> The results speak for themselves. Every one of the forty-one Safety Standards currently applicable to cars and light trucks address either crash avoidance (benefitting those both inside and outside the vehicle) or occupant protection. Not one addresses purely external crash mitigation.

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<sup>136</sup> NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., OVERVIEW OF VEHICLE COMPATIBILITY/LTV ISSUES (1998), <https://icsw.nhtsa.gov/cars/problems/studies/LTV> [<https://perma.cc/Z3SE-MXC5>]. That year, a prescient report by NHTSA researchers concluded that "[c]ontinued growth in the number and weight of light trucks, unless offset by safety improvements, is likely to increase the hazard in collisions between the trucks and smaller road users" and noted that reducing light truck weight "is likely to generate significant benefits for pedestrians and car occupants" far beyond any additional risk to truck occupants. NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., *supra* note 135, at 4.

<sup>137</sup> See *supra* notes 1–10 and accompanying text.

<sup>138</sup> See *supra* note 128 and accompanying text.

<sup>139</sup> See *supra* notes 14–15, 129–31 and accompanying text.

<sup>140</sup> Of course, in the crash compatibility context, the victims are often themselves car owners; here, I distinguish between car owners generally and the purchaser of *the specific vehicle being regulated*.

Given the popular association of the MVSA with Nader, the notion that auto-safety regulation is influenced by consumer protection may seem obvious. However, the safety movement that culminated in the MVSA originated not in consumer protection, but in an epidemiological vision of roadway safety. Senator Abraham Ribicoff, whose 1965 hearings on auto safety laid the groundwork for the MVSA months before Nader entered the national picture, drew primarily on the work of epidemiologist William Haddon (who would go on to serve as the first NHTSA administrator) to paint roadway safety as a public health concern.<sup>141</sup> At the signing ceremony for the MVSA, President Johnson described roadway fatalities as a “raging epidemic,” comparable to polio and childhood disease, which the new act will set out to “cure.”<sup>142</sup> And the preamble to the Act itself makes no reference to consumers; rather, the stated purpose is simply “to reduce traffic accidents and deaths and injuries to persons resulting from traffic accidents.”<sup>143</sup>

The intervention of consumer-protection advocates like Nader into the extant epidemiological auto-safety approach was indispensable to the passage of the MVSA.<sup>144</sup> But the new activists brought with them a constrained vision of specifically *consumer* interests requiring government intervention.<sup>145</sup> In *Unsafe at Any Speed* these blind spots were readily apparent. Early in the book, Nader illustrated the consequences of a transmission defect with grisly anecdotes of drivers accidentally plowing through crowds of pedestrians and other bystanders.<sup>146</sup> Tellingly, however, his focus was on how those tragedies “trap[ped] the driver” and led to criminal prosecutions.<sup>147</sup> Any serious reflection on the consequences for non-occupant casualties is entirely absent. For the Naderite movement, the hapless driver/consumer was the chief victim of dangerous auto design, and consumerism defined the primary class of person whose interests required government intervention.<sup>148</sup>

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<sup>141</sup> THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 3, 51-52.

<sup>142</sup> *Remarks of the President at Signing of the Highway Safety Act and the Traffic Safety Act* (1966) in 1 NATIONAL TRAFFIC AND MOTOR VEHICLE SAFETY ACT OF 1966 LEGISLATIVE HISTORY 32-33 (1985).

<sup>143</sup> National Traffic and Motor Vehicle Safety Act of 1966, Pub. L. No. 89-563, 80 Stat. 718. As a result, Mashaw and Harfst classified NHTSA as a “health and safety” agency alongside OSHA and the EPA. THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 4.

<sup>144</sup> THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 53 (describing the publication of *Unsafe at Any Speed* as a turning point in the safety movement).

<sup>145</sup> This was a problem endemic to the third-wave consumer movement. LIZBETH COHEN, A CONSUMER’S REPUBLIC 386 (2003) (describing the “blurring of lines” between *citizens* and *consumers* in the third wave).

<sup>146</sup> NADER, *supra* note 84, at 56-57.

<sup>147</sup> *Id.* at 57.

<sup>148</sup> COHEN, *supra* note 145, at 386-87 (noting that “citizen” and “consumer” were used interchangeably in the third-wave movement and that the movement defined interests within increasingly granular subconstituencies). Indeed, it was Nader who first proposed that the MVSA

Following the passage of the MVSA and throughout the 1970s, repeated Congressional and executive intervention ensured that this consumer-centered approach would emerge as the dominant vision of auto safety. In 1972, the Motor Vehicle Information and Savings Act established the five mile-per-hour bumper standard (a measure intended to lower owners' repair bills, unrelated to any safety concern) and the consumer-education program that would eventually become NCAP.<sup>149</sup> The increasingly narrow vision was reflected in the text of the 1972 Act: NHTSA was required to publish information to consumers on the "crashworthiness" of specific automobile models, but "crashworthiness" was defined only as "the protection that a passenger motor vehicle affords *its passengers*."<sup>150</sup> Just two years later, Congress, acting in the name of consumers, finally laid to rest any epidemiological safety approach. The 1974 amendments to the MVSA were aimed squarely at NHTSA's recent rule mandating ignition interlocks, devices that prevented automobiles from starting until the seatbelt had been fastened.<sup>151</sup> At a time when only 25 to 30% of motorists wore seatbelts, the rule was clearly sound from a public-safety standpoint.<sup>152</sup> But when furious drivers flooded Congress with letters objecting to the mandate,<sup>153</sup> Congress responded to the outcry by repealing the interlock rule, providing consumers the freedom to purchase "exactly as much safety equipment as they wanted."<sup>154</sup> As if the consumer-centric message was not clear enough, the 1974 amendments also dramatically expanded NHTSA's recall authority by giving motorists the right to have defects repaired at no cost.<sup>155</sup> In the same breath, Congress both roundly rebuked NHTSA's epidemiological approach for inconveniencing consumers and foisted *more* consumer-protection responsibility on the agency to enforce implied warranties on behalf of consumers.

As described by historian Lisbeth Cohen, the broader consumer movement experienced a dramatic philosophical shift in the late 1970s, one that reduced the common ground between consumer advocates and epidemiologists. Increasingly, the movement brought a consumer mentality to citizens' relationship with the government itself—as "customers," they began to

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include the authority to enforce warranties by ordering the recall of defective vehicles. THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 57.

<sup>149</sup> Motor Vehicle Information and Cost Savings Act, Pub. L. No. 92-513, §§ 102(b), 201, 86 Stat. 947, 949, 956 (1972); *see also* 49 C.F.R. § 571.215 (1975) (setting the bumper standard at five miles per hour).

<sup>150</sup> Motor Vehicle Information and Cost Savings Act, § 2(14), 86 Stat. at 948 (emphasis added).

<sup>151</sup> Motor Vehicle and Schoolbus Safety Amendments of 1974, Pub. L. No. 93-492, sec. 109, § 125(b), 88 Stat. 1470, 1482.

<sup>152</sup> THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 85.

<sup>153</sup> *Id.* at 134.

<sup>154</sup> *Id.* at 135.

<sup>155</sup> Motor Vehicle and Schoolbus Safety Amendments of 1974, sec. 102, 88 Stat. at 1470-77; *see also* THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 110 (discussing the impact of this expanded authority).

evaluate government programs by the personal benefits they generated.<sup>156</sup> The Ford and Carter administrations embraced this shift, placing increasing emphasis on preventing “undue” regulatory costs on consumers.<sup>157</sup>

The most visible product of this shift was the increasing importance of cost–benefit analyses in NHTSA’s rulemaking initiatives. On the heels of a 1976 DOT-wide policy mandating cost–benefit analyses in all rulemaking, the Ford administration appointed John W. Snow, a USDOT deputy general counsel and part-time professor of cost–benefit analyses, as NHTSA administrator.<sup>158</sup> Snow immediately began incorporating cost–benefit analyses into the agency’s rulemaking process—despite the fact (as safety advocates in Congress pointed out) that the MVSA in no way mandated that safety standards generate more safety benefits than costs.<sup>159</sup> The cost–benefit requirement survived through the Carter administration and Snow’s eventual replacement by Nader protégé Joan Claybrook. Although personally opposed to cost–benefit analyses, Claybrook placed Snow’s deputy and chief cost–benefit analyst in charge of all rulemaking activity.<sup>160</sup> This requirement dramatically impacted the pace of rulemaking, creating, according to Mashaw and Harfst, a “reiterative, . . . ponderous rulemaking process.”<sup>161</sup> Indeed, stringent analysis requirements were a main technique used by succeeding administrations to delay and defeat rulemaking altogether.<sup>162</sup> Notably exempt from these onerous requirements was NHTSA’s recall program;<sup>163</sup> while costly to the automotive industry, it provided direct benefits to consumers in the form of free repairs on vehicles they had already purchased.

Beginning in the mid-1970s, NHTSA has been increasingly drawn to auto-safety solutions that impose the least burden on occupants and owners. Recalls covered at manufacturer expense, the NCAP consumer information

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<sup>156</sup> COHEN, *supra* note 145, at 397 (“[P]oliticians and their customer-voters were quick to reject what, in their view, yielded an inadequate personal return on their investment . . .”).

<sup>157</sup> *Id.* at 390, 393 (quoting Carter’s statement that deregulation would ensure consumers get a “better deal”). Momentum in the Ford administration culminated in President Carter’s executive order establishing an Office of Consumer Affairs to ensure that federal agencies responded to consumers’ demands and complaints. THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 166.

<sup>158</sup> THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 189–90.

<sup>159</sup> See *id.* at 191–94 (describing Snow’s strategy for justifying cost–benefit analyses); *Command and Control*, *supra* note 60, at 177 (“Congress made clear that safety was the overriding consideration. . . . Costs were to be secondary . . .”).

<sup>160</sup> See THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 196–97.

<sup>161</sup> *Command and Control*, *supra* note 60, at 181.

<sup>162</sup> GOLDEN, *supra* note 75, at 42–44, 46 (describing the use of cost–benefit analyses by NHTSA under Reagan).

<sup>163</sup> *Command and Control*, *supra* note 58, at 181. This is particularly surprising given that NHTSA itself requested that cost–benefit analysis be incorporated into the expanded 1974 recall authority—a proposal expressly rejected by Congress. THE STRUGGLE FOR AUTO SAFETY, *supra* note 53, at 114–15. As noted previously, there is still no evidence establishing any safety benefits from the recall program. See *supra* note 60 and accompanying text.

program, and the growing focus on education efforts to modify pedestrian behavior<sup>164</sup> all reflect a vision of road safety that centers the interests and preferences of automobile consumers. When rulemaking did happen, it was occupant-centric and almost exclusively served the interests of automobile owners.<sup>165</sup> This approach likely privileged whiter, wealthier, and male interests at the expense of the safety of other road users.

But for all the fluctuations of the consumer movement and shifts in safety policy, one of the more consequential elevation of consumer interests in auto safety was one cemented into the MVSA from the start. Although the MVSA provided for safety standards to ensure “the *public* is protected against unreasonable risk,”<sup>166</sup> and its rulemaking provision contained no specific mention of consumers, drivers, or occupants, it did require that any proposed standard be “appropriate for the particular type of motor vehicle . . . for which it is prescribed.”<sup>167</sup> Per the Senate report, this innocuous-seeming caveat was intended to ensure that rulemakers prioritized “affording consumers [a] wide range of choices” in the market—soon interpreted to mean that the standards could not be used to “eliminate” any particular type of vehicle, regardless of how dangerous it was.<sup>168</sup>

This emphasis on consumer protection came directly at the expense of NHTSA’s ability to set safety standards to address externalized dangers like pedestrian safety and crash compatibility. In order to “afford[] consumers [a] continued wide range of choices,” NHTSA was precluded from setting standards that might “eliminate” certain categories of vehicles.<sup>169</sup> To the extent the very traits of light trucks that create greater negative externalities are the same ones that define the category of vehicle (high ride height and large mass), NHTSA may struggle to effectively regulate those problems. At

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<sup>164</sup> See Fred Ranck, *Walk Alert: The New National Pedestrian Safety Program*, ITE J., Aug. 1989, at 37-38, 40 (describing NHTSA’s new program to “inform[] pedestrians of the measures they can take to protect themselves” and increase enforcement of pedestrian laws); *We Asked NHTSA to Rewrite the Pedestrian Safety Playbook*, AMERICA WALKS (Oct. 28, 2020), <https://americawalks.org/we-asked-nhtsa-to-rewrite-the-pedestrian-safety-playbook> [<https://perma.cc/9N3A-E8CD>] (criticizing NHTSA’s 2020 Pedestrian Safety Playbook for inappropriately focusing on modifying pedestrian behavior).

<sup>165</sup> Although the backup-camera requirement inserted in FMVSS 111 by the 2007 Cameron Gulbransen Kids Transportation Safety Act is nominally focused on non-occupant safety, the primary impetus was horror stories of SUV drivers running over their own children in the driveway. *Cameron Gulbransen*, KIDSANDCARS.ORG, [https://www.kidsandcars.org/child\\_story/cameron-gulbransen](https://www.kidsandcars.org/child_story/cameron-gulbransen) [<https://perma.cc/S2W6-G8TY>] (recounting the death of Cameron Gulbransen, namesake of the act, who was killed when his father reversed his SUV over him in the driveway of their home, and advocating for backup-camera legislation).

<sup>166</sup> National Traffic and Motor Vehicle Safety Act of 1966, Pub. L. No. 89-563, 80 Stat. 718 (codified as amended at 49 U.S.C. § 301).

<sup>167</sup> *Id.* at 80 Stat. at 719.

<sup>168</sup> *Chrysler Corp. v. Dep’t of Transp.*, 472 F.2d 659, 679 (6th Cir. 1972) (quoting S. REP. NO. 89-1301 (1966)).

<sup>169</sup> *Id.*

the same time, the increasing emphasis on recall actions left a large hole for vehicle designs with no specific “defects,” but which were nonetheless disproportionately dangerous. Finally, as NHTSA shifted emphasis from regulation<sup>170</sup> to consumer education through the NCAP program, market failures created by consumer self-interest in selecting light trucks went entirely unchecked. Although the consumer-protectionist approach has undoubtedly improved road safety in some respects, it left an Explorer-sized blind spot for automobiles that offered improved occupant protection but greater risks for those outside the vehicle.

#### IV. THE ROAD AHEAD: AUTO SAFETY AS TRANSPORTATION JUSTICE

Consumer-oriented policies—from a mandate to maintain diversity of consumer choice, to rigorous rulemaking analysis requirements to minimize costs to consumers, to the increasing emphasis on consumer education and recalls over rulemaking—have all worked to frustrate any attempts to regulate for either pedestrian protection or crash incompatibility. Today, in the face of the light-truck crisis, it is clear that the fifty-year-old framework through which Congress and NHTSA have viewed auto safety has never been adequate to meaningfully address externalized harms. At the same time, the alarming disparate impacts that these externalized dangers create for women, low-income communities, and people of color demand urgent intervention to ensure that our transportation system does not compound existing inequalities. A new vision of auto safety, grounded in long-standing principles of transportation justice, is required to empower NHTSA to address the light-truck crisis. Fortunately, a rich literature from the transportation-planning field is available to inform those efforts, and NHTSA’s sister agencies within USDOT have already implemented these policies to varying degrees. However, NHTSA may be unable or unwilling to implement this vision on its own; Congressional intervention, perhaps even to the point of amending the MVSA, may be necessary.

##### *A. Defining Transportation Justice*

Transportation justice aims to answer the normative questions faced by transportation policymakers, which frequently require difficult trade-offs among competing interests, by reference to philosophical principles of

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<sup>170</sup> Except to the extent that the light-truck category created unique risks for owners, as with rollovers and child back-overs; in such cases, NHTSA and Congress moved swiftly to address them through rulemaking.

justice.<sup>171</sup> Transportation justice theory covers a diverse body of thought, including both substantive and procedural theories,<sup>172</sup> but holds as a core principle the equitable distribution of the benefits and burdens of transportation systems. Whether drawing from John Rawls and Amartya Sen,<sup>173</sup> Ronald Dworkin,<sup>174</sup> or Henri Lefebvre,<sup>175</sup> transportation justice theorists generally subscribe to a distributive equity theory that allocates resources (either concrete resources like funding or abstract concepts like “accessibility”) in ways that reduce inequality,<sup>176</sup> and are roundly critical of utilitarian principles such as those that seek only to maximize efficient movement.<sup>177</sup> Although these theorists are primarily writing in the context of transit planning and investment, the principle of equitable distribution of transportation’s benefits and burdens applies as much to auto safety as it does to highway design.<sup>178</sup> Indeed, transportation justice serves the same objectives in either context: a segment of the automobile fleet that disproportionately subjects low-income and minority people to traffic violence represents just as

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<sup>171</sup> See KAREL MARTENS, *TRANSPORT JUSTICE: DESIGNING FAIR TRANSPORTATION SYSTEMS 5-7* (2017) (noting “the inevitable political choices and trade-offs that have to be made in transportation planning and policy” and arguing that such choices cannot be made “without reverting to notions of justice and fairness”).

<sup>172</sup> *Id.* at 8, fig. 1.1.

<sup>173</sup> Rafael H. M. Pereira, Tim Schwanen & David Banister, *Distributive Justice and Equity in Transportation*, 37 *TRANSP. REVS.* 170, 184-86(2016) (proposing an ethical perspective drawing on John Rawls’s theory of egalitarianism and Amartya Sen’s “capabilities” approach to achieve fair distribution of transportation investments).

<sup>174</sup> MARTENS, *supra* note 171, at 13-14.

<sup>175</sup> MIMI SHELLER, *MOBILITY JUSTICE: THE POLITICS OF MOVEMENT IN AN AGE OF EXTREMES* 36 (2018).

<sup>176</sup> See MARTENS, *supra* note 171, at 14 (advocating for a transportation system that provides “all persons with a sufficient level of accessibility”); Pereira et al., *supra* note 164, at 184 (“[A] transport policy is fair if it distributes transport investments and services in ways that reduces inequality of opportunity.”); SHELLER, *supra* note 175, at 35 (incorporating distributive justice among other concepts). Other aspects of these theories do not translate as neatly to the auto-safety context: Martens, for example, centers the concept of “accessibility” in his vision of transportation justice—a relevant consideration for infrastructure planning and investment, but less so in the context of NHTSA’s mission to regulate the vehicles within that system. MARTENS, *supra* note 171, at 26-27 (describing Martens’ theory). Likewise, Sheller’s theory of “mobility justice” goes beyond the scale of national and regional planning to consider mobility in a global context; although an essential lens, it similarly goes beyond the scope of NHTSA’s mandate. See SHELLER, *supra* note 175, at 44 (outlining a theory incorporating migration, tourism, and climate justice issues).

<sup>177</sup> See SHELLER, *supra* note 175, at 23-24 (explaining how utility-maximizing approaches reproduce unequal power structures).

<sup>178</sup> Sheller in fact criticizes Pereira’s concept of distributive equity as unduly limited, noting that distributive justice should not only include the means of transport and access to mobility, but also “the equitable distribution of the risks . . . and possible harms associated with mobility infrastructures [including] crashes,” since “poor and vulnerable populations . . . experience . . . the greatest exposure to harm, injury and death from unjust mobility systems.” *Id.* at 26 (noting pedestrian fatalities specifically).

much of an inequitable limitation on mobility rights as a municipal government that underfunds bus routes in poor neighborhoods.

According to transportation justice principles, NHTSA would prioritize rulemaking initiatives designed to correct the inequitable burdens imposed by light trucks, even at the expense of benefits like diversity of consumer choice and owner-occupant protection—benefits that currently flow to more privileged groups. In many ways, this would represent a complete reversal from the existing approach: When NHTSA (at Congress’s insistence) promulgates ESC requirements protecting light-truck consumers from one of the few negative consequences of their purchase while ignoring crash compatibility and pedestrian safety, they not only allow the disadvantaged to continue to bear a disproportionate burden, but actively ensure that the benefits of auto-safety regulations accrue to wealthier, whiter road users. Indeed, the cost–benefit analysis, a cornerstone of the consumerist vision, is often diametrically opposed to distributional justice principles.<sup>179</sup>

### B. Transportation Justice in the Federal Government

The strength of any proposal depends as much on its practical viability as it does on the moral force of its arguments, and it might be easy to dismiss this fundamental reorientation of our auto-safety regime along transportation justice principles as utopianism. This would be a mistake: If anything, this proposal would harmonize NHTSA’s regulatory approach with those of its sister agencies within USDOT. As this Section outlines, shades of transportation justice principles have been gaining momentum within USDOT for decades, and such a shift at NHTSA would promote a unified, equity-oriented approach to federal surface transportation policy.

Distributional equity principles first appeared in USDOT’s 1970 regulations implementing Title VI, which not only prohibit racial discrimination but *require* funding recipients to take race-conscious affirmative action to address prior inequitable distributions of benefits.<sup>180</sup> And after President Clinton’s 1994 executive order on environmental justice

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<sup>179</sup> SHELLER, *supra* note 175, at 23–24 (noting how cost–benefit analyses in transit planning can reproduce inequality by valuing the movement efficiency of wealthy people more); Daniel Hemel, *Regulation and Redistribution with Lives in the Balance*, U. CHI. L. REV. (forthcoming 2021) (manuscript at 3–4) (explaining that traditional cost–benefit analyses accord the same weight to a dollar in the hands of both Jeff Bezos and someone below the poverty line and exploring the difficulties with conducting distributively weighted cost–benefit analyses).

<sup>180</sup> 49 C.F.R. § 21.5(a), (b)(7) (1970) (“This part does not prohibit the consideration of race [to remedy discriminatory practices] . . . Where prior discriminatory practice or usage tends . . . to deny [individuals] the benefits of [the recipient’s programs, the recipient must] take affirmative action to remove or overcome the effects . . .”).



expanded protections to low-income communities,<sup>181</sup> both USDOT and the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) each issued agency orders aimed at addressing disproportionate burdens on minority and low-income populations.<sup>182</sup> In addition, FTA has promulgated extensive guidelines on reporting requirements for funding recipients,<sup>183</sup> including a requirement to conduct equity analyses, to ensure that equity goals are met.<sup>184</sup> Several transportation justice scholars have read these intersecting orders and guidelines as implicitly or explicitly embodying distributional justice principles.<sup>185</sup> And at least one DOT component agency, the FTA, has been willing to take administrative action under these regulations to enforce distributive justice principles.<sup>186</sup>

With the two largest surface transportation operating agencies<sup>187</sup> and the USDOT itself incorporating distributive-justice principles to various degrees, the dissonance of NHTSA's regulatory approach is apparent. Not only has

<sup>181</sup> Exec. Order No. 12898, 59 Fed. Reg. 7629 (Feb. 11, 1994). *See also* Karel Martens & Aaron Golub, *A Fair Distribution of Accessibility: Interpreting Civil Rights Regulations for Regional Transportation Plans*, J. PLAN. EDUC. & RES., Sept. 2018, at 5 (noting that the executive order “effectively expanded the definition of ‘protected classes’ of the Civil Rights Act to include low-income populations . . .”).

<sup>182</sup> Richard A. Marcantonio, Aaron Golub, Alex Karner & Louise Nelson, *Confronting Inequality in Metropolitan Regions*, 44 FORDHAM URB. L. REV. 1017, 1047-48 (2017). The executive order itself can be even read to require equitable distribution of benefits and burdens. Martens & Golub *supra* note 181 at 5.

<sup>183</sup> FED. TRANSIT ADMIN., U.S. DEP'T OF TRANSP., CIRCULAR 4702.1B, TITLE VI REQUIREMENTS AND GUIDELINES FOR FEDERAL TRANSIT ADMINISTRATION RECIPIENTS (2012).

<sup>184</sup> *Id.* at ch. VI-1 to VI-2. *See* TRANSIT COOP. RSCH. PROGRAM, TRANSP. RESEARCH BD., TCRP RESEARCH REPORT 214, EQUITY ANALYSIS IN REGIONAL TRANSPORTATION PLANNING PROCESSES 4 (2020) (identifying the Title VI Circular as the source of the Equity Analysis requirement).

<sup>185</sup> Marcantonio et al., *supra* note 182, at 1056 (noting that the Title VI and Environmental Justice requirements “share the same fundamental purpose . . . to ensure that [protected minority and low-income groups] receive an equitable distribution of benefits without bearing an unfair share of burdens”); *see also* Martens & Golub, *supra* note 181, at 6-7 (analyzing the various agency orders and guidance documents to extract possible normative standards of distributional justice).

<sup>186</sup> Marcantonio et al., *supra* note 182, at 1053-55 (describing the FTA's administrative enforcement action to withdraw federal funding from the San Francisco-area Metropolitan Planning Organization over its plan that removed transit stops in working-class minority neighborhoods on a proposed airport shuttle route).

<sup>187</sup> U.S. DEP'T OF TRANSP., TRANSFORMING COMMUNITIES IN THE 21ST CENTURY 4-5 (2017) (listing the budgets of all DOT component agencies; besides the Federal Aviation Administration, FHWA and FTA have the largest budgets).

NHTSA never issued its own agency order under Executive Order 12898,<sup>188</sup> it performs only cursory environmental justice analyses on new safety standards.<sup>189</sup>

Fortunately, however, recent actions by the new Biden administration suggest an opportunity to reorient auto-safety policy dramatically. Transportation Secretary Pete Buttigieg has brought considerable attention to road-safety issues and has consistently highlighted equity as a high priority for the department.<sup>190</sup> More fundamentally, recent actions of the new administration suggest that cracks may be appearing in the consumer-protection foundation. President Biden recently outlined his plan to overhaul the cost-benefit analysis process applied by the Office of Management and Budget to, among other things, “take into account the distributional consequences of regulation . . . to ensure that regulatory initiatives appropriately benefit and do not inappropriately burden disadvantaged, vulnerable, or marginalized communities.”<sup>191</sup> Although the memorandum “reaffirms the basic principles” of past cost-benefit orders, the explicit discussion of distributional principles clearly sounds in the register of transportation justice and could provide the groundwork for more explicit (and thoughtful) incorporation of equity principles in NHTSA’s rulemaking activities.<sup>192</sup>

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<sup>188</sup> Although NHTSA’s rulemaking activities are not covered by Title VI as they do not involve disbursement of funds, the Executive Order operates as an independent requirement on all federal agencies. Exec. Order No. 12898, *supra* note 181, at § 1-101 (charging “each Federal agency” with addressing disproportionate adverse health burdens created for minority and low-income populations by the agency’s programs, policies or activities).

<sup>189</sup> See, e.g. NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., DOT HS 812 347, MINIMUM SOUND REQUIREMENTS FOR HYBRID AND ELECTRIC VEHICLES: FINAL ENVIRONMENTAL ASSESSMENT 30 (2016) (providing a short paragraph of environmental justice analysis for FMVSS 141 anticipating no adverse impact on covered populations). Of course, given that NHTSA’s work is not spatially bounded the way FHWA and FTA are, the Executive Order’s focus on low-income and minority *populations* does not map precisely onto an auto-safety regime that operates at a vehicle systems level. *But see supra* notes 41–42 and accompanying text (showing that traffic violence is geographically distributed).

<sup>190</sup> Sam Mintz, *How Biden is Betting on Buttigieg To Drive a New Era of Racial Equity*, POLITICO (Mar. 8, 2021, 4:30 AM), <https://www.politico.com/news/2021/03/08/biden-buttigieg-racial-equity-473928> [<https://perma.cc/CF9L-3HCS>] (“Buttigieg has touched on improving racial equity in transportation at virtually every television interview.”). *But see* Alissa Walker, *Pete Buttigieg Isn’t a Transit Visionary. But Biden Might Not Need One*, CURBED (Dec. 15, 2020), <https://www.curbed.com/2020/12/pete-buttigieg-usdot-amtrak-joe-biden.htm> [<https://perma.cc/QYD3-SL3R>] (arguing that Buttigieg is not a “transit visionary”).

<sup>191</sup> *Memorandum for the Heads of Executive Departments and Agencies: Modernizing Regulatory Review*, § 2 THE WHITE HOUSE (Jan. 20, 2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/modernizing-regulatory-review> [<https://perma.cc/QG9N-PV7Y>].

<sup>192</sup> *But see* Hemel, *supra* note 179, at 6–7 (discussing some difficulties with incorporating distributional principles into cost-benefit analyses).

*C. The Need for Congressional Action*

If the apparent priorities of the Biden administration signal a newfound interest in revisiting long-standing assumptions in transportation policy, there is still good reason to doubt that executive action alone will be enough to enshrine a transportation justice vision within NHTSA. Three factors in particular suggest that securing a meaningful commitment to addressing the disparities and inequities in auto safety will require Congressional action.

First is the inescapable language in the MVSA that embedded consumerism into the heart of NHTSA's mission. Whatever ambiguity that exists in the statutory requirement that regulations be "appropriate for the particular type" of vehicle cannot overcome the clear evidence of Congressional intent that no class of vehicle be prohibited, no matter how dangerous.<sup>193</sup> For NHTSA to have the latitude to embrace transportation-justice principles fully, Congress will have to modify the MVSA so that consumer choice no longer trumps protection of vulnerable road users.<sup>194</sup>

Second, the practical reality is that nearly every significant rulemaking undertaken by NHTSA in the past three decades has been done at the direction or request of Congress.<sup>195</sup> Given the agency's limited resources,<sup>196</sup> the demands of the rulemaking process, and the likelihood that Congress will continue to direct the agency's rulemaking activities in years to come, any independent NHTSA rulemaking initiative may be an unacceptably risky investment of resources; even if the agency begins the process, any independent transportation-justice-oriented rulemaking could easily be sidelined if other rulemaking demands are made by Congress.

Third, and perhaps most important, is the fact that since the passage of the MVSA, Congress has been the most forceful proponent of the consumer-protection approach. From the creation of NCAP, to never-ending expansions of NHTSA's recall authority, to the high-profile and embarrassing legislative overrule of NHTSA's seatbelt interlock standard, Congress has repeatedly intervened not only to expand the agency's consumer protection mandate but to reject forcefully any alternative vision

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<sup>193</sup> See *supra* notes 157–159 and accompanying text.

<sup>194</sup> This is not to suggest that transportation justice principles would require an outright ban on light trucks. However, the risk of running afoul of the type-appropriate requirement has, for example, stymied efforts to incorporate the GTR-9 standard. Telephone Interview with Erika Jones, Former Special Counsel to the Adm'r, Nat'l Highway Traffic Safety Admin. (Oct. 28, 2020) (notes on file with author).

<sup>195</sup> *Command and Control*, *supra* note 60, at 215 (noting "the frequency with which Congress [has] felt it necessary to set [NHTSA's] agenda" through agency-forcing statutes such as ISTEA, and suggesting that the intended message to NHTSA was to "adopt rules only when asked").

<sup>196</sup> *NHTSA Oversight: The Road Ahead, Hearing Before the H. Subcomm. on Com., Trade, & Consumer Prot.*, 111th Cong. 9 (2010) (statement of Rep. John Dingell) (noting that NHTSA has "suffered years of stagnation in funding and . . . reduction in personnel levels").

of road safety that could detrimentally affect automobile consumers. In light of that history, it should be no surprise that NHTSA may not want to act without express direction from Congress.

As an agency simultaneously “chronically underfunded and over-politicized,” to borrow the words of a former deputy administrator,<sup>197</sup> it is clear that NHTSA faces significant risks should it attempt to steer a new course without Congressional endorsement. For the promise of transportation justice in auto safety to be realized, Congress will likely need to give its full-throated assent.

### CONCLUSION

For fifty years, the federal government has attempted to regulate auto design to promote road safety. But a road-safety vision oriented toward the interests of consumers has proved woefully inadequate. The consumer-oriented regime has failed to control for vehicle designs that create disproportionately large risks for other road users, despite forty years of agency research establishing the exact disparate dangers that have played out in the current light-truck crisis. NHTSA’s inaction is made all the more alarming by the disparate burden these dangers have placed on vulnerable groups.

As this Comment has shown, NHTSA’s inability to meet the current moment is the result of a deep-seated, *structural* flaw in our auto-safety regime. Creating a safer, more equitable transportation system requires a new approach. Fortunately, a new movement for transportation justice, already making inroads elsewhere in the Department of Transportation, offers a ready-made framework for incorporating distributional equity into auto-design regulation. Congress and the Executive should act to bring NHTSA’s rulemaking in line with transportation justice principles and pump the brakes on the decades-long safety crisis unfolding on our streets.

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<sup>197</sup> Myron Levin & Eli Wolfe, *In Battle Against “The Highway Disease,” Traffic Safety Agency Attacked as Asleep at the Wheel*, SALON (Dec. 26, 2020, 9:00 AM), [https://www.salon.com/2020/12/26/in-battle-against-the-highway-disease-traffic-safety-agency-attacked-as-asleep-at-the-wheel\\_partner](https://www.salon.com/2020/12/26/in-battle-against-the-highway-disease-traffic-safety-agency-attacked-as-asleep-at-the-wheel_partner) [<https://perma.cc/5WQN-64QW>] (quoting David Friedman).