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STRICT LIABILITY IN CYCLING LAWS TO READY THE ROADS FOR ENVIRONMENTALLY FRIENDLY COMMUTING

COLLEEN MAKER*

Abstract: Because automobiles cause harmful effects on the environment, the United States should encourage bicycling as an alternative means of transportation to automobiles. Many Americans elect not to cycle as a means of transportation out of fear of a collision with an automobile. Such collisions can be devastating physically and financially, and yet, after a bicycle-automobile collision, cyclists often bear the burden of proving negligence in a suit against the driver, and are often left without a remedy for their injuries. Other countries, such as the Netherlands, use a form of strict liability in lawsuits concerning bicycle-automobile collisions, which shifts the cost of such accidents to automobile drivers. U.S. courts should apply strict liability—as currently used in U.S. tort law—to collisions between cyclists and automobiles. Shifting the cost of bicycle-automobile accidents to automobile drivers will even out the consequences between cyclists and drivers, encouraging drivers to drive more safely, creating safer roads, and encouraging cycling—an environmentally friendly method of transportation—in place of driving a carbon emitting automobile.

INTRODUCTION

On September 23, 1993, Frederick Waring was riding his bicycle down a street outside of Austin, Texas.¹ As he entered an intersection through which he had the right-of-way, while following other vehicles, an automobile coming from the opposite direction turned left and struck him.² Mr. Waring suffered severe head injuries and was in a coma for several days.³ The driver of the automobile claimed he never saw Mr. Waring or his bicycle before the collision.⁴

^{*} Managing Editor, Boston College Environmental Affairs Law Review, 2014–2015.

¹ Waring v. Wommack, 945 S.W.2d 889, 890 (Tex. App. 1997).

² See id. at 890–91, 894. The driver of a left-turning vehicle has a statutory duty to yield to vehicles approaching from the opposite direction. See TEX. TRANSP. CODE ANN. § 545.152 (West 1995); Waring, 945 S.W.2d at 894.

³ Waring, 945 S.W.2d at 891. The cyclist had no recollection of the accident. *Id.*

⁴ *Id.* at 894. Although others testified that the cyclist was difficult to see because the sun was shining brightly at the time of the accident, the defendant testified that he could not remember whether the sun impacted his view of the cyclist. *Id.*

After the accident, Mr. Waring filed a suit against the driver for negligence to recover damages for his serious personal injuries sustained in the accident.⁵ At trial, "the jury failed to find negligence on the part of either party." The Court of Appeals of Texas, presiding in Austin refused to hold the automobile driver liable for Mr. Waring's injuries or grant him damages because it did not find the automobile driver to be negligent. The court held that the burden was on the plaintiff to prove that the automobile driver "failed to act as a reasonably prudent person under the circumstances existing at the time of the accident." Further, the court made it clear that automobile drivers do not have an absolute duty to avoid collisions. Mr. Waring, therefore, was left with no remedy to compensate him for his injuries.

Amid injustices to cyclists such as this, ¹¹ reliance on automobiles has increased in the United States, severely impacting the environment. ¹² Automobiles cause harmful levels of ozone, carbon monoxide, carbon dioxide, and noise pollution, and contribute to global warming. ¹³ Cycling, however, has considerably less negative environmental impacts. ¹⁴ In fact, if even ten percent of commuters in the United States switched from automobiles to bicycles as a commuting method, emissions of carbon dioxide—a chemical known to contribute to the global warming crisis—would be reduced by 25.4 million tons per year. ¹⁵ And yet, only approximately thirty-two percent

⁵ Id. at 890.

⁶ *Id*.

⁷ See id. at 895.

⁸ *Id.* at 892.

⁹ *Id.* at 891. "Although [the automobile driver] had an enhanced duty not only to maintain a proper lookout but also to observe the speed and distance of oncoming vehicles to determine if they constituted an immediate hazard before he began his turn, this duty was not absolute." *Id.* at 892.

¹⁰ See id. at 891, 895.

¹¹ See, e.g., id.

¹² See OFFICE OF MOBILE SOURCES, U.S. ENVTL. PROT. AGENCY, AUTOMOBILES AND OZONE 2 (1993), available at www.epa.gov/otaq/consumer/04-ozone.pdf, archived at http://perma.cc/L5C4-HWWS.

¹³ See id. at 1; Raymond B. Ludwiszewski & Charles H. Haake, Cars, Carbon, and Climate Change, 102 Nw. U. L. Rev. 665, 666 (2008); Air Pollution Comes from Many Sources, NAT'L GEOGRAPHIC, http://environment.nationalgeographic.com/environment/global-warming/pollution-overview/ (last visited Feb. 13, 2015), archived at http://perma.cc/3ZA9-QLMF; Noise Pollution, U.S. ENVTL. PROT. AGENCY, epa.gov/air/noise.html (last updated July 16, 2012), archived at http://perma.cc/NB6G-8UBF.

¹⁴ See Daisy Carrington, Hover Bikes and Laser Lights: The Sci-Fi Future of Cycling, CNN (Jan. 17, 2014, 11:47 AM), http://www.cnn.com/2014/01/15/tech/innovation/hover-bikes-and-laser-lights/index.html?sr=fb011514cyclingfuture12p, archived at http://perma.cc/8P7Z-KQ9G.

¹⁵ Air Pollution Comes from Many Sources, supra note 13; Benefits of Bike Commuting, MARIN CNTY. BICYCLE COAL., http://www.marinbike.org/Resources/BenefitsOfBikeCommuting. shtml (last visited Feb. 13, 2015), archived at http://perma.cc/R2DA-CQHG. In 2012, carbon dioxide emissions in the United States were estimated at 5400 million tons. Overview of Green-

of Americans own bicycles—a proportion significantly lower than many other countries. ¹⁶ Two possible causes of the low rate of bicycle ownership and use as a means of transportation in the United States are the lack of safety measures currently afforded to cyclists on the roads and the lack of judicial remedies in the event of an accident. ¹⁷ Further, cyclists are also known to have a negative reputation in the minds of drivers, who find them to be nuisances on the road. ¹⁸

Under current U.S. law—as illustrated by the plight of Mr. Waring—it is difficult for cyclists to recover damages after a collision with an automobile, even if the driver is at fault. ¹⁹ This Note argues that in order to provide a realistic opportunity for cyclists to recover damages after a collision with an automobile, the United States should apply the tort theory of strict liability to automobile drivers involved in collisions with cyclists. ²⁰ By imposing the burden of proving that the cyclist was breaking cycling laws on automobile drivers—instead of forcing the cyclist-plaintiff to prove the driver was negligent—drivers will be more cautious of cyclists. ²¹ Cyclists will also be more careful to follow cycling laws to ensure their own safety and a remedy in the event of a collision. ²² An increase in cycling safety will then encourage more cycling, which will directly benefit the environment. ²³

Part I of this Note discusses the harmful impact of automobiles on the environment. ²⁴ Part II discusses the option of bicycling as an alternative to

house Gases, U.S. ENVTL. PROT. AGENCY, http://www.epa.gov/climatechange/ghgemissions/gases/co2.html (last updated July 2, 2014), archived at http://perma.cc/5EUD-BLW4.

¹⁶ See Top 10 Countries with Most Bicycles Per Capita, SPOKEFLY, https://www.spokefly.com/blog/top-10-countries-bicycles-per-capita/ (last visited Feb. 14, 2015), archived at https://perma.cc/ATB6-93X6.

¹⁷ See M.S., Cycling v Cars: The American Right-of-Way, ECONOMIST (Nov. 11, 2013, 2:56 PM), http://www.economist.com/blogs/democracyinamerica/2013/11/cycling-v-cars, archived at http://perma.cc/ZU8W-TWQ3. According to Boston, Massachusetts city officials, "[b]icycling around downtown is confusing and uncomfortable with one-way streets, narrow lanes, and lack of bicycle accommodations." Steve Annear, There's a Public Hearing on the Proposed 'Connect Historic Boston' Bike Loop, BOSTONMAGAZINE.COM (Feb. 26, 2014, 10:22 AM) http://www.bostonmagazine.com/news/blog/2014/02/26/connect-historic-boston-bike-trail-hearing/, archived at http://perma.cc/5PCM-CBZN. "[Boston's] proposed bike trail is supposed to take 'the stress' out of traveling downtown for cyclists, whether they be tourists on Hubways or daily riders, according to the city's website." Id.

¹⁸ See Daniel Duane, Op-Ed., *Is It O.K. to Kill Cyclists?*, N.Y. TIMES, Nov. 9, 2013, http://www.nytimes.com/2013/11/10/opinion/sunday/is-it-ok-to-kill-cyclists.html?_r=0, *archived at* http://perma.cc/XE8B-OXS7.

¹⁹ See M.S., supra note 17.

²⁰ See infra notes 209–317 and accompanying text.

²¹ See M.S., supra note 17.

²² See id

²³ See Annear, supra note 17; Carrington, supra note 14.

²⁴ See infra notes 29–65 and accompanying text.

driving an automobile,²⁵ and Part III describes the legal landscape of an automobile driver's liability, both domestically and internationally.²⁶ Part IV explains the current strict liability scheme in the United States,²⁷ and Part V analogizes the proposed strict liability for automobile drivers to strict products liability and discusses the beneficial potential of shifting the evidentiary burden of proof from cyclists to drivers.²⁸

I. THE NEED FOR ENVIRONMENTALLY FRIENDLY COMMUTING ALTERNATIVES

A. The Effect of Cars on the Environment

Despite the development of more environmentally friendly automobile technology, the excessive use of automobiles in the United States has caused severe impacts on the environment.²⁹ Automobiles are at least partly to blame for harmful levels of ozone, carbon monoxide, carbon dioxide, and noise pollution in the atmosphere.³⁰ These pollutants are harmful to the environment and carry the potential to adversely affect human health.³¹

1. Ozone

Ozone, comprised of three oxygen atoms combined ("O₃"), is created by chemical reactions between hydrocarbons, oxides of nitrogen, and sunlight. ³² It is a major byproduct of automobiles, entering the atmosphere through emissions from cars, trucks, gas stations, and factories. ³³ In urban areas, cars, trucks, buses, construction vehicles, and boats emit most of the pollutants that create this harmful effect. ³⁴ Despite improved technology

²⁵ See infra notes 66–94 and accompanying text.

²⁶ See infra notes 95–164 and accompanying text.

²⁷ See infra notes 165–208 and accompanying text.

²⁸ See infra notes 209–317 and accompanying text.

²⁹ OFFICE OF MOBILE SOURCES, AUTOMOBILES AND OZONE, *supra* note 12, at 2.

³⁰ *Id.* at 1–2; Ludwiszewski & Haake, *supra* note 13, at 666; *Air Pollution Comes from Many Sources*, *supra* note 13; *Noise Pollution*, *supra* note 13.

³¹ OFFICE OF MOBILE SOURCES, AUTOMOBILES AND OZONE, *supra* note 12, at 2; *Noise Pollution, supra* note 13. Health risks associated with automobile pollution include aggravated asthma, aggravated emphysema and bronchitis, reduced oxygen delivery to organs and tissues, and noise induced hearing loss. *See AIRTrends 1995 Summary*, U.S. ENVTL. PROT. AGENCY, http://www.epa.gov/airtrends/aqtrnd95/co.html (last updated Jan. 5, 2012), *archived at* http://perma.cc/K3H3-8XWD; *Noise Pollution, supra* note 13; Maria A. Fierro et al., *What is Ozone?*, PIMA CNTY, ARIZ. DEP'T OF ENVTL. QUALITY, http://www.airinfonow.org/html/ed_ozone.html (last visited Feb. 13, 2015), *archived at* http://perma.cc/4F66-LVKT.

³² See Fierro et al., supra note 31. Ozone is different than life-sustaining oxygen, which is made up of two oxygen atoms combined ("O₂"). *Id.*

³³ Id.

³⁴ OFFICE OF MOBILE SOURCES, AUTOMOBILES AND OZONE, *supra* note 12, at 1.

that has lead to more environmentally friendly cars, ozone levels have remained high because people are driving more often.³⁵

Although the ozone layer protects life on earth from the sun's harmful ultraviolet rays, ozone formed too close to the earth's surface can have harmful effects. Ozone corrodes statues, monuments, natural rock, and building materials. Additionally, because ozone is a powerful disinfectant and cleaning agent, it is harmful to humans and animals when it comes into contact with living tissue by causing swelling and inflammation in the cells lining the airwaves. Other health risks and potential illnesses due to high levels of ozone are reduced lung function, aggravated asthma, aggravated emphysema and bronchitis, among many other illnesses attributed to ozone exposure.

2. Carbon Monoxide

Carbon monoxide, an atmospheric pollutant emitted from automobiles when carbon fuels are not burned completely, is a colorless, odorless, poisonous gas. 40 Automobiles are responsible for the vast majority of carbon monoxide emissions. 41 In the United States, over two-thirds of carbon monoxide emissions come from motor vehicles. 42 In cities, however, automobiles cause even more environmental damage, accounting for ninety percent of carbon monoxide emissions. 43

Carbon monoxide harms the environment by polluting the air and causing smog. 44 High levels of carbon monoxide also pose serious health risks; when carbon monoxide enters the bloodstream it can reduce oxygen delivery to organs and tissues. 45 Exposure to high levels of carbon monoxide has also been known to cause "visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, and difficulty in performing complex tasks." 46 Carbon monoxide poisoning can even be fatal. 47

³⁵ *Id.* at 2.

³⁶ *Id.* at 1–2; Fierro et al., *supra* note 31.

³⁷ Fierro et al., *supra* note 31.

³⁰ *Id*.

³⁹ Id

⁴⁰ Ludwiszewski & Haake, *supra* note 13, at 666; *AIRTrends 1995 Summary*, *supra* note 31.

⁴¹ OFFICE OF MOBILE SOURCES, U.S. ENVTL. PROT. AGENCY, AUTOMOBILES AND CARBON MONOXIDE 1 (1993), available at http://www.epa.gov/otaq/consumer/03-co.pdf, archived at http://perma.cc/N69D-Z35H; AIRTrends 1995 Summary, supra note 31.

⁴² OFFICE OF MOBILE SOURCES, AUTOMOBILES AND CARBON MONOXIDE, *supra* note 41, at 1.

⁴³ Id.

⁴⁴ Ludwiszewski & Haake, *supra* note 13, at 666.

⁴⁵ See AIRTrends 1995 Summary, supra note 31.

⁴⁶ *Id*.

3. Carbon Dioxide

Another harmful gas emitted from automobiles is carbon dioxide, ⁴⁸ which is the primary greenhouse gas causing global warming. ⁴⁹ Automobiles release, on average, twenty-four pounds of carbon dioxide into the atmosphere for every gallon of gas consumed; as a result, they contribute one fifth of all carbon dioxide emissions in the United States. ⁵⁰ Carbon dioxide levels in the atmosphere are "higher than they have been for hundreds of thousands of years." ⁵¹

The National Aeronautics and Space Administration, or NASA, released a study concluding that automobiles are the "largest net contributor to climate change pollution." Further, the United States is responsible for a large amount of pollution that causes global warming. 53 "In fact, the U.S. transportation sector alone emits more carbon emissions than all but three other countries" *total* emissions." 54

Global warming—caused by carbon emissions—is predicted to have devastating consequences on the environment, with some consequences already beginning.⁵⁵ Climate change has already begun melting the polar ice caps, warming lakes globally, and changing animal migration patterns and dates of plant activity.⁵⁶ Global warming has also begun creating tem-

⁴⁷ Carbon Monoxide Questions and Answers, U.S. CONSUMER PROD. SAFETY COMM'N, https://www.cpsc.gov/en/Safety-Education/Safety-Education-Centers/Carbon-Monoxide-Inform ation-Center/Carbon-Monoxide-Questions-and-Answers-/ (last visited Feb. 13, 2015), archived at http://perma.cc/6F8Y-7MCY. For example, leaving a car running in a garage might cause carbon monoxide poisoning. *Id.* "The Centers for Disease Control and Prevention estimates that several thousand people go to hospital emergency rooms every year to be treated for[carbon monoxide] poisoning." *Id.*

⁴⁸ Air Pollution Comes from Many Sources, supra note 13.

⁴⁹ Id.

⁵⁰ See Car Emissions & Global Warming, UNION OF CONCERNED SCIENTISTS, http://www.ucsusa.org/our-work/clean-vehicles/car-emissions-and-global-warming#.VN4a5lPF9ew (last visited Feb. 13, 2015), archived at http://perma.cc/W3LM-HK6D. Other contributors of carbon dioxide are airplanes, power plants, and "other human activities that involve the burning of fossil fuels such as gasoline and natural gas." Air Pollution Comes from Many Sources, supra note 13.

⁵¹ Air Pollution Comes from Many Sources, supra note 13.

⁵² Zachary Shahan, *NASA Says: Automobiles Largest Net Climate Change Culprit*, CLEAN TECHNICA (Feb. 23, 2010), http://cleantechnica.com/2010/02/23/nasa-says-automobiles-largest-climate-change-culprit/, *archived at* http://perma.cc/S6JG-2B72 (stating that "automobiles are the largest contributor to climate change, followed by . . . burning of household biofuels (i.e. wood and animal dung) and . . . raising livestock").

⁵³ See Car Emissions and Global Warming, supra note 50.

⁵⁴ Id.

⁵⁵ Alina Bradford, Effects of Global Warming, LIVESCIENCE.COM (Dec. 17, 2014, 11:15 PM), http://www.livescience.com/37057-global-warming-effects.html, archived at http://perma.cc/5PF8-9FEB.

⁵⁶ *Id.* ("Today, the overwhelming consensus of researchers is that global warming is real and is caused by human activity, primarily the burning of fossil fuels that pump carbon dioxide . . . , methane[,] and other greenhouse gases into the atmosphere.").

perature extremes and severe weather patterns with destructive consequences.⁵⁷

4. Noise Pollution

Sound becomes noise pollution when "it either interferes with normal activities such as sleeping, conversation, or disrupts or diminishes one's quality of life." Increased use of automobiles increases noise pollution. Because automobiles are a major source of noise pollution, areas that have a higher volume of automobiles, such as urban areas, experience higher levels of noise pollution. Although noise pollution does not receive as much recognition as water pollution and air pollution, it can have serious health effects; common health issues directly related to noise pollution include noise induced hearing loss, sleep disruption, lost productivity, speech interference, high blood pressure, and other stress-related illnesses. 61

B. Government Action to Combat Automobile Pollution

Both state and federal governments in the United States have taken the initiative to combat automobile pollutants.⁶² The Environmental Protection Agency (EPA) has created "common-sense regulatory initiatives," such as

⁵⁷ See id.

⁵⁸ *Noise Pollution, supra* note 13.

⁵⁹ See Ron Chepesiuk, Decibel Hell: The Effects of Living in a Noisy World, 113 ENVTL. HEALTH PERSP. A34, A34 (2005), available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC12 53729/pdf/ehp0113-a00034.pdf, archived at http://perma.cc/C628-MEUK.

⁶⁰ See id. at A34, A41. Some cities, such as New York City, have made efforts to reduce noise pollution. Honking Your Horn Will Cost You in NYC, ALLCARRENTACAR.COM (Jan. 21, 2013, 10:05 AM), http://www.allcarrentacar.com/blog/honking-your-horn-will-cost-you-in-nyc/, archived at http://perma.cc/6URQ-SRYJ ("In fact, New York City is considered to be a pioneer in the area of noise pollution, becoming one of the first American cities to adopt and enforce a strict noise code back in 1972."). Since 1972, it has been illegal for drivers to honk their car's horns within the city. Id. The no-honking law carries a \$350 fine for drivers who honk their horns outside of an emergency situation. Id. Many question the beneficial effects of the law, however, blaming lack of enforcement. Id.; see N.Y.C., ADMIN. CODE tit. 24, ch. 2, § 24-237 (2014), available at http://public.leginfo.state.ny.us/lawssrch.cgi?NVLWO:, archived at http://perma.cc/KC8Z-LLBD.

⁶¹ Noise Pollution, supra note 13 ("Noise induced hearing loss is the most common and often discussed health effect, but research has shown that exposure to constant or high levels of noise can cause countless adverse health effects.").

⁶² See What EPA Is Doing About Climate Change, U.S. ENVTL. PROT. AGENCY, http://www.epa.gov/climatechange/EPAactivities.html (last updated Aug. 1, 2014), archived at http://perma.cc/T3HV-GUH9. Other countries are attempting to combat pollution from automobiles as well. See, e.g., Alanna Petroff, Paris Pollution Leads to Car Ban, CNNMONEY (Mar. 18, 2014, 5:43 AM), http://money.cnn.com/2014/03/17/news/paris-pollution-traffic/, archived at http://perma.cc/B6L4-CE44. In France, the government recently enforced a temporary partial driving ban to cut back on worsening air pollution in Paris. Id. The ban limits cars that may be on the road each day by license plate number, and the government has temporarily offered public transportation free of charge. Id.

vehicle greenhouse gas rules to reduce automobile emissions. ⁶³ The EPA also encourages automobile drivers to prevent air pollution by keeping tires properly inflated, maintaining their cars, getting regular tune-ups, and reducing the number of cars on the road by carpooling, using public transportation, riding a bicycle, and walking. ⁶⁴ Some states, including New York, are encouraging proper maintenance by requiring annual automobile inspections and repairs of pollution producing faulty vehicle emission systems. ⁶⁵

II. CYCLING AS A COMMUTING ALTERNATIVE

The excessive use of automobiles domestically and internationally is polluting the environment. The EPA suggests cycling as an environmentally friendly alternative to driving. Tycling does not produce any of the negative environmental impacts that cars or other similar modes of transportations produce. In fact, bicycles might soon affirmatively improve the environment, as at least one company has begun researching bicycle models that contain air purifiers. Many citizens have also recognized the positive impacts of cycling, resulting in increased sales of bicycles in the United States.

⁶³ What EPA Is Doing About Climate Change, supra note 62; see Regulations & Standards, U.S. ENVTL. PROT. AGENCY, http://www.epa.gov/otaq/climate/regulations.htm (last updated Dec. 19, 2014), archived at http://perma.cc/G38S-SL3X.

⁶⁴ Ways to Reduce Air Pollution, U.S. ENVTL. PROT. AGENCY, http://epa.gov/oaqps001/peg_caa/reduce.html (last updated Oct. 28, 2014), archived at http://perma.cc/7G24-9XH4.

⁶⁵ Controlling Air Pollution from Motor Vehicles, N.Y. STATE DEP'T OF ENVIL. CONSERVATION, http://www.dec.ny.gov/chemical/8394.html (last visited Feb. 13, 2015), archived at http://perma.cc/W844-Z2A7.

⁶⁶ OFFICE OF MOBILE SOURCES, AUTOMOBILES AND OZONE, *supra* note 12, at 2.

⁶⁷ Ways to Reduce Air Pollution, supra note 64. Boston city officials claim that "[i]ncreasing bicycle trips from transit hubs to popular destinations, workplaces, or homes would help reduce congestion on transit by providing an alternative to stop transfers on the subway system." Annear, supra note 17.

⁶⁸ See Carrington, supra note 14.

⁶⁹ *Id.* Daisy Carrington, a reporter with CNN, notes, "[t]he Bangkok based Lightfog Creative and Design Company . . . has upped cycling's already soaring ecological ante with its concept for an air-purifying bike At the moment, the idea exists solely as artistic renderings (the company has yet to make a prototype, though one is supposedly in the works)." *Id.*

⁷⁰ C. Curt Starling, *Bike Injuries: Collision-Related Trauma*, http://www.hughston.com/hha/a_15_3_1.htm (last visited Feb. 13, 2015), *archived at* http://perma.cc/CE36-TWUL ("Today, more bicycles are sold annually than automobiles, and more than 17 million adults are estimated to ride at least twice weekly."). On the other hand, "[i]n the daytime on a normal working day in the Netherlands, more than a million journeys are made by bike every hour." David Hembrow, *A Million Journeys Per Hour by Bike*, AVIEWFROMTHECYCLEPATH.COM (Feb. 18, 2011), http://www.aviewfromthecyclepath.com/search/label/millionperhour, *archived at* http://perma.cc/7FGH-5D2Q.

Americans, however, use their bicycles less than most other countries. ⁷¹ Although forty percent of all trips taken in the United States are only two miles or less, only two percent of those trips are taken by bicycle. ⁷² By switching to cycling for these short trips, would-be cyclists could have a hugely beneficial impact on the environment. ⁷³ In fact, if even ten percent of commuters currently using automobiles switched to cycling, carbon dioxide emissions would be reduced by 25.4 million tons per year. ⁷⁴ Switching to cycling in the United States, therefore, has the potential to reduce the severity of the global warming crisis. ⁷⁵

Although cycling provides an environmentally friendly alternative to automobiles, there is tension between cyclists and drivers that causes cyclists to resent drivers, and visa versa. To Drivers tend to find cyclists on the road to be a nuisance and cyclists tend to feel endangered by overly aggressive, negligent, and reckless drivers. For example, when a cab driver in New York City grew frustrated with a law-abiding cyclist who the cab driver felt was in his way, the cab driver quickly accelerated into the cyclist, directly hitting him and a nearby pedestrian. Despite the severity of the resulting injuries, sources reported that the cab driver was unlikely to be

⁷¹ Top 10 Countries with Most Bicycles Per Capita, supra note 16. A recent study conducted by the Department of Transportation in California found a decrease in the use of automobiles and an increase in walking, cycling, and utilizing public transportation by Californians. Jonathan Zasloff, Are Californians Finally Getting Out of Our Cars?, LEGALPLANET (Mar. 14, 2014), http://legal-planet.org/2014/03/14/are-californians-finally-getting-out-of-our-cars/, http://perma.cc/6WNM-SWKA. See generally CAL. DEP'T OF TRANSP., 2010-2012 CALIFORNIA HOUSEHOLD TRAVEL SURVEY FINAL REPORT (2013),http://www.dot.ca.gov/hq/tsip/FinalReport.pdf, archived at http://perma.cc/2R73-K95W (survey detailing method of travel for Californians). Brian Taylor, UCLA's Chief Transportation Expert, is at least one commentator that believes the survey's results are only due to the poor economy. Zasloff, supra. If transportation habits of Californian commuters are changing, as the survey predicts, it is crucial that the roads are made safer for cyclists now. See Duane, supra note 18;

⁷² AMERICA BIKES & LEAGUE OF AMERICAN BICYCLISTS, NATIONAL HOUSEHOLD TRAVEL SURVEY (2010), available at http://www.advocacyadvance.org/docs/nhts09.pdf, archived at http://perma.cc/J92W-F27D.

⁷³ See Benefits of Bike Commuting, supra note 15.

⁷⁴ *Id.*; see supra note 15 and accompanying text.

⁷⁵ See Air Pollution Comes from Many Sources, supra note 13; Benefits of Bike Commuting, supra note 15.

⁷⁶ See Duane, supra note 18.

⁷⁷ See id.

⁷⁸ Brad Aaron, *Cabbie Rammed Cyclist, Severed Woman's Leg, Won't Be Charged*, BICY-CLELAW.COM (Aug. 20, 2013), http://www.bicyclelaw.com/news/n.cfm/cabbie-rammed-cyclist-severed-womans-leg-wont-be-charged, *archived at* http://perma.cc/WDD6-6HUK. The cyclist was injured, his bike was damaged, and the pedestrian was severely maimed, having the lower half of one of her legs severed. *Id.*

criminally charged or face severe legal consequences.⁷⁹ When drivers do face criminal charges, the cases are usually dismissed due to jurors' sympathy for the driver.⁸⁰ The lack of remedy for injured cyclists contributes to concerns about the lack of safety of cycling.⁸¹

In the United States, cyclists make up two percent of traffic deaths and four percent of all emergency room visits are a result of cycling-related injuries. Fatal bicycle collisions are most common when the collision occurs between a cyclist and an automobile. Bicycle trips, however, account for only one percent of all trips in the United States. Considering the low percentage of bicycle trips, the percentages of traffic related cyclist deaths and injuries are disproportionately high. In fact, according to the National Safety Council, bicycle injuries and fatalities cost the economy over \$4 billion per year.

Even though bicycling is much more common in many major foreign cities than in the United States, the large number of cyclists in those cities does not correlate with a higher number of fatal car-on-cyclist collisions. 88 In fact, in the Netherlands, which has a population of 6,652,800 people and

"[J]urors identify with drivers." Convictions carry life-destroying penalties . . . and jurors "just think, well, I could make the same mistake. So they don't convict." That's why police officers and prosecutors don't bother making arrests. Most cops spend their lives in cars, too, so that's where their sympathies lie.

Id.

⁸¹ See id.

82 Starling, supra note 70.

 84 Id

85 See id.; Starling, supra note 70.

⁷⁹ *Id.* The Taxi and Limousine commission moved for a "punitive suspension" of the cab driver's hack license for a mere thirty days. *See* Brad Aaron, *TLC Seeking 30-Day Hack License Suspension After Midtown Curb-Jump Crash*, STREETSBLOG NYC (Aug. 21, 2013), http://www.streetsblog.org/2013/08/21/tlc-seeking-30-day-hack-license-suspension-after-midtown-curb-jump-crash/, *archived at* http://perma.cc/CW5Y-4FEY.

Duane, supra note 18. In a New York Times Op-Ed, Daniel Duane stated,

⁸³ Pedestrian and Bicycle Crash Statistics, PEDESTRIAN & BICYCLE INFO. CTR., http://www.pedbikeinfo.org/data/factsheet_crash.cfm#No1 (last visited Feb. 13, 2015), archived at http://perma.cc/92JR-YUNF.

⁸⁶ "[T]he National Safety Council is a nonprofit organization with the mission to save lives by preventing injuries and deaths at work, in homes and communities, and on the road through leadership, research, education[,] and advocacy." *About the National Safety Council*, NAT'L SAFETY COUNCIL, http://www.nsc.org/learn/about/Pages/about-nsc.aspx (last visited Feb. 15, 2015), *archived at* http://perma.cc/TZT4-R738.

⁸⁷ Pedestrian and Bicycle Crash Statistics, supra note 84. "Our nation's economy is significantly impacted by the total cost of unintentional injuries Wage and productivity losses are just a few of the costs of a motor vehicle collision." *Estimating the Costs of Unintentional Injuries*, NAT'L SAFETY COUNCIL, http://www.nsc.org/learn/safety-knowledge/Pages/injury-facts-estimating-cost-of-unintentional-injuries.aspx (last visited Feb. 13, 2015), archived at http://perma.cc/AF2D-6SEM.

⁸⁸ M.S., *supra* note 17.

approximately 16,500,000 bicycles, ⁸⁹ Dutch citizens make more trips via bicycle each day than the United States, Great Britain, and Australia combined. ⁹⁰ Even with a higher rate, cycling in the Netherlands results in far fewer fatalities than cycling in the United States. ⁹¹ In the United States, in the early 2000s, there were approximately fifty-eight cyclist deaths for every one billion kilometers cycled. ⁹² In the Netherlands in 2010, on the other hand, there were only twelve cyclist fatalities for every one billion kilometers cycled. ⁹³ Thus, cyclists in the United States are about five times more likely to be involved in a fatal crash than their Dutch counterparts. ⁹⁴

III. CYCLING LAW

A. Current U.S. Cycling Law

Automobile drivers rarely face consequences after a collision with a cyclist. ⁹⁵ After hitting a cyclist, drivers commonly use the defense that they did not see the cyclist, even if the cyclist was riding legally within a marked bike lane. ⁹⁶ Even when accidents are the fault of the automobile driver, and the collision results in the death of the cyclist, the automobile driver is rarely held liable. ⁹⁷ In most states, bicycles are considered "vehicles" in the eyes of the law. ⁹⁸ Therefore, fault in collisions between an automobile and a

⁸⁹ Top 10 Countries with Most Bicycles Per Capita, supra note 16.

⁹⁰ Hembrow, *supra* note 70 ("[Sixteen] million Dutch people make more cycle journeys between them than 300 million Americans, 65 million British[,] and 20 million Australians all added together, and they do so with greater safety than cyclists in any of those countries.").

⁹¹ M.S., *supra* note 17.

⁹² *Id.* This statistic may have declined since the early 2000s. *Id.* Because the death rate has remained fairly constant since the early 2000s, however, it is believed that this statistic is still fairly accurate. *Id.* "In 2011, 677 lost their lives in bicycle/motor vehicle collisions, just under two people every day of the year in the [United States]." *Pedestrian and Bicycle Crash Statistics, su-pra* note 84.

⁹³ M.S., *supra* note 17. The number of cycling deaths in the Netherlands has gone down by a third since 2000. *Id.*

⁹⁴ See id.

⁹⁵ Duane, *supra* note 18; *see also supra* note 80 and accompanying text (describing why automobile drivers rarely face consequences after a collision with a cyclist). Leah Shahum, executive director of the San Francisco Bicycle Coalition stated, "[w]e do not know of a single case of a cyclist fatality in which the driver was prosecuted, except for D.U.I. or hit-and-run." Duane, *supra* note 18.

⁹⁶ How to Avoid Car-on-Bike Accidents, BICYCLELAW.COM, http://www.bicyclelaw.com/p. cfm/bicycle-safety/how-to-avoid-car-on-bike-accidents (last visited Feb. 13, 2015), archived at http://perma.cc/X36Y-KSQR; see, e.g., Waring v. Wommack, 945 S.W.2d 889, 894 (Tex. App. 1997).

⁹⁷ See Duane, supra note 18; see also supra note 80 and accompanying text (describing why automobile drivers rarely face consequences after a collision with a cyclist).

⁹⁸ Bob Mionske, *Bike Accidents: Collisions with Cars at Intersections*, NOLO, http://www.nolo.com/legal-encyclopedia/bike-accidents-collisions-with-cars-29549-2.html (last visited Feb. 13, 2015), *archived at* http://perma.cc/52KM-JC77.

cyclist and between two cars are determined in the same way. ⁹⁹ Generally, fault of the collision is determined by whether the driver or cyclist had the right-of-way, ¹⁰⁰ with the burden of proof falling on the moving party, usually the injured cyclist. ¹⁰¹

States are divided between the use of contributory negligence and comparative negligence as a defense in tort law negligence actions. 102 Comparative negligence, adopted by a majority of states, 103 reduces the damages awarded to a plaintiff by the percentage his negligence contributed to the injury. 104 Contributory negligence, on the other hand, bars any recovery for a plaintiff in a negligence action if the plaintiff is deemed to also have been negligent. 105 In states with a contributory negligence scheme, therefore, if a cyclist is found to be even the least bit at fault, she may be barred from recovery altogether. 106 Collisions between any two parties in a contributory negligence scheme will reach this conclusion, even if not between an automobile and a bicycle. 107

In bicycle-automobile collisions, cyclists are more likely to become injured than automobile drivers because of the sheer mass and power disparity between an automobile and a bicycle. ¹⁰⁸ Therefore, cyclist advocates be-

⁹⁹ Id.

¹⁰⁰ *Id*.

¹⁰¹ Bob Mionske, *Why We Need Cycling Insurance*, BICYCLING (June 22, 2009), http://www.bicycling.com/blogs/roadrights/why-we-need-cycling-insurance, *archived at* http://perma.cc/AV5B-3EDU ("[P]olice are allowed to make an initial determination about fault. If the police blame the cyclist, he has an even more difficult burden of proof, because the motorist will use the police determination as a defense in court.").

¹⁰² See Carol A. Mutter, Moving to Comparative Negligence in an Era of Tort Reform: Decisions for Tennessee, 57 TENN. L. REV. 199, 199 (1990).

¹⁰³ See Louis R. Frumer & Melvin I. Friedman, 21 Personal Injury: Actions, Defenses, Damages § 101.11 (2015).

¹⁰⁴ Mutter, *supra* note 102, at 199.

¹⁰⁵ *Id.* Four states, Alabama, Maryland, North Carolina, and Virginia, as well as the District of Columbia, use contributory negligence. FRUMER & FRIEDMAN, *supra* note 103, § 101.11 n.1.

¹⁰⁶ See How to Avoid Car-on-Bike Accidents, supra note 96. ("In fact, in some states, if you are even [one percent] negligent, you will not be able to recover any damages for your injuries."). "In some states, if the cyclist doesn't come to a complete stop at an intersection, the cyclist may be barred from any recovery, even if the motorist is mostly responsible for an accident." Mionske, Bike Accidents: Collisions with Cars at Intersections, supra note 98.

¹⁰⁷ See, e.g., Saindon v. Lucero, 187 F.2d 345, 346 (10th Cir. 1951) (finding deceased plaintiff was contributorily negligent for injuries sustained when struck by an automobile while walking on the highway); see How to Avoid Car-on-Bike Accidents, supra note 96. The court in Saindon v. Lucero held, "[g]enerally it has been said that contributory negligence is the neglect of the duty imposed upon a person to exercise ordinary care for his own protection and safety which is a legally contributing cause of injury." 187 F.2d at 346.

¹⁶⁸ See Strict Liability in the Netherlands, NL CYCLING (Feb. 21, 2013), http://bicycledutch.wordpress.com/2013/02/21/strict-liability-in-the-netherlands/, archived at http://perma.cc/D27N-PF56; Stricter Liability—Questions and Answers, CYCLE LAW SCOTLAND, http://www.cycling-accident-compensation.co.uk/questions-and-answers.aspx (last visited, Feb. 13, 2015), archived at http://perma.cc/ZW44-XHQQ.

lieve that cyclists have more incentive to cycle safely—to protect themselves from physical injuries and death—than drivers have incentive to avoid cyclists. ¹⁰⁹ Many cyclist advocates believe that, in light of this disparity, the current U.S. legal system treats cyclists unjustly. ¹¹⁰ Speaking out against the perceived injustice, one advocate has lamented that, "[t]his insane lacuna in the justice system reflects extreme systematic prejudice by drivers against cyclists, and would be easy enough to fix" through changes in the law. ¹¹¹

Coupled with claims that drivers are rarely criminally prosecuted after collisions with cyclists, and the burden on the cyclist in a civil case, there is very little institutional incentive for drivers to take extra precautionary measures to avoid striking cyclists with their automobiles. For instance, in *Waring v. Wommack*, the Texas Court of Appeals affirmed the dismissal of a case involving a car collision with a cyclist riding legally on the road, brought by the cyclist to compensate for injuries resulting from the accident. The cyclist, Frederick Waring, was riding his bicycle through an intersection, into which he had the right-of-way, when he was struck by a turning vehicle. The court held that it was Mr. Waring's burden to prove that the driver of the automobile was negligent. In his defense, the driver claimed he did not see the cyclist. The court found that the driver was not negligent and dismissed the case, The court found that is not atypical in collisions between motor vehicles and cyclists.

Some states have taken the initiative to protect cyclists by creating penalties aimed at deterring the kind of driving that endangers cyclists. 119

¹⁰⁹ See M.S., supra note 17.

¹¹⁰ See Duane, supra note 18.

¹¹¹ M.S., *supra* note 17 ("All that America would have to do would be to adopt traffic regulations like the ones in place in the Netherlands").

¹¹² See Duane, supra note 18; Mionske, Why We Need Cycling Insurance, supra note 101.

¹¹³ 945 S.W.2d 889, 894–95 (Tex. App. 1997); see supra notes 1–10 and accompanying text.

¹¹⁴ Waring, 945 S.W.2d at 890–91, 894–95.

¹¹⁵ *Id.* at 895.

¹¹⁶ Id. at 890-91.

¹¹⁷ See id. at 895.

¹¹⁸ See, e.g., Martinez v. Landry, 399 So.2d 629, 630 (4th Cir. 1981) (holding automobile driver was not negligent after hitting nine-year-old on a bicycle); Santiago v. Quattrociocchi, 91 A.D.3d 747, 748 (N.Y. App. Div. 2012) (holding infant plaintiff riding a bicycle to be the proximate cause of his own injuries after he was struck by an automobile). "Although the plaintiff suffers from amnesia as a result of the accident, and thus is not held to as high a degree of proof, . . . he is not relieved of the obligation to provide some proof from which negligence can reasonably be inferred." Santiago, 91 A.D.3d at 748; see also Waring, 945 S.W.2d at 895 (holding the cyclist had the burden to prove the automobile driver was negligent and caused the accident).

¹¹⁹ E.g., Bicycle & Pedestrian Program, OREGON.GOV, http://www.oregon.gov/ODOT/hwy/bikeped/Pages/laws_regs.aspx (last visited Feb. 13, 2015), archived at http://perma.cc/HQR6-R5JC; LACBC and the Proposed California Vulnerable User Law, BIKINGINLA (July 27, 2009), http://bikinginla.com/tag/holland-bicycle-liability-law/, archived at http://perma.cc/F3LY-KOSA.

For example, Oregon passed a bill in 2007 creating "careless driving penalties" for automobile drivers that cause serious physical injury or death to "vulnerable user[s] of the public way" because of careless driving. ¹²⁰ Connecticut, Illinois, Nevada, Michigan, Massachusetts, and Rhode Island have passed similar bills. ¹²¹ Not all states, however, are as proactive in creating safe cycling laws. ¹²² Texas, for example, vetoed similar proposed legislation in 2009, though several communities in Texas are passing local vulnerable user laws to bypass the Governor's veto. ¹²³

B. Foreign Cycling Law

1. Dutch Law: Strict Liability

In the Netherlands, automobile drivers face strict liability in civil actions when they are involved in a collision with a cyclist. ¹²⁴ The Dutch created the strict liability scheme with Article 185 of the Road Safety Act of 1994 ("Article 185Wvw"). ¹²⁵ The law was put in place in the 1990s, after

¹²⁰ Bicycle & Pedestrian Program, supra note 119 ("Under the bill, a 'vulnerable user' includes a pedestrian, a highway worker, a person riding an animal, the operator or user of a farm tractor, a skateboard, roller skates, in-line skates, a scooter, or a bicycle."). See generally OR. REV. STAT. § 811.135 (2013) (the state of Oregon's vulnerable user law). The bill "requires a court to sentence a person convicted of this offense to complete a traffic safety course, perform 100 to 200 hours of community service, pay a fine of up to \$12,500, and suspension of driving privileges for one year." Bicycle & Pedestrian Program, supra note 119.

¹²¹ Joseph Cutrufo, With Governor Malloy's Signature, Vulnerable User Bill Becomes Law in Connecticut (May 19, 2014), http://blog.tstc.org/2014/05/19/with-governor-malloys-signature-vulnerable-user-bill-becomes-law-in-connecticut/, archived at http://perma.cc/ZH5B-K7U4; Vulnerable Roadway User Laws Gain Momentum Nationwide as More People Bike and Walk, ALA. BICY-CLE & PEDESTRIAN ALLIANCE (Apr. 18, 2011), https://akpedbikealliance.wordpress.com/2011/04/18/%E2%80%A2-vulnerable-roadway-user-laws-gain-momentum-nationwide-as-more-people-bike-and-walk/, archived at https://perma.cc/J3VL-2W7Y.

¹²² See LACBC and the Proposed California Vulnerable User Law, supra note 119.

¹²³ Id.; Vulnerable Roadway User Laws Gain Momentum Nationwide as More People Bike and Walk, supra note 121; see S.B. 488, 81st Leg., Reg. Sess. (Tex. 2009), available at http://www.legis.state.tx.us/tlodocs/81R/billtext/html/SB00488I.htm, archived at http://perma.cc/JF8D-SQG9. The bill attempted to codify proper driving etiquette regarding cyclists, including making harassment and intimidation of cyclists illegal. See Tex. S.B. 488. Governor Rick Perry vetoed the bill, claiming it contradicted current statutes and placed the burden on automobile drivers. AC-TION UPDATE—Governor Vetoes Safe Passing, BIKETEXAS (June 19, 2009), http://www.bike texas.org/en/news/action-alerts/723-action-update-governor-vetoes-safe-passing, archived at http://perma.cc/6ZEF-HTA9.

¹²⁴ David Hembrow & Mark Wagenbuur, *Campaign for Sustainable Safety, Not Strict Liability*, AVIEWFROMTHECYCLEPATH.COM (Jan. 2, 2012), http://www.aviewfromthecyclepath.com/2012/01/campaign-for-sustainable-safety-not.html, *archived at* http://perma.cc/AA8A-QE3N.

¹²⁵ *Id.*; see Road Traffic Act 1994, Stb. ch. XII, art. 185 (1994), available at www.st-ab.nl/wetten/0352_Wegenverkeerswet_1994_Wvw_1994.htm, archived at http://perma.cc/R4E7-RJLP. "There is no equivalent for the phrase 'strict liability' in Dutch. It is usually described by the general public [by saying that]... 'as a driver you are liable when you crash into a cyclist' "Strict Liability in the Netherlands, supra note 108.

the Netherlands had already established a "majority cycling culture." ¹²⁶ Under Dutch law, pedestrians and cyclists are considered "weaker participants in traffic." ¹²⁷ Automobile drivers are held strictly liable for injuries resulting from automobile-cyclist collisions. ¹²⁸ The law places a presumption of fault on the driver involved in a collision with a cyclist. ¹²⁹ Cyclists over the age of fourteen who are acting recklessly might be held *partly* liable—at least fifty percent—for the damages because they are presumed to understand appropriate behavior on the road. ¹³⁰

If the driver of the automobile could have reasonably foreseen the accident to happen, the accident will be deemed the driver's fault. 131 Even if the driver can prove none of the blame falls on him, he will still be held partly liable. 132 If a driver can prove that the collision was a result of "circumstances beyond his control"—showing the accident was out of the driver's control or foresight—he may only escape some, but not all, liability. 133 Drivers, however, rarely succeed on this defense. 134 For example, if an automobile driver strikes a cyclist on a road that does not contain a bike lane, thus forcing the cyclist to ride in traffic, the driver will be held liable for at least fifty percent of the damages. 135 The same result will be reached if the evelist is struck as a result of running a red light. 136 Dutch judges even consider failing to yield to an automobile, or jumping a red light, either intentionally or accidentally, as foreseeable. 137 Therefore, a driver would not be granted a "circumstances beyond control" defense in these situations. 138 Even if the cyclist is struck after riding the wrong direction on a one-way street and then speeding out in front of the vehicle at an intersection, the driver will still be held liable under current Dutch law. 139

¹²⁶ Hembrow & Wagenbuur, *supra* note 124.

¹²⁷ M.S., *supra* note 17.

¹²⁸ See Strict Liability in the Netherlands, supra note 108.

¹²⁹ M.S., *supra* note 17.

¹³⁰ Hembrow & Wagenbuur, *supra* note 124 ("An adult pedestrian dressed in black and crossing a road without looking can expect to be held... liable for damage to a motor vehicle which hits him."). The law dictates that if the cyclist is under the age of fourteen, the automobile driver will always be held at fault for the collision, even if the cyclist would otherwise be at fault. *Id*.

¹³¹ Strict Liability in the Netherlands, supra note 108.

¹³² See M.S., supra note 17. "If [the cyclist] was indeed at fault, the driver is still liable for [fifty percent] of the damage. Dutch [lawmakers] considered this to be reasonable, because the non-motorised road user usually suffers more and more severe damage." Strict Liability in the Netherlands, supra note 108.

¹³³ See M.S., supra note 17; Strict Liability in the Netherlands, supra note 108.

¹³⁴ M.S., *supra* note 17.

¹³⁵ See id.

¹³⁶ See id.

¹³⁷ Strict Liability in the Netherlands, supra note 108.

¹³⁸ Id.

¹³⁹ See M.S., supra note 17.

An article in *The Economist* provides an extreme example to show just how difficult it is to successfully utilize the "circumstances beyond control" defense in the Netherlands:

[I]f a tornado is racing through the streets of some Dutch town, picks [a] truck up, and hurls it into a bicyclist, who is in the middle of running a red light while going the wrong way up a oneway street, no hands . . . the truck driver will probably not have to pay the cyclist's damages, unless the cyclist was fourteen or younger, in which case the truck driver will have to make an extra effort to prove that there was nothing he could have done to avoid the accident. ¹⁴⁰

The law's intention and responsibility is to determine "material damage and financial responsibility." Whether or not the law actually creates safer conditions for cyclists is debated in countries advocating for strict liability in this context. If In fact, many citizens of the Netherlands are not aware of their country's own law, or that the law is stricter than other countries, which is the primary argument critics of the strict liability scheme use to show the Dutch law cannot be credited with the low rate of accidents in the Netherlands. It is a context of the strict liability scheme use to show the Dutch law cannot be credited with the low rate of accidents in the Netherlands.

2. Dutch Law: Infrastructure

In the Netherlands, the infrastructural design of the roads is different from roads in the United States, or anywhere else in the world for that matter. 144 Dutch roads separate automobiles from bicycles to provide "a traffic environment that is safer for all road users." 145 The road design in the Netherlands is referred to as "Sustainable Safety." 146 Sustainable Safety began in the 1990s at the same time as the enactment of Article 185 Wvw's strict liability scheme. 147 The roads are engineered to account for human error, mak-

 $^{^{140}}$ Id

¹⁴¹ Hembrow & Wagenbuur, *supra* note 124 ("[The law] could also help determine who pays for repair or replacement of an adult's bicycle which has been run over by a truck. However, this law is not concerned with allocating blame, or with imprisoning bad drivers.").

¹⁴² See Campaign for Presumed Liability: Road Share, CYCLE LAW SCOTLAND, http://www.cycling-accident-compensation.co.uk/strict-liability.aspx (last visited Feb. 13, 2015), archived at http://perma.cc/2QTK-P5HM; Strict Liability in the Netherlands, supra note 108.

Hembrow & Wagenbuur, supra note 124.

¹⁴⁴ Ld

¹⁴⁵ Strict Liability in the Netherlands, supra note 108; Sustainable Safety, NL CYCLING (Jan. 2, 2012), http://bicycledutch.wordpress.com/2012/01/02/sustainable-safety/, archived at http://perma.cc/9RHP-8GET

¹⁴⁶ Strict Liability in the Netherlands, supra note 108.

¹⁴⁷ Hembrow & Wagenbuur, *supra* note 124.

ing accidents less common than in other countries. ¹⁴⁸ For example, pedestrians, cars, and cyclists each have their own set of traffic lights at each intersection. ¹⁴⁹ At a particular moment, only one group of travelers, moving in one direction will have a green light. ¹⁵⁰ That way, there are no cars coming in the opposite direction, or turning across a lane while travelers are coming in the opposite direction. ¹⁵¹ Additionally, cars, pedestrians, and cyclists are not competing with one other to cross the intersection first. ¹⁵²

Some Dutch citizens attribute their cycling safety culture to the infrastructure the Netherlands has created, rather than to any additional strictness of their laws. Critics of the Dutch strict liability scheme claim, "the importance of this [strict liability] law is often wildly overstated across the English speaking world." They claim that Sustainable Safety (i.e., the improved infrastructure) and not the implementation of a strict liability scheme, must be given the credit for driver awareness and cycling safety in the Netherlands. Iss

3. Scotland's Efforts to Pass Strict Liability Laws for Cyclist-Automobile Collisions

Although many other countries utilize the Dutch strict liability model for cycling, not all countries, including the United States, follow this model. ¹⁵⁶ The United Kingdom is one of a minority of European countries that

¹⁴⁸ Id. Some U.S. cities are attempting to implement cyclist-friendly infrastructure as well. See, e.g., CHI. DEP'T OF TRANSP., COMPLETE STREETS CHICAGO 5 (2013), available at http://www.cityofchicago.org/content/dam/city/depts/cdot/Complete%20Streets/CompleteStreetsGui delines.pdf, archived at http://perma.cc/59PP-GKY5; Annear, supra note 17. Boston city officials have created a "Connect Historic Boston" proposal that would create a "family friendly" bicycle loop around the city's downtown area, "which will connect cyclists to historic sites all around the city with relative ease." Annear, supra note 17. The project "will feature the installation of buffered, protected bike lanes, special paving to separate the trail from the roadways and pedestrian walkways, and two-lane tracks for cyclists throughout." Id. Chicago is also planning to implement bicycle and pedestrian-friendly infrastructure. See CHI. DEP'T OF TRANSP., supra note 148, at 5.

¹⁴⁹ Hembrow & Wagenbuur, supra note 124.

¹⁵⁰ See id.

¹⁵¹ *Id*.

¹⁵² See id.

¹⁵³ See Strict Liability in the Netherlands, supra note 108 ("It's like with disease: it's good to know there is a cure for an illness, but you'd rather not get sick in the first place. In this analogy 'strict liability' is the antidote, whereas 'sustainable safety' is the vaccine.").

¹⁵⁴ Hembrow & Wagenbuur, *supra* note 124.

¹⁵⁵ See id

¹⁵⁶ Campaign for Presumed Liability: Road Share, supra note 142. "Stricter liability is the norm in most countries in the world. In Europe, this includes major nations like Belgium, Denmark, France, Germany, the Netherlands[,] and Spain Stricter liability can also be found in Asia, in countries like India, Bangladesh, Vietnam, and China." Strict Liability—Questions and Answers, supra note 108.

do not use strict liability to protect cyclists and other "vulnerable road users," along with Cyprus, Malta, Romania, and Ireland. 157

In Scotland, the Campaign for Stricter Liability (the "Campaign") was created to push for strict liability to be implemented to protect Scottish cyclists. 158 Contrary to the belief of strict liability critics in the Netherlands. 159 the Campaign believes implementing strict liability, in conjunction with its advertising through the media and cyclist organizations, will increase cycling safety. 160 The Campaign has made some progress in Scotland. 161 Currently, it is running an online petition and utilizing internet forums to spread knowledge. 162 The goal of the Campaign is to introduce a strict liability bill to the Scottish Parliament. 163 Ultimately, the hope is that the bill will implement a "no-fault liability" structure in Scottish cycling law. 164

IV. STRICT LIABILITY IN THE UNITED STATES

The legal concept of strict liability—analogous to the Dutch law used for automobile-cyclist collisions—exists in U.S. common law for torts. 165 Strict liability makes a defendant liable for harm without looking at the defendant's intent or negligence. 166 Unlike in traditional negligence tort cases, in strict liability tort cases, defendants may be held liable for harm that was not caused intentionally, recklessly or negligently, as long as defendant's actions were the factual cause of the harm. 167 Strict liability should not be confused with absolute liability because defenses and limitations might still be applicable in certain strict liability situations. 168 Unlike absolute liability—where there would be no burden of proof and no possible defense strict liability shifts the burden of proof from the aggrieved moving party to

¹⁵⁷ Campaign for Presumed Liability: Road Share, supra note 142.

¹⁵⁹ See supra notes 153–155 and accompanying text.

¹⁶⁰ Campaign for Presumed Liability: Road Share, supra note 142; Hembrow, Perfect Driving Will Never Happen (Campaign for Sustainable Safety, Not Strict Liability—part 2), AVIEWFROM THECYCLEPATH.COM (July 19, 2013), www.aviewfromthecyclepath.com/2013/07/perfect-drivingwill-never-happen.html, archived at http://perma.cc/436F-6HP2.

¹⁶¹ See Campaign for Presumed Liability: Road Share, supra note 142.

¹⁶² See id.

¹⁶⁴ See id. No-fault liability is "where a person is held responsible not for his failure to display the diligence of a reasonable man, but because he is in control of danger to other people's lives, health, or property." Id.

¹⁶⁵ See RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM ch. 4, Scope Note (2010); Hembrow & Wagenbuur, supra note 124.

¹⁶⁶ RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM ch. 4, Scope Note.

¹⁶⁷ *Id*.

¹⁶⁸ *Id.* § 20.

the alleged tortfeasor defendant. ¹⁶⁹ U.S. tort law applies such strict liability in limited instances—most notably in cases involving abnormally dangerous activities and in products liability. ¹⁷⁰

A. Abnormally Dangerous Activity

A strict liability standard was first applied in the United States to activities considered "abnormally dangerous." ¹⁷¹ If the activity creates a high risk of foreseeable physical harm, even if all parties exercise reasonable care and the activity is "not a matter of common usage," it is considered abnormally dangerous. ¹⁷² Further, even if the defendant took all necessary precautions while performing the abnormally dangerous activity, he may be held strictly liable for any resulting injury. ¹⁷³

This concept of strict liability originated in the United Kingdom in the 1800s, in the case of *Rylands v. Fletcher*. ¹⁷⁴ In *Rylands*, the defendant built a reservoir on his land and during the process of building it, the base began to leak, which in turn damaged a nearby property. ¹⁷⁵ The House of Lords held the defendant at fault for the damage. ¹⁷⁶ In particular, Lord Chancellor Cairns held that because the defendant was using his land for "a non-natural use," he should be held strictly liable for the damage caused by his activi-

¹⁶⁹ See John F. Vargo, The Emperor's New Clothes: The American Law Institute Adorns a "New Cloth" for Section 402A Products Liability Design Defects—A Survey of the States Reveals a Different Weave, 26 U. MEM. L. REV. 493, 508 (1996) ("Imposing strict liability relieves plaintiff of the burden of proving fault Indeed, the most significant difference between negligence and strict liability [might] turn out to be where the burden of proof lies with respect to such issues.").

sues.").

170 RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM ch. 4, Scope Note, § 24. Strict liability is also used in cases of *respondeat superior*. *Id.* at ch. 4, Scope Note. *Respondeat superior* is actually a combination of strict liability and negligence. *Id.* If an employee is found negligent, the employer can be held strictly liable for the negligent actions of his employees. *Id.*

¹⁷¹ Id. § 20; see, e.g., City of Neodesha v. BP Corp. N. Am. Inc., 287 P.3d 214, 220 (Kan. 2012) (class action suit alleging groundwater and subsurface soil contamination caused by former oil refinery considered abnormally dangerous activity and subject to strict liability).

 $^{^{172}}$ Restatement (Third) of Torts: Liab. for Physical & Emotional Harm \S 20; see, e.g., City of Neodesha, 287 P.3d at 220.

¹⁷³ RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 20; *see*, *e.g.*, Klein v. Pyrodyne Corp., 810 P.2d 917, 918–19, 921, 925–26 (Wash. 1991) (finding general contractor for aerial fireworks at public fireworks display strictly liable for injuries sustained by spectators even though he took all mandatory precautions).

¹⁷⁴ Rylands v. Fletcher, L.R. 3 H.L. 330 (1868); RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 20.

¹⁷⁵ Rylands, L.R. 3 H.L. at 331–32.

¹⁷⁶ *Id.* at 337.

ty. 177 Today, U.S. courts often cite to *Rylands* when discussing abnormally dangerous activities. 178

The *Restatement (Second) of Torts* lists six factors to consider when determining whether an activity is abnormally dangerous.¹⁷⁹ The factors are: (1) the degree of risk that harm will occur; (2) the likelihood of great harm; (3) the potential to eliminate the risk by using reasonable care; (4) the common nature of the activity; (5) the appropriateness of the activity to occur in a given location; and (6) the value of the activity to the community.¹⁸⁰ The activity must be found to be abnormally dangerous according to an examination of these factors for strict liability to apply to an alleged tort.¹⁸¹

B. Products Liability

Products liability makes a product's manufacturer strictly liable for injury to a consumer during use of the product, even if the manufacturer took all possible care in production and sale. Instead of proving the manufacturer was negligent in its construction of the product, the injured party must prove that the product in question was defective and unreasonably dangerous. Next, the injured party must prove that the defect existed at the time it "left the hands of the defendant." Finally, the plaintiff must prove that "the defect was the direct and proximate cause of the plaintiff's injuries or loss." If the plaintiff is able to meet its burden of proof, the manufacturer will be held strictly liable for the plaintiff's injuries or loss, regardless of whether or not it was negligent.

Originally, strict products liability was used to protect consumers against food unsafe for human consumption. ¹⁸⁷ Today, however, strict products liability is applied more broadly. ¹⁸⁸ The justification behind the use of

¹⁷⁷ Id. at 339.

¹⁷⁸ RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 20; see, e.g., Sprankle v. Bower Ammonia & Chem. Co., 824 F.2d 409, 414 (5th Cir. 1987); City of Neodesha, 287 P.3d at 225.

¹⁷⁹ RESTATEMENT (SECOND) OF TORTS § 520 (1965).

 $^{^{180}}$ Id

¹⁸¹ City of Neodesha, 287 P.3d at 217 (class action suit alleging groundwater and subsurface soil contamination caused by former oil refinery considered abnormally dangerous activity and subject to strict liability).

¹⁸² RESTATEMENT (SECOND) OF TORTS § 402A.

¹⁸³ Temple v. Wean United, Inc. 364 N.E.2d 267, 270 (Ohio 1977); RESTATEMENT (SECOND) OF TORTS § 402A.

¹⁸⁴ Temple, 364 N.E.2d at 270.

¹⁸⁵ *Id*.

¹⁸⁶ See id.

¹⁸⁷ RESTATEMENT (SECOND) OF TORTS § 402A.

¹⁸⁸ *Id.* "Beginning in 1958... a number of recent decisions... have extended the rule of strict liability to cover the sale of any product which, if it should prove to be defective, may be expected to cause physical harm to the consumer or his property." *Id.* "[Strict products liability]

strict liability for products is that "the seller, by marketing his product for use and consumption, has undertaken and assumed a special responsibility toward any member of the consuming public who may be injured by it." Additionally, public policy considerations require that consumers be protected—particularly against accidental injuries caused by manufacturers—by putting the costs on those best suited to bear them. ¹⁹⁰ Strict liability thus gives consumers maximum protection, allowing them to trust that manufacturer's products are made with all the necessary precautions. ¹⁹¹

The case of *Escola v. Coca Cola Bottling Co. of Fresno* is considered the landmark products liability case in the United States. ¹⁹² In 1944, in *Escola*, the Supreme Court of California held Coca Cola liable for injuries sustained by a waitress when a bottle of soda exploded on her. ¹⁹³ The bottle, which shattered in the waitress's hand, "inflicted a deep five-inch cut, severing blood vessels, nerves[,] and muscles of the thumb and palm of the hand." ¹⁹⁴ The plaintiff was unable to prove exactly what caused the bottle to explode. ¹⁹⁵ Instead, the plaintiff relied solely on the doctrine of *res ipsa loquitur*. ¹⁹⁶ Coca Cola, the defendant, rebutted her claims by countering that if the plaintiff could not produce evidence proving specific negligent acts that caused the bottle to explode, the case must be dismissed. ¹⁹⁷

The court in *Escola* based its holding on a criminal statute. ¹⁹⁸ "The statute imposes criminal liability not only if the food is adulterated, but if its container, which may be a bottle, has any deleterious substance, or renders the product injurious to health." ¹⁹⁹ The criminal statute attached liability even if the plaintiff was unable to prove the manufacturer was at fault. ²⁰⁰ The court in *Escola*—basing its decision on the public policy-based stat-

applies also to products which, if they are defective, may be expected to and do cause only 'physical harm' in the form of damage to user's land or chattels, as in the case of animal food or a herbicide." *Id.*

¹⁸⁹ *Id*.

¹⁹⁰ Id.

¹⁹¹ See id.

¹⁹² See 150 P.2d 436 (Cal. 1944); Shapo on the Law of Products Liability, CCH Law of Products Liability pt. 1, ch.7, § 7.01 (2014), available at 2013 WL 5624029 (C.C.H.).

¹⁹³ Escola, 150 P.2d at 440.

¹⁹⁴ *Id.* at 438.

¹⁹⁵ Id. at 439.

¹⁹⁶ *Id.* at 438. *Res ipsa loquitor* is a Latin phrase meaning "the thing speaks for itself." BLACK'S LAW DICTIONARY 712 (10th ed. 2014). "The doctrine providing that, in some circumstances, the mere fact of an accident's occurrence raises an inference of negligence that establishes a prima facie case." *Id.*

¹⁹⁷ Escola, 150 P.2d at 438.

¹⁹⁸ *Id.* at 441.

¹⁹⁹ Id.

²⁰⁰ *Id*.

ute—extended strict liability to civil cases.²⁰¹ The policy thrust behind the decision was that strict liability is applied to products liability because the manufacturer is in a better position to detect defects and to provide a sense of safety to consumers.²⁰²

A manufacturer may be able to avoid liability, however, if it can prove that the consumer was using the product in an unforeseeable way. For example, in 2013, in *Korban v. Boostpower U.S.A.*, the owner of a boat held a fuel rail to stop a gasoline leak while another passenger continued to drive the boat. While the owner held the fuel rail, fuel began to spew, covering him. Ultimately, the owner suffered fatal injuries when a rapid fireball overtook him. The plaintiff, suing on behalf of the deceased owner, claimed that the accident would not have occurred if a security bar had been installed on the boat. The Tenth Circuit Court of Appeals held, however, that because the fuel rail was being misused in an unforeseeable way, the manufacturer was free from liability.

V. APPLYING STRICT LIABILITY TO CURRENT U.S. BICYCLING LAW

Applying strict liability to automobile collisions with bicyclists will lead to safer roads for American cyclists, ²⁰⁹ which will in turn lead to increased rates of cycling, ²¹⁰ thereby reducing environmentally harmful auto emissions. ²¹¹ The U.S. legal system should recognize that although a bicycle is considered a vehicle, cyclists are more physically vulnerable and suffer more severe damages than the automobile driver in a bicycle-automobile collision. ²¹² The law should shift the burden of proof from the cyclist to the automobile driver through implementation of strict liability on automobile drivers who strike cyclists. ²¹³ Because the strict liability scheme is already

 $^{^{201}}$ Id

²⁰² RESTATEMENT (SECOND) OF TORTS § 402A (1965).

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²⁰⁴ 533 F.App'x 820, 822 (10th Cir. 2013). "The fuel rail is a part of the fuel injection system It's essentially a metal pipe that channels fuel to the fuel injectors which will in turn spray the fuel into the engine's air stream ... The fuel rail must be strong enough to contain fuel under pressure without breaking" John Brennan, *What Is a Fuel Rail*?, EHOW, http://www.ehow.com/about_6672624_fuel-rail_.html (last visited Feb. 13, 2015), *archived at* http://perma.cc/P8GB-UAFD.

²⁰⁵ Korban, 533 F.App'x at 821–22.

²⁰⁶ *Id*.

²⁰⁷ *Id*.

²⁰⁸ Id. at 823.

²⁰⁹ See M.S., supra note 17.

²¹⁰ See Annear, supra note 17.

²¹¹ See Ways to Reduce Air Pollution, supra note 64.

²¹² See Strict Liability in the Netherlands, supra note 108.

²¹³ See id.

in use in other areas of U.S. tort law to shift the presumption of liability to the party better suited to avoid the injury, courts are already logistically well suited and doctrinally prepared to apply the standard to cycling accidents. ²¹⁴ It would also be inexpensive in comparison to alternative measures to improve cyclist safety, such as infrastructure reform. ²¹⁵

Although a proposed strict liability scheme in the United States would mimic Article 185 of the Road Safety Act of 1994 ("Article 185Wvw"), it would function somewhat differently. The change in the law could have profound impacts on both drivers and cyclists in the United States. Although some Dutch citizens might criticize the strategy of implementing strict liability to create safer roads, cycling advocates believe the change will have a positive impact on road safety in the United States, which will in turn benefit the environment.

A. The Need for Change

The United States needs to encourage cycling to protect the environment from the harmful effects of automobiles.²²¹ If commuters switch from driving automobiles to riding bicycles, the environment will benefit from reduction in noise pollution, as well as harmful ozone, carbon monoxide, and carbon dioxide, which will slow global warming.²²² In order to effectively present cycling as a commuting alternative, cyclists will first need to

 $^{^{214}}$ See, e.g., Restatement (Third) of Torts: Liab. for Physical & Emotional Harm $\S~20~(2010);$ Restatement (Second) of Torts $\S~402A~(1965);$ Strict Liability in the Netherlands, supra note 108.

²¹⁵ Śee Annear, *supra* note 17. Preliminary costs to create bicycle infrastructure in certain areas of Boston's downtown alone are estimated at \$23.2 million. *Id*.

²¹⁶ See RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 20; Strict Liability in the Netherlands, supra note 108. See generally Road Traffic Act 1994, Stb. ch. XII, art. 185, available at www.st-ab.nl/wetten/0352_Wegenverkeerswet_1994_Wvw_1994.htm (codification of the Dutch automobile-cyclist collision strict liability scheme), archived at http://perma.cc/R4E7-RJLP.

²¹⁷ See M.S., supra note 17 ("This regulatory regime places an extra burden on drivers Cyclists in the Netherlands learn to stay inside the country's ubiquitous bike lanes, not to run red lights, and to signal before turning, and they obey those rules more scrupulously than Americans do [without the strict liability regime].").

²¹⁸ See, e.g., Hembrow & Wagenbuur, supra note 124; Strict Liability in the Netherlands, supra note 108.

²¹⁹ See Hembrow, Perfect Driving Will Never Happen, supra note 160.

²²⁰ See Benefits of Bike Commuting, supra note 15.

²²¹ See OFFICE OF MOBILE SOURCES, AUTOMOBILES AND OZONE, *supra* note 12, at 2; Carrington, *supra* note 14.

See Office of Mobile Sources, Automobiles and Ozone, supra note 12, at 1–2; Office of Mobile Sources, Automobiles and Carbon Monoxide, supra note 41, at 1; Air Pollution Comes from Many Sources, supra note 13; Benefits of Bike Commuting, supra note 15; Noise Pollution, supra note 13.

feel safe on the roads.²²³ To accomplish this, strict liability should be applied to automobile drivers when they are involved in a collision with a bicvclist.²²⁴

Although infrastructure reform would be a sure way to improve cyclist safety, such reform is likely many years away, and it will be expensive.²²⁵ The United States should implement strict liability now to increase cycling safety and thereby protect the environment from the harmful effects of automobiles.²²⁶ Strict liability already exists for other harms in the U.S. tort law system, and it would be relatively easy to implement quickly and at little cost. 227 Down the road, after strict liability has been successfully implemented, infrastructure might be adjusted to supplement the safety offered to cyclists.²²⁸

B. Strict Liability Already Works in the United States

Strict liability is already used in the United States in tort law for products liability and abnormally dangerous activities.²²⁹ In the United States, circumstances that warrant strict liability create a presumption of liability on the actor. 230 Similarly, applying strict liability to automobile drivers would create a presumption of liability on the driver in the event of a collision with a cyclist. ²³¹ Instead of forcing injured cyclists to prove the driver's negligence, recklessness, or even intent, the burden would shift to the defendant driver to provide a defense against strict liability.²³²

²²³ See Annear, supra note 17; Duane, supra note 18.

See M.S., supra note 17.

See Annear, supra note 17; Hembrow & Wagenbuur, supra note 124; see also supra note 153 and accompanying text (comparing strict liability to a cure for an illness and sustainable safety to a vaccine). Boston's proposed infrastructure plan is funded through a federal Transportation Investment Generating Economic Recovery, or TIGER, grant. Annear, supra note 17. Preliminary costs of the project are estimated at \$23.2 million. Id. Due to the mass expense and logistical complications of altering the current infrastructure of the roads, in comparison with the ease of reforming application of strict liability, infrastructure reform seems untenable as an immediate solution. See id.

226 See Benefits of Bike Commuting, supra note 15; M.S., supra note 17.

The Commutation of Topics Liab for Physical &

²²⁷ See, e.g., RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 20 (2010); RESTATEMENT (SECOND) OF TORTS § 402A (1965); see Annear, supra note 17. Because the structure of strict liability already exists in tort law, it would be administratively less complicated and less expensive to implement than creating a new legislative scheme for cyclists or infrastructure reform. See RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 20; RESTATEMENT (SECOND) OF TORTS § 402A; Annear, supra note 17.

²²⁸ See Annear, supra note 17; Hembrow & Wagenbuur, supra note 124.

See RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 20; RESTATEMENT (SECOND) OF TORTS § 402A; see supra notes 165–208 and accompanying text.

²³⁰ See Vargo, supra note 169, at 508.

²³¹ See M.S., supra note 17; Stricter Liability—Questions and Answers, supra note 108.

²³² See M.S., supra note 17; Stricter Liability—Questions and Answers, supra note 108.

The use of strict products liability is most analogous to the structure and logic behind strict liability in automobile-bicycle collisions. ²³³ In those cases, the manufacturer is liable for damages caused by its products.²³⁴ The manufacturer is held liable because it is in a better position to avoid the harm. 235 Similarly, drivers are in a better position to avoid accidents with cyclists; they have more power and protection on the road.²³⁶ Additionally, strict liability is implemented in products liability cases in order to protect the consumer and instill consumers with a sense of safety. 237 Analogously, strict liability laws for drivers will provide extra security to cyclists, making the roads safer for the environmentally friendly commuting method.²³⁸

The caveat to strict products liability is that if the manufacturer can prove that the consumer was using the product in an unforeseeable way, it will not be held liable for the damages. ²³⁹ This defense should be available in a strict liability scheme used for automobile collisions with cyclists.²⁴⁰ Generally, automobile drivers will be held strictly liable for collisions with cyclists. 241 The burden will be on the automobile driver to prove that the cyclist was not abiding by cycling laws and therefore was misusing the road in an unforeseeable way. 242 If the automobile driver can prove that the cyclist was not abiding by the cycling laws, the driver may not be held liable for damages.²⁴³ This, however, will not be a quick and easy defense, and it

²³³ See infra notes 234–245 and accompanying text.

²³⁴ See RESTATEMENT (SECOND) OF TORTS § 402A.

²³⁶ M.S., *supra* note 17 ("The burden can be summed up as follows: before you turn, you have to check carefully in the mirror to see whether there's a cyclist there."); Strict Liability in the Netherlands, supra note 108 ("Because due to the differences between motorised and nonmotorised road users, it is very likely that the latter will suffer more and more severe damage and/or injuries when both are involved in a traffic accident."). "The law also considers the fact that drivers are obliged to be insured for such damage and non-motorised road users are not." Strict Liability in the Netherlands, supra note 108.

²³⁷ See RESTATEMENT (SECOND) OF TORTS § 402A.

²³⁸ See id.; M.S., supra note 17.

²³⁹ Randy R. Koenders, *Products Liability: Product Misuse Defense*, 65 A.L.R. 4th 263, § 3 (1988). The Model Uniform Product Liability Act, as well as most states, recognizes the product misuse defense. Id. "However, the highest courts in Kansas and Texas have completely rejected the misuse defense and supplanted it with comparative fault and contributory negligence principles." *Id.*240 See id.

²⁴¹ See RESTATEMENT (SECOND) OF TORTS § 402A. Strict liability is shifting the burden of proof from the cyclist to the driver, not solely implementing a contributory negligence standard. Stricter Liability—Questions and Answers, supra note 108.

²⁴² See Koenders, supra note 239, § 3; supra note 153 and accompanying text. In the United States, Alabama, Arizona, Colorado, Connecticut, Idaho, Illinois, Michigan, New Hampshire, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Utah, Washington, and West Virginia put the burden of proving misuse on the defendant in strict products liability cases. Koenders, supra note 239, § 3.

²⁴³ See Koenders, supra note 239, § 3.

will not always be successful.²⁴⁴ The burden will be on the automobile driver to prove the cyclist was misusing the road, and doing so will often be a challenge.²⁴⁵

Strict products liability has had a positive impact on consumers in the United States. 246 When the concept was first extended from inherently dangerous activities to products liability, however, the public policy grounds for the rule were not enough to persuade judges. 247 For almost two decades after the ruling in *Escola*, 248 strict liability was often applied in products liability cases under the "disguise" of implied warranty. William Prosser's article, *The Assault Upon the Citadel*, was a contributing factor that initiated the redrafting of the Restatement (Second) of Torts, to include strict products liability. 250

Similarly, courts have the power to expand the application of strict liability to collisions between automobiles and cyclists. The progression of courts applying strict liability more broadly to products should be mimicked in the context of automobile-bicycle collisions. Although the expansion of strict liability to products was gradual, the same public policy considerations make strict liability for automobile-bicycle collisions beneficial to cyclists. The expansion shows that if courts begin to expand strict liability further, the change is likely to eventually gain wide acceptance in the future, as demonstrated by strict products liability, which is now unquestioned in the U.S. legal system. 254

²⁴⁴ See id. The defense will not be as difficult to obtain as the "circumstances beyond control" defense in the Netherlands. See Strict Liability in the Netherlands, supra note 108; supra notes 124–143 and accompanying text.

²⁴⁵ See Koenders, supra note 239, § 3.

²⁴⁶ RESTATEMENT (SECOND) OF TORTS § 402A; *see, e.g.*, Escola v. Coca Cola Bottling Co. of Fresno, 150 P.2d 436, 441 (Cal. 1944) (Traynor, J., concurring).

²⁴⁷ SHAPO ON THE LAW OF PRODUCTS LIABILITY, *supra* note 192, § 7.01. In *Escola v. Coca Cola Bottling Co. of Fresno*, Judge Traynor wrote a separate concurring opinion advocating for "absolute liability." 150 P.2d at 441; SHAPO ON THE LAW OF PRODUCTS LIABILITY, *supra* note 192, § 7.01. "However, Judge Traynor was unable to persuade his colleagues on the California Supreme Court, or any other U.S. courts, that the time had come for such boldness." SHAPO ON THE LAW OF PRODUCTS LIABILITY, *supra* note 192, § 7.01.

²⁴⁸ 150 P.2d at 441.

²⁴⁹ SHAPO ON THE LAW OF PRODUCTS LIABILITY, *supra* note 192, § 7.01.

²⁵⁰ *Id.* ("Prosser argued that a form of strict liability had been applied for decades, not only to food, an area in which a non-fault form of liability had traditionally been employed, but to other products as well."). In 1963, in *Greenman v. Yuba Power Products*, "Judge Traynor brought his *Escola* idea of 1944 to full bloom." 377 P.2d 897 (Cal. 1963)

²⁵¹ See Greenman, 377 P.2d at 897.

²⁵² See id.

²⁵³ See id.

²⁵⁴ See id.

C. Proposed Differences from Dutch Strict Liability

The proposed strict liability scheme in the United States would not exactly mimic Article 185Wvw in the Netherlands. Because bicycles are treated as vehicles in the United States, and not as "weaker participants," as in the Netherlands, the application of strict liability should, and must, differ slightly. Even if the cyclist's actions leading up to the accident were fore-seeable, the automobile would not be deemed at fault if the cyclist is not abiding by cycling laws. For example, if a cyclist causes a collision with an automobile by running a red light, the driver of the automobile would not be liable, or at least not fully liable for the collision. A cyclist running a red light in the Netherlands, in contrast, would not be so unforeseeable as to satisfy the "circumstances beyond control" defense. In the United States, however, the cyclist—considered a vehicle in the eyes of the law—would be breaking the law and therefore would be held at least partly to blame for the accident.

D. Impact on U.S. Drivers and Bicyclists

Strict liability would have positive implications for both drivers and cyclists.²⁶¹ Applying strict liability to automobile drivers involved in collisions with cyclists would equalize the consequences of collisions between automobile drivers and cyclists.²⁶² Drivers, however, might incorrectly assume the law creates an injustice to them in the event of a collision.²⁶³ For example, the Dutch tourism and car owners' organization claims that some drivers think strict liability gives cyclists "a blank check to ignore the

²⁵⁵ Compare RESTATEMENT (SECOND) OF TORTS § 402A (1965) ("If the injury results from abnormal handling . . . or from abnormal preparation or use . . . or from abnormal consumption . . . the seller is not liable."), with Strict Liability in the Netherlands, supra note 108 ("[Strict liability] is usually described by the general public [by saying that]. . . 'as a driver you are liable when you crash into a cyclist' . . . unless the driver can prove the incident was caused by circumstances beyond his/her control. That will be hard, because the driver must then prove he/she drove flaw-less[ly].").

²⁵⁶ See Mionske, Bike Accidents: Collisions with Cars at Intersections, supra note 98; M.S., supra note 17. Because most states treat drivers and cyclists as vehicles, they are held to the same standard of negligence. See Mionske, Bike Accidents: Collisions with Cars at Intersections, supra note 98. The law cannot utilize two different standards for the same type of road user. See id.; M.S., supra note 17.

²⁵⁷ See Koenders, supra note 239, § 3.

²⁵⁸ See id.; M.S., supra note 17.

²⁵⁹ M.S., *supra* note 17.

²⁶⁰ See Koenders, supra note 239, § 3; Mionske, Bike Accidents: Collisions with Cars at Intersections, supra note 98.

²⁶¹ See Duane, supra note 18; M.S., supra note 17.

²⁶² See M.S., supra note 17.

²⁶³ See id.

rules."²⁶⁴ Cyclists, however, are more concerned with their health and safety than with liability and compensation after an accident. ²⁶⁵ "[A] cyclist is not going to deliberately ride through a red light thinking: 'I won't have to pay the damages anyway.' He is more likely to be influenced by the risk that he will land in the hospital."²⁶⁶ Because a cyclist's life is on the line, as opposed to the driver's wallet, the law evens out the consequences by fixing an existing injustice, not creating a new one. ²⁶⁷ Thus, the scheme will result in fewer accidents involving cyclists. ²⁶⁸

Changing the liability model in the United States for collisions between automobile drivers and cyclists might have dramatic effects on both groups. ²⁶⁹ If drivers are made aware that they will be held strictly liable for collisions with cyclists, they will be more cautious of cyclists and take extra precautions to avoid collisions. ²⁷⁰ Drivers will no longer be able to use the excuse, "I didn't see the cyclist." ²⁷¹ Cyclists, on the other hand, will likely become increasingly aware of the cycling laws in their area. ²⁷² Because cyclist safety will only be increased if cyclists abide by the cycling laws and damages can only be collected in such cases, cyclists will be more likely to abide by cycling laws. ²⁷³ This, in turn, has the potential to reduce the number of automobile-bicycle collisions and cyclist fatalities, by making all parties on the road more cautious, and encouraging all to follow the rules of the road more closely. ²⁷⁴ And in so doing, it might ease the tension between cyclists and automobile drivers that exists on U.S. roads. ²⁷⁵

By using a model similar to the Netherlands, and switching the burden of safety from cyclists to automobile drivers, the United States can increase safety for cyclists.²⁷⁶ For example, *Waring v. Wommack*—where the Texas Court of Appeals dismissed the case because the driver was not found to be negligent after striking a cyclist riding legally through an intersection when he had the right-of-way—would have had a different result in the Dutch

²⁶⁴ Id.

²⁶⁵ *Id*.

²⁶⁶ *Id*.

²⁶⁷ See id.

²⁶⁸ *Id*.

²⁶⁹ See id.

²⁷⁰ See id.

²⁷¹ See id.; Mionske, How to Avoid Car-on-Bike Accidents, supra note 96. "In fact, that is the number one excuse drivers make when they collide with a cyclist—'I didn't see him." Id.

²⁷² See M.S., supra note 17.

²⁷³ See id.

^{2/4} See id.

²⁷⁵ See Duane, supra note 18. If cyclists and automobile drivers are both encouraged to abide by the laws and courtesies of the road, there may be less tension between them. See id.

²⁷⁶ See id.; M.S., supra note 17.

strict liability scheme.²⁷⁷ The driver would have been held liable for the injuries to the cyclist even though the driver was not found to be negligent.²⁷⁸ If the driver knew he might be liable, he might have been more cautious of the possibility of the cyclist on the road in the first instance.²⁷⁹

E. Responding to Skeptics

Many commentators in the Netherlands are skeptical about the effects of implementing strict liability in other countries. They claim that strict liability will not prevent collisions because a collision between a automobile driver and a cyclist is rarely intentional, and therefore cannot be deterred by implementation of strict liability. In response, cyclist advocates claim that there is "no such thing as an unavoidable accident." 283

Although not all accidents will be avoided, strict liability should cause many drivers to be more cautious of cyclists and their rights on the road.²⁸⁴ Additionally, the United States currently uses the strict liability model for several other areas of law.²⁸⁵ For example, a manufacturer does not intentionally or carelessly sell a defective product.²⁸⁶ U.S. courts and legislatures, however, have found that it is vital to offer the protection of strict products liability to consumers, to ensure manufacturers are being as careful as possible and to shift fault to the manufacturer in the event an accident occurs.²⁸⁷ The same line of reasoning applies to the use of strict liability for automobile drivers: they will be more cautious of cyclists on the road because they will be liable for damages when an accident occurs.²⁸⁸

Some commentators in the Netherlands admit that road safety would be improved if drivers were more cautious of cyclists and could therefore avoid accidents.²⁸⁹ Many, however, refuse to link strict liability with safer

²⁷⁷ See 945 S.W.2d 889, 890–91, 894–95 (Tex. App. 1997) (the automobile driver claimed he did not see the cyclist); M.S., supra note 17; supra notes 113–117 and accompanying text.

²⁷⁸ See Waring, 945 S.W.2d at 895; supra note 17 and accompanying text.

²⁷⁹ See Waring, 945 S.W.2d at 895; Strict Liability in the Netherlands, supra note 108.

²⁸⁰ See, e.g., Hembrow & Wagenbuur, supra note 124; Hembrow, Perfect Driving Will Never Happen, supra note 160; Strict Liability in the Netherlands, supra note 108.

²⁸¹ Hembrow, Perfect Driving Will Never Happen, supra note 160; Strict Liability in the Netherlands, supra note 108.

²⁸² Hembrow, Perfect Driving Will Never Happen, supra note 160; Strict Liability in the Netherlands, supra note 108.

²⁸³ Hembrow, Perfect Driving Will Never Happen, supra note 160.

²⁸⁴ See M.S., supra note 17.

²⁸⁵ See, e.g., RESTATEMENT (SECOND) OF TORTS §§ 402A, 520 (1965).

²⁸⁶ See id. § 402A. Strict liability might still apply even if the seller exercised all due care in preparation and handling of the product. *Id.*

²⁸⁷ *Id*.

²⁸⁸ See id.

²⁸⁹ Hembrow, *Perfect Driving Will Never Happen*, supra note 160.

driving in the country, instead attributing it to the innovative infrastructural enhancements put in place in the country. Nonetheless, the strict liability scheme was adopted in the Netherlands at the same time as the infrastructure change. Therefore, it is difficult to determine whether all the credit for cyclist safety should be allocated to the infrastructure, as some claim, or if instead, whether it is attributable to some combination of both factors. 292

Skeptics of the notion that strict liability results in safer roads for cyclists claim that a connection cannot be made between behavior and punishment. They claim that other factors are involved in making safer roads, and liability alone will not deter unsafe driving behavior. The U.S. legal system, however, is based, at least partly on the idea that the law can deter behavior by holding citizens accountable. The theory of deterrence is that punishment, or the threat of punishment, will pressure citizens to abide by the laws. In tort law specifically, deterrence is based on the economic theory that assumes citizens will take cost-justified precautions and therefore will avoid potentially costly tort liability.

In the Netherlands, the law's only effect is to determine financial responsibility after a collision already happened, by dictating which party's insurance company pays for the collision's resulting damage.²⁹⁸ Even still, automobile drivers who know they will be held financially responsible for a collision might act more cautiously on the roads.²⁹⁹ Although insurance companies might pay the liabilities, accidents might also cause an increase in insurance rates.³⁰⁰ Even the automobile driver who does not care about the safety of the cyclist will surely care about the impact on his wallet.³⁰¹

Now it's true that road safety would be improved if drivers were perfect, and this is sometimes described as a "low hanging fruit" to cycling campaigners who believe that the danger that they face daily on the roads would be reduced if only they could convince all drivers to behave better all the time.

²⁹⁰ E.g., id.

Id.; Strict Liability in the Netherlands, supra note 108; see supra notes 144-155 and accompanying text.

²⁹¹ Hembrow & Wagenbuur, *supra* note 124.

²⁹² See io

²⁹³ Id.; Strict Liability in the Netherlands, supra note 108.

Hembrow & Wagenbuur, supra note 124.

²⁹⁵ Ernest J. Weinrib, *Deterrence and Corrective Justice*, 50 UCLA L. REV. 621, 621 (2002). Deterrence and corrective justice are the pillars of tort law. *See id.* at 627 "[T]ort law should be understood through a mixed theory that affirms both corrective justice and deterrence." *Id.*

²⁹⁶ See id. at 627.

²⁹⁷ See id.

²⁹⁸ Hembrow & Wagenbuur, *supra* note 124.

²⁹⁹ See Weinrib, supra note 295, at 627; Hembrow & Wagenbuur, supra note 124; M.S., supra note 17.

³⁰⁰ Accident Info: How Car Accidents Can Affect Your Rate, ESURANCE.COM, http://www.esurance.com/claims-info/accident-info/accidents-and-increased-rates (last visited Feb. 14, 2015),

Some commentators in the Netherlands further claim that strict liability cannot be the reason for safe cycling in the Netherlands because residents of the Netherlands do not know their law is different from the laws in other countries. ³⁰² Sources in the Netherlands claim that there are low rates of cycling in other countries because cyclists are worried about being involved in collisions generally, and not who will pay for damages afterwards. ³⁰³ Although those in the Netherlands cite the infrastructural improvements, and not the strict liability scheme, as the source of cycling safety in the country, ³⁰⁴ the two initiatives were implemented almost simultaneously. ³⁰⁵ It is unclear whether either strict liability or infrastructure is the sole cause of the increase in bicycle safety, but it seems unlikely that bicycle safety in the Netherlands can be solely attributed to either factor. ³⁰⁶

Skeptics claim that the law will not increase the number of cyclist commuters. 307 Such critics claim that people will cycle more when they believe the roads are safe and they will not be involved in a collision—not when they will be compensated for a collision. 308 Strict liability attempts to even out the consequences of an accident between an automobile driver and

archived at http://perma.cc/5947-MF75. Accidents do not automatically cause insurance rates to increase. *Id.* It may take three years for premiums to return to the pre-accident rate, however, if they are increased as the result of an accident. *Id.* Implementing a strict liability scheme has the potential to increase insurance rates to prices that many cannot feasibly afford. *See id.* This may result in a decrease in the volume of cars on the road, which furthers the goal of increasing the use of environmentally friendly commuting methods such as cycling. *See How Biking Instead of Driving Can Help You Save On Auto Insurance*, 4AUTOINSURANCEQUOTE.COM, http://www.4autoinsurancequote.com/uncategorized/how-biking-instead-of-driving-can-help-you-save-on-auto-insurance/ (last visited Feb. 14, 2015), archived at http://perma.cc/R6KB-YSDO.

³⁰¹ See Weinrib, supra note 295, at 627.

³⁰² Hembrow & Wagenbuur, *supra* note 124. Similarly, in products liability, consumers might not feel safer merely because the manufacturer will be liable for injuries sustained from the product, but strict products liability still helps to keep consumers safe. *See* RESTATEMENT (SECOND) OF TORTS § 402A (1965). In fact, most Americans are not familiar with all laws and regulations generally. Frank Bruni, Op-Ed, *America the Clueless*, N.Y. TIMES, May 11, 2013, http://www.nytimes.com/2013/05/12/opinion/sunday/bruni-america-the-clueless.html?pagewanted=all&_r=0, *archived at* http://perma.cc/8XQK-JQ3J.

³⁰³ Hembrow & Wagenbuur, *supra* note 124.

The lack of cycling in other countries is not due merely to worries about a lack of compensation for remaining family after a family member has been crushed by a truck. Rather, people are scared to cycle due to worry about being crushed by a truck in the first place. This change of law does not in itself encourage a higher rate of cycling. That was never its purpose.

Id.; Strict Liability in the Netherlands, supra note 108.

³⁰⁴ E.g., Hembrow & Wagenbuur, supra note 124.

³⁰⁵ *Id*.

³⁰⁶ See id.

³⁰⁷ Id.; Strict Liability in the Netherlands, supra note 108.

³⁰⁸ Strict Liability in the Netherlands, supra note 108 (i.e., they do not believe strict liability will make drivers more vigilant and thus inherently safer on the roads).

a cyclist.³⁰⁹ Even if the immediate effect is not to increase cycling, in time, drivers will be more cautious out of necessity, which will lead to safer roads and more cycling commuters.³¹⁰ Countries with low cycling rates, such as the United States, can benefit from these laws until proper infrastructure and cycling culture is developed.³¹¹

F. Strict Liability Will Benefit the Environment

By creating safer roads, cycling levels in the United States will increase. If commuters switch to cycling from automobiles as their primary means of short distance commuting, the environment will enjoy a huge benefit. Levels of ozone, carbon monoxide, carbon dioxide, and noise pollution will all be reduced significantly, providing both health and environmental benefits. He creation of safer roads can convince even one out of ten automobile drivers to switch to cycling, the effects of global warming will be reduced. He carbon emissions that most countries' total emissions, the United States has a responsibility to encourage environmentally friendly commuting methods and to reduce emissions in any way possible. He collisions, and encouraging safe cycling as a commuting alternative, the United States could affect such a reduction, which would significantly improve our environment and protect it for future generations.

CONCLUSION

The excessive reliance on automobiles in the United States causes serious environmental impacts. Although bicycling is an environmentally friendly commuting alternative, many Americans choose not to cycle because the roads are not safe for cycling under the current laws. Sharing the

³⁰⁹ See id.

³¹⁰ See M.S., supra note 17; Strict Liability in the Netherlands, supra note 108.

³¹¹ See Annear, supra note 17; Duane, supra note 18; M.S., supra note 17; supra note 153 and accompanying text.

³¹² See Strict Liability in the Netherlands, supra note 108; supra notes 261–311 and accompanying text.

³¹³ See Carrington, supra note 14.

³¹⁴ See Ludwiszewski & Haake, supra note 13, at 666; OFFICE OF MOBILE SOURCES, AUTO-MOBILES AND OZONE, supra note 12, at 1–2; Air Pollution Comes from Many Sources, supra note 13, at 1; Benefits of Bike Commuting, supra note 15; Noise Pollution, supra note 13.

³¹⁵ See Air Pollution Comes from Many Sources, supra note 13; Benefits of Bike Commuting, supra note 15.

³¹⁶ See Car Emissions & Global Warming, supra note 53.

³¹⁷ See Carrington, supra note 14; M.S., supra note 17; Strict Liability in the Netherlands, supra note 108.

roads creates tension between drivers and cyclists, making cyclists feel, and in some instances become, unsafe. Even after a collision, cyclists face an uphill battle in court in actions against drivers for damages (even when the automobile driver is clearly at fault for the accident).

From an international perspective, Americans cycle less than citizens of many other countries, and when they do cycle, it is at a higher risk than those abroad. In the Netherlands, for example, bicycling rates are much higher than in the United States, and yet, casualties as a result of cycling are significantly lower. The cycling safety in the Netherlands may be attributed to its "sustainable safety" infrastructure, and the strict liability scheme placing the burden on automobile drivers in the event of a collision.

Strict liability, analogous to the law governing automobile-bicycle collisions in the Netherlands and the current U.S. strict liability application to products liability, would create safer roads for cyclists. A strict liability scheme could be implemented quickly in the United States because strict liability is already applied in other tort law situations. Implementation by courts would also be inexpensive and less politically challenging than infrastructure reform. By implementing strict liability, the United States could provide protection to cyclists, therefore making the roads safer and encouraging environmentally friendly commuting.