INCOMPLETE STREETS

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American streets are typically made for automobiles. Some streets are as many as six or eight lanes wide.[1] Such wide streets are difficult for walkers to cross,[2] and motor vehicles frequently travel at speeds as high as 50 miles per hour[3]—speeds high enough to kill a walker if a collision occurs.[4] Even in urban areas, many streets lack sidewalks,[5] forcing walkers to walk in the road. Separate lanes for cyclists are even less common than sidewalks. For example, Philadelphia has more bike lanes per square mile than any other U.S. city,[6] yet only 16 percent of its streets have bike lanes.[7]

The status quo has a wide variety of social costs. In 2022, over 7,000 pedestrians lost their lives in crashes with automobiles.[8] Where people do not

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1. WILLIAM J. ZURBORG, *Completing Streets: Improving America's "Complete Streets,*" 47 WM. & MARY ENV'T L. & POL'Y REV. 467 (2023) ("Many cities, particularly suburbs, are littered with seven-lane highways with little to no crosswalks."); ASMARA M. TEKLE, *Roll on, Cyclist: The Idaho Rule, Traffic Law, and the Quest to Incentivize Urban Cycling*, 92 CHI.-KENT L. REV. 549, 554 (2017) (explaining that high-traffic roads typically have "four to ten lanes of traffic.").

2. MOLLY DUNHAM, *Where the Shoe Leather Meets the Road: Learning from Experience in Crafting a Complete Streets Ordinance*, 63(8) PLAN. & ENV'T L. 3 (2011) ("[I]t's difficult for a pedestrian to get across the street at all, even if there's a stoplight and a pedestrian crosswalk . . . .").

3. *See* TEKLE, *supra* note 1, at 554 (explaining that on such streets, traffic goes at "speeds of 30-50 miles per hour."); DUNHAM, *supra* note 2, at 3 ("[W]ide, straight streets signal to drivers that this is a great environment for driving really fast.").

4. SARA C. BRONIN & GREGORY H. SHILL, *Rewriting Our Nation's Deadly Traffic Manual*, 135 HARV. L. REV. F. 1, 10 (2021) (explaining that when a pedestrian is hit by a car going 40 miles per hour, the pedestrian has only a 15 percent chance of survival, as opposed to a 95 percent chance of survival if the car is going 20 mph); *id*. at 13 (asserting that wider roads promote "faster and more dangerous driving.").

5. *See, e.g.*, David Sachs, *Denver is Missing Sidewalks on More Than A Quarter of Its Streets*, STREETSBLOG DENVER (Dec. 20, 2016), https://denver.streetsblog.org [https://perma.cc/J2PY-C7HV] (highlighting that 23 percent of streets within the city of Denver have no sidewalk); CHANGE LAB SOLS, MAKING STREETS WELCOMING FOR WALKING 2 (Dec. 6, 2013), https://www.changelabsolutions.org/sites/default/files/Streets-Welcome-for-Walking_FINAL_20131206.pdf [https://perma.cc/TW6R-MKLC] ("40 percent of roads in the United States do not have sidewalks."); VANESSA CASADO PEREZ, *Reclaiming the Streets*, 106 IOWA L. REV. 2185, 2187 (2021) (suggesting that the problem is worse in suburban neighborhoods).

6. Randy LoBasso, *Philly Leads U.S. Cities in Bike Lanes Per Mile*, BICYCLE COAL. OF GREATER PHILA. (Nov. 24, 2015), https://bicyclecoalition.org [https://perma.cc/5Q3C-U8PQ].

7. *Id*. (highlighting that Philadelphia has 426 miles of bike lanes); PA. DEP'T OF TRANSP., PENNSYLVANIA HIGHWAY STATISTICS 10 (2022), https://www.dot.state.pa.us/public/pubsforms/Publications/PUB%20600.pdf (documenting that Philadelphia has just over 2595 miles of road).

8. GOVERNORS HIGHWAY SAFETY ASS'N, PEDESTRIAN TRAFFIC FATALITIES BY STATE: 2022 PRELIMINARY DATA 3 (2023), https://www.ghsa.org/resources/Pedestrians23 [https://perma.

walk, they are less likely to get exercise and, thus, more likely to become obese and suffer obesity-related ailments.[9] And where people drive instead of walk, they are likely to create more automobile-related greenhouse gas emissions and other forms of pollution.[10]

One partial[11] solution to these problems is "Complete Streets" policies. According to one group that supports such policies, a "complete street" is one "designed and operated to enable safe access for all users: [including] pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities."[12] Because this language states a general policy rather than mandating a specific design, governments will apply this concept differently in different contexts.[13] Complete streets policies may include adding or improving bike lanes for cyclists, sidewalks, and crosswalks for pedestrians,[14] and/or "road diets" that make streets narrower and thus safer to cross.[15] The latter objective

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cc/4SG2-H3M7]; *id.* at 13 (The five states with the highest death rates were New Mexico, Arizona, Florida, Louisiana, and South Carolina (in that order).

9. *See infra* Part I, Section B.

10. *See infra* Part I, Section C.

11. I call complete streets a partial solution because some factors affecting transportation safety are unrelated to street design. For example, the rise of heavier and taller vehicles has made collisions more dangerous for pedestrians. *See* GREGORY H. SHILL, *Regulating the Pedestrian Safety Crisis*, 97 N.Y.U. L. REV. ONLINE 194, 204 (2022) (noting that taller vehicles are more likely to injure the most vulnerable parts of a pedestrian's body, such as their head, and heavier vehicles are more lethal than lighter vehicles).

12. SAMANTHA R. CHAPMAN, *Combating Obesity One Step at a Time: Why Indiana Should Implement Statewide Complete Streets Legislation*, 12 IND. HEALTH L. REV. 385, 387 (2015) (quoting *Indiana Complete Streets Coalition*, HEALTH BY DESIGN, http://www.healthbydesignonline.org/IndianaCompleteStreetsCampaign.html (last visited Aug. 20, 2014)); *see also* ZURBORG, *supra* note 1, at 471 (The Federal Department of Transportation defines "Complete Streets" as "streets designed and operated to enable safe use and support mobility for all users."); *id.* ("[Including] people of all ages and abilities, regardless of whether they are traveling as drivers, pedestrians, bicyclists, or public transportation riders.")

13. *See* PATRICIA E. SALKIN, 3 N.Y. ZONING LAW & PRACT. § 32A:90 (4th ed. 2022) ("Complete streets are more of a policy than a specific design, [so] each application is as unique as the particular community context.").

14. *See* Kayla Dwyer, *'Complete Streets' 2.0: Eyeing Safety, Indianapolis Revises 10-Year-Old Road Design Policy*, INDIANAPOLIS STAR (June 7, 2022), https://www.indystar.com/story/news/local/transportation/2022/06/07/amid-fatal-crashes-indianapolis-revises-complete-streets-policy/7505115001 [https://perma.cc/3GGP-5YPHk] ("[T]he city should approach street design with all travelers in mind by incorporating elements like bike lanes and walking paths into street projects."); ZURBORG, *supra* note 1, at 474 ("Many complete streets initiatives focus on implementing dedicated bike lanes and safer crosswalks for pedestrians . . . ."); *but see Corridors*, SAN ANTONIO TOMORROW, https://sacompplan.com/corridors/ [https://perma.cc/GT3Y-B7X7] (last visited Oct. 20, 2023) (the existence of a sidewalk is not always sufficient, because "a narrow sidewalk with no buffer between pedestrians and speeding traffic, no landscaping and no furnishings will be less attractive, safe and used than a wider sidewalk with attractive lighting, benches and a wide planted buffer with large street trees.").

15. *See* DUNHAM, *supra* note 2, at 3 (describing road diet as a "Complete Streets" change); DOUG MCQUEEN, ASHBURY PARK COMPLETE STS. COAL., ENVISIONING A BETTER MAIN STREET 2 (Dec. 2015), http://apcompletestreets.org/wp-content/uploads/2017/02/Asbury-Park_Main-St-

can be accomplished through modifications such as mid-block medians for walkers or special lanes for buses.[16] For example, the city of Durham, North Carolina, "completed" one busy road by installing a mid-block crossing with a protected pedestrian refuge and closing one traffic lane to provide additional space for buses to pull over.[17] Because local governments control most streets, "complete streets" is primarily a local issue.[18]

However, these policies have had limited results. Even in cities with highly rated complete streets policies, many streets continue to lack sidewalks or bike lanes, and some streets are too wide to be comfortably crossed.[19] In addition, the number of pedestrians and cyclists killed by automobiles has increased over the past decade, even in some places with complete streets policies.[20]

What went wrong? To some extent, the incompleteness of American streets is unrelated to the municipal policy language. Even a city that wishes to build sidewalks and narrow streets has limited money and, thus, will need more than a few years to retrofit every street.[21] However, the language of complete streets policies gives local governments significant discretion to avoid change. For example, a complete streets policy may require a local government to make streets safer for cyclists and walkers without prescribing how to achieve this goal.[22] This Article examines the language of complete streets policies to show that such policies are sometimes unnecessarily unclear and discusses how these policies could be made more specific and thus more effective.

Part I of the Article explains the justifications for complete streets in more detail. Part II discusses some examples of the longest-lived complete streets policies and critiques the language of those policies. Part III similarly addresses newer complete streets policies. Part IV discusses reforms that might make

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Road-Diet-Research-Paper.pdf [https://perma.cc/42H5-46MX] (proposing that four-lane streets be reduced to three lanes, and that the fourth lane be devoted to a bike lane).

16. *See* SEBASTIAN PRZYBYLA, *Finding the Right of Way: Implementing Complete Streets Programs*, 33(10) ZONING & PLAN. L. REP. 1 (Nov. 2010) (explaining that complete streets can include "sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible transit stops, frequent crossing opportunities, median islands, accessible pedestrian signals, [and] curb extensions"); SALKIN, *supra* note 13 (illustrating that elements of complete streets may include "sidewalks, micromobility lanes or accommodating wide paved shoulders, special transit lanes, comfortable and accessible public transportation stops[,] . . . safe street crossing opportunities, clear and accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more.").

17. ZURBORG, *supra* note 1, at 472.

18. CASSIE CHAMBERS ARMSTRONG, *The Role of Local Government in Promoting Environmental Policy, and How Louisville is Mirroring National Trends*, 13 KY. J. EQUINE, AGRIC. & NAT. RES. L. 273, 276 (2020-21) (reporting that over 98 percent of complete streets policies are enacted by local or regional governments and that just over 1 percent were enacted by states).

19. *See infra* Part II, Section C.

20. *See infra* note 161 and accompanying text (outlining that despite Indianapolis having one of the best policies, the city has seen a nearly 50% increase in pedestrian deaths since the 2010s).

21. *See infra* Part IV, Section A.

22. *See infra* Part III, Section A.

complete streets policies more effective.

I. BACKGROUND: THE CASE FOR COMPLETE STREETS

In the 20th century, bicycle advocacy groups used the term "routine accommodations" to describe transportation planning that accommodated bicycles.[23] Bicycle activists thought this term was a bit "clunky."[24] After a series of brainstorming meetings, staffers from several American advocacy organizations decided in 2003 that the term "complete streets" was more powerful.[25] This group formed a Complete Streets Task Force, which later evolved into the National Complete Streets Coalition ("NCSC").[26] The group initially sought to have 25 local governments adopt complete streets policies; however, by 2010, almost 200 had done so.[27] Today, over 1,700 complete streets policies have been enacted by both state and local governments.[28] Although the federal government does not require lower levels of government to adopt complete streets policies, it does provide technical assistance for state and local governments that wish to do so.[29] In addition, the 2021 Infrastructure Investment and Jobs Act provides that local planning organizations must use 2.5 percent of funds to develop either complete streets policies or similar plans designed to promote non-automotive transportation.[30]

Even though the term "complete streets" was initially designed to address the needs of cyclists,[31] it has been expanded to address pedestrian-oriented policies such as new crosswalks and improved sidewalks.[32] These policies have

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23. Barbara McCann, *Happy Anniversary, Complete Streets!*, SMART GROWTH AM. (Dec. 3, 2010), https://smartgrowthamerica.org/happy-anniversary-complete-streets/ [https://perma.cc/V6K4-5P47].

24. *Id.*

25. *Id.* (explaining that the author was the first person to use the term in a memo, but that the term emerged as a "collaborative effort" to find a "powerful name" for the concept and that David Goldberg of Smart Growth America was the first person to mention the term).

26. *Id.*

27. *Id.*

28. *Complete Streets Policies*, SMART GROWTH AM., https://smartgrowthamerica.org/program/national-complete-streets-coalition/policy-atlas [https://perma.cc/Y4EL-RZ9K].

29. *See* ZURBORG, *supra* note 1, at 473-74; (The Environmental Protection Agency "distributes grants to state and local governments for . . . Complete Streets initiatives" and "has several technical assistance programs to aid governments in implementing Complete Streets policies."); *id.* (Furthermore, the Federal Highway Administration also plans to develop additional technical materials).

30. *See* National Association of City Transportation Officials, *The Infrastructure Investment and Jobs Act*, https://nacto.org/program/the-infrastructure-investment-and-jobs-act/ [https://perma.cc/DV6J-XBSK] (funds must be used to "develop and adopt complete streets policies, active transportation plans, transit access plans, transit-oriented development plans, or regional intercity rail plans."); *id.* Similarly, state governments must use 2.5 percent of state planning and research funds for similar purposes.

31. *See* MCCANN, *supra* note 23.

32. *Id.*

four major justifications: safety, public health, environmental protection, and social equity.

A. Safety

Streets that accommodate pedestrians and cyclists tend to be safer for all concerned. For example, a Federal Highway Administration study found that "when speed limit and traffic volume are taken into account, the likelihood of a site with a paved sidewalk being a crash site is 88.2 percent lower than a site without a sidewalk."[33] Thus, adding sidewalks is likely to reduce pedestrian injuries.

Similarly, some studies suggest that bike lanes may make cyclists safer by separating cyclists from fast-moving automobiles.[34] In particular, bike lanes may be especially useful if they are "protected"—they use barriers to physically separate cyclists from moving traffic.[35] Where bike lanes are unprotected, there is a risk that cyclists may collide with nearby drivers,[36] or that they may be "doored"—in other words, hit by a car door being opened as a motorist exits a vehicle from a parking lane.[37]

These safety advantages are likely to be multiplied where complete streets policies slow down automobile traffic. According to the Federal Highway Administration, a pedestrian struck by an automobile traveling at 20 miles per hour has a 95 percent chance of survival, while a pedestrian struck by a vehicle traveling 40 miles per hour has only a 15 percent chance of survival.[38] Thus, road diets and other strategies to slow vehicle speeds will likely reduce injuries

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33. U.S. DEPT. OF TRANS. FED. HIGHWAY ADMIN., AN ANALYSIS OF FACTORS CONTRIBUTING TO "WALKING ALONG ROADWAY" CRASHES: RESEARCH STUDY AND GUIDELINES FOR SIDEWALKS AND WALKWAYS 8 (Feb. 2002), https://www.pedbikeinfo.org/cms/downloads/WalkingAlongRoadways_Study_Guidelines.pdf [https://perma.cc/YT6H-2KK5].

34. *See* KAY TESCHKE ET AL., *Route Infrastructure and the Risk of Injuries to Bicyclists: A Case-Crossover Study*, 102 AM. J. PUB. HEALTH 2336, 2341 (2012) (concluding that most studies of bike lanes and similar infrastructure have shown a reduced risk of crashes).

35. *See* KYLE M. LYMAN, *The Issues With Deterring Negligence and the Vulnerable User Law in Washington State, Plus Recommendations for Legislatures and Prosecutors*, 16 J. HEALTH & BIOMEDICAL L. 78, 99 n.176 (2019) (arguing that cyclists are more protected when "there is some type of physical barrier between moving cars [and] bikes"); MIKAEL COLVILLE-ANDERSEN, *Copenhagenize: The Definitive Guide to Global Bicycle Urbanism* 180 (2018) (highlighting that cyclists are safer if there is a "curb-separated cycle track that physically separates cyclists from motorized vehicles").

36. Marco, *Bike Lanes: The Good, The Bad and the Ugly*, VOLTA CYCLES, https://volatacycles.com/bike-lanes/?expand_article=1 [https://perma.cc/GFQ7-TTXV] (finding that bike lanes are safest when they have "physical barriers, such as concrete curbs, to prevent drivers from turning into them.").

37. COLVILLE-ANDERSEN, *supra* note 35, at 77 (explaining that bike lanes next to parking lanes are in the "door zone"); KEN MCLEOD, *Bicycle Laws in the United States-Past, Present, and Future*, 42 FORDHAM URB. L. J. 869, 906 (2015) ("[D]ooring . . . [is] a major contributor to bicyclist crashes, accounting for twenty percent or more of bicyclist crashes [in the United States].").

38. BRONIN & SHILL, *supra* note 4, at 10.

and deaths in auto crashes.

Road diets also reduce damage to drivers. A study by the Federal Highway Administration found that road diets that converted four-lane streets to three-lane streets reduced the total number of crashes by somewhere between 19 percent and 47 percent.[39] The study explained that the road diet improved safety because it slowed down traffic, lessened the amount of weaving from lane to lane, and decreased the number of lanes pedestrians needed to cross.[40]

Some evidence suggests that complete streets projects may create similar safety benefits. A 2015 study by NCSC and Smart Growth America ("SGA") examined 37 complete streets projects and found that collision and injury rates declined in most neighborhoods after the projects were implemented.[41] As a result, collision and injury costs were $18.1 million per year lower than they otherwise would have been.[42]

B. Health

Walking reduces the risk of obesity and similar public health problems. A study by three Arizona State University scholars created a "walkability index," which measured the distance of churches, schools, and entertainment from various places being studied.[43] The report found that a "1 percent increase in the walkability index of a neighborhood is associated with a 50 percent reduction in the likelihood that it will belong to a high disease as opposed to a low disease cluster for obesity."[44] The scholars also found that such increased walkability was associated with "49 percent lower likelihood for diabetes, 39 percent lower likelihood for hypertension, and 40 percent lower likelihood for heart disease."[45]

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39. FED. HIGHWAY ADMIN., ROAD DIET 1 (2016), https://safety.fhwa.dot.gov/road_diets/resources/pdf/fhwasa17021.pdf [https://perma.cc/P7MR-MW7F].

40. *Id*.; *see* ERIC DUMBAUGH, *Safe Streets, Livable Streets*, 71 J. AM. PLAN. ASSOC. 283, 288-90 (2005) (outlining that the narrower section of Colonial Drive in Orlando, Florida, had 31 percent fewer injuries from mid-block crashes, even though both the 44-foot section and the 50-foot section had similar traffic volumes); *see also* PETER SWIFT ET AL., *Residential Street Typology and Injury Accident Frequency*, CONGRESS FOR NEW URBANISM 1, 5 (2006), http://massengale.typepad.com/venustas/files/SwiftSafetyStudy.pdf (finding that a 36-foot-wide residential street in Longmont, Colorado, had more than five times as many crashes per mile, per year, as the town's 24-foot-wide streets).

41. SMART GROWTH AM. & NAT'L COMPLETE STS. COAL., SAFER STREETS, STRONGER ECONOMIES 7 (2015), https://smartgrowthamerica.org/wp-content/uploads/2016/08/safer-streets-stronger-economies.pdf [https://perma.cc/WAX4-2GSC] ("About 70 percent of projects experienced a reduction in collisions.").

42. *Id*. at iv.

43. VASUDHA LATHEY ET AL., *The Impact of Subregional Variations in Urban Sprawl on the Prevalence of Obesity and Related Morbidity,* 29 J. PLAN. EDUC. & RSCH. 127, 132 (2009).

44. *Id*. at 134; *see also* MARY E. KENNELLY ET AL., *Strengthening Vendor Standards in the Supplemental Nutrition Assistance Program: Are Healthier Foods Within Reach*?, 16 J. HEALTH CARE L. & POL'Y 141, 144 n.19 (2013) (citing other studies with similar conclusions).

45. LATHEY, *supra* note 43, at 134. Although the study did not address cycling, there is some evidence that cycling also reduces obesity. *See infra* note 51 and accompanying text.

Walking also creates a variety of health benefits unrelated to obesity and obesity-related diseases. For instance, a Harvard Medical School study found that women who walked seven hours or more per week had a 14 percent lower risk of breast cancer than those who walked three hours or fewer per week.[46] The study also found that men and women who walked over 20 minutes daily, at least five days a week, had 43 percent fewer sick days than those who exercised once a week or less.[47] Additionally, the study found that walking reduces arthritis-related pain and may even prevent arthritis from forming.[48]

Walking may even benefit mental health as well. For example, a study by several Chinese scholars found that "the average number of walks per week was significantly associated with emotional health … [even] for respondents from neighborhoods with serious air pollution."[49] Another study, cited on the American Psychology Association webpage, found that the risk of depression is 18 percent lower among adults who walk 75 minutes per week.[50]

Cycling has similar health benefits. For example, a Swedish study following over 20,000 people for ten years found that persons who commuted by bicycle had a decreased risk of obesity and high blood pressure.[51] A Danish study following 53,700 middle-aged men and women over 20 years found that those who took up cycling had a 26 percent lower risk of heart disease than those who had never cycled.[52] A third study focusing on adults with diabetes found that cyclists had a 35 percent lower risk of death compared to non-cyclists.[53]

Where walking is safer and more comfortable, people are more likely to walk.[54] For instance, one study shows that people who live in neighborhoods with sidewalks are 47 percent more likely to walk regularly.[55] Similarly, cycling tends to increase in places with bike lanes. For example, one recent study showed that during the first years of the COVID-19 pandemic, cycling increased over 40 percent more in cities that created additional bike lanes than in cities

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46. *5 Surprising Benefits of Walking*, HARV. HEALTH PUBL'G (Dec. 7, 2023), https://www.health.harvard.edu [https://perma.cc/ALG7-XCLU].

47. *Id*.

48. *Id*.; *see also* PEREZ, *supra* note 5, at 2190 ("[W]alking 15 minutes a day increases life expectancy.").

49. ZHENJEN ZHU ET AL., *Exploring the Relationship Between Walking and Emotional Health in China*, 17 INT. J. ENV'T. RES. PUB. HEALTH 8804, 8808 (2020).

50. *See* TORI DEANGELIS, *Want to Boost Your Mental Health? Take a walk*, AM. PSYCH. ASS'N. (Nov. 1, 2022), https://www.apa.org/monitor/2022/11/defeating-depression-naturally [https://perma.cc/Z2FD-6ZCN].

51. *Bicycling*, HARV. T.H. CHAN SCH. OF PUB. HEALTH (Dec. 2022)., https://www.hsph.harvard.edu/nutritionsource/bicycling [https://perma.cc/WU6Y-YWHP].

52. *Id.*

53. *Id.*

54. *See* JEFF SPECK, WALKABLE CITY: HOW DOWNTOWN CAN SAVE AMERICA, ONE STEP AT A TIME 11 (2012) (clarifying that people will not choose to walk unless walking is "useful, safe, comfortable, and interesting").

55. PEREZ, *supra* note 5, at 2190 (citation omitted) (explaining that residents of "neighborhoods with sidewalks are 47 percent more likely than residents of areas without sidewalks to walk 39 minutes per day").

that did not.[56] In other words, sidewalks and bike lanes induce demand for walking and biking, thus making such behavior more common.[57] It follows that if complete streets policies make walking and biking more desirable, these policies will reduce the frequency of obesity and other health problems discussed above.

C. Environmental Protection

By contrast, where walking and biking are difficult, people are likely to drive more and walk less. Twenty-nine percent of American greenhouse gas emissions come from transportation, and 81 percent of those emissions come from cars and trucks.[58] Transportation-related greenhouse gas emissions have increased by 284 percent since 1990.[59] Furthermore, automobile-related emissions create pollution unrelated to climate change.[60] Motor vehicles contribute 38.3 percent of carbon monoxide emissions, one-third of nitrogen oxide emissions, and 39 percent of benzene emissions.[61] In New York City alone, particulate matter from vehicles contributes to about 320 deaths per year.[62] Moreover, vehicle-related emissions are not limited to those directly coming from automobile tailpipes; 52 percent of automobile-related emissions come from brakes and tires,[63] parking lot construction and maintenance create

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56. SEBASTIAN KRAUS & NICOLAS KOCH, *Provisional COVID-19 Infrastructure Induces Large, Rapid Increases in Cycling*, 118 PROC. NAT'L ACAD. SCIS. 1, 2 (2021) ("Since we expect cycling to increase in both treated and control cities as a reaction to COVID-19, we take the difference between the cycling increase in treated and in control cities as our estimate of the average effect of the [bike lane] program. This difference in differences approach suggests an increase in cycling of 41.6% induced on average by the policy.").

57. *Cf.* ERIC PHILLIPS, *The Future of Autonomous Vehicles in American Cities*, 21 N.Y.U. J. LEGIS. & PUB. POL'Y 287, 331 n. 200 (2018) (noting that highways induce demand for automobile travel).

58. U.S. ENV'T PROT. AGENCY, FAST FACTS ON TRANSPORTATION GREENHOUSE GAS EMISSIONS, U.S. ENV'T PROT. AGENCY (June. 18, 2024), https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions [https://perma.cc/599K-Z4NK].

59. U.S. ENV'T PROT. AGENCY, FAST FACTS: U.S. TRANSPORTATION SECTOR GREENHOUSE GAS EMISSIONS 1990–2021 2 (2023), https://www.epa.gov/system/files/documents/2023-06/420f23016.pdf [https://perma.cc/7GB6-74VZ] (outlining that although emissions from passenger cars have decreased, this decline has been offset by a 369 percent increase in emissions from light-duty trucks).

60. U.S. ENV'T PROT. AGENCY, OUR BUILT AND NATURAL ENVIRONMENTS 58 (2013), https://www.epa.gov/sites/default/files/2014-03/documents/our-built-and-natural-environments.pdf [https://perma.cc/3XAZ-NZ65].

61. *Id*. at 58, 60 (listing various examples).

62. IYAD KHEIRBEK ET AL., *The Contribution of Motor Vehicle Emissions to Ambient Fine Particulate Matter Public Health Impacts in New York City: A Health Burden Assessment*, 15 ENV'T HEALTH 89 (2016).

63. Stephen Edelstein, *Research: Tires and Brakes Emit More Particulates Than Tailpipes*, GREEN CAR REPS. (Feb. 28, 2023), https://www.greencarreports.com/news/1138892_research-tires-and-brakes-emit-more-particulates-than-tailpipes?utm_source=substack&utm_medium=email [https://perma.cc/Y9LE-UN5M].

almost as much particulate matter as vehicle use,[64] and the construction of a lane-mile of road produces as much carbon dioxide as 20 households.[65] Thus, to the extent that complete streets policies reduce vehicle use, these policies are likely to decrease vehicle-related emissions and pollution-related diseases.

D. Equity

To the extent that incomplete streets allow drivers to travel at high rates of speed, those streets obviously put nondrivers at risk. Consequently, people who cannot afford a car are most negatively affected by incomplete streets; these Americans tend to be lower-income and/or people of color.[66] Eighteen percent of Black Americans lack access to a car, as opposed to only 9 percent of White Americans.[67] Similarly, about 20 percent of adults living in poverty have no access to a car.[68] Therefore, to the extent that complete streets policies make streets safer for nondrivers, those policies are particularly likely to benefit lower-income Americans and Americans of color.

II. THE LIMITS OF COMPLETE STREETS: FIRST-GENERATION POLICIES

Have complete streets policies worked? If one measures "success" as the number of streets altered to accommodate cyclists or walkers, the results have been somewhat favorable. For example, the number of American street-miles served by protected bike lanes increased from 34 miles in 2006 to 425 in 2018.[69]

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64. U.S. ENV'T PROT. AGENCY, *supra* note 60, at 58 ("A study that computed the lifecycle emissions of sulfur dioxide and PM_{10} for cars showed that adding parking lot construction and maintenance to the calculations raises emissions by as much as 24 percent and 89 percent, respectively, over calculations excluding these factors.").

65. *Id.* (thus, motor vehicles would be toxic even if increased fuel efficiency or electrification of vehicles reduced or eliminated emissions coming from automobile tailpipes).

66. *See infra* notes 67-68 and accompanying text.

67. *Car Access: Everyone Needs Reliable Transportation Access and in Most American Communities That Means a Car*, NAT'L EQUITY ATLAS, https://nationalequityatlas.org/indicators/Car_access [https://perma.cc/7L4T-4CA3]. (last visited Nov. 8, 2023). (it seems unlikely that these percentages have changed in the post-COVID era; in 2021, only 4 percent of American new car buyers were Black, which means blacks are significantly underrepresented among this group). *See Distribution of New and Used Car Buyers in the United States in 2021, by ethnicity*, STATISTA (Dec. 19, 2023), https://www.statista.com/statistics/1267606/us-car-buyers-by-ethnicity/ [https://perma.cc/L46L-5KLH] (also, 6 percent of buyers of used cars Black); U.S. CENSUS BUREAU QUICKFACTS UNITED STATES, https://www.census.gov/quickfacts/fact/table/US/RHI225222 [https://perma.cc/LF6A-9KCC] (13.6 percent of Americans are Black).

68. Caroline Cournoyer, *More Poorer Residents Are Driving Cars, Presenting New Issues for Transit Agencies*, GOVERNING (Apr. 6, 2018), https://www.governing.com/archive/gov-car-ownership-poverty.html [https://perma.cc/XJS8-UQ2S].

69. Ilana Strauss, *Is the U.S. Becoming More Bike Friendly?*, NAT'L GEOGRAPHIC (Sept. 21, 2021), https://www.nationalgeographic.com/environment/article/is-the-us-becoming-more-bike-friendly [https://perma.cc/G5T6-G3XD]. (I note, however, that I have not found data comparing bike lane growth in places with "complete streets" policies to growth in places without such policies).

Nonetheless, these improvements are quite modest since the U.S. has over 2.8 million urban street miles.[70] Sidewalk improvements have occurred in some cities, but at a slow pace. For instance, in Austin, Texas, which has a complete streets policy,[71] voters approved a bond issue several years ago to add more sidewalks; however, the bond issue will only add sidewalks to 3 percent of the streets without them.[72] In addition, Nashville, Tennessee, which also has a complete streets policy,[73] added only eight miles of sidewalks in 2022, even though the city has 1,900 miles of streets without sidewalks.[74]

Given the modesty of street improvements, it should not be surprising that the amount of walking and biking has not increased significantly. The federal government's National Household Transportation Survey found that the number of hours Americans spent walking per year increased from 33 in 2001 to 37 in 2017, while the percentage of Americans walking at least 30 minutes per day increased from 7.2 percent in 2001 to 8 percent in 2017.[75] On the other hand, only 16 percent of Americans walked on the day they were surveyed in 2017, slightly fewer than in 2001, when the comparable number was 18 percent.[76] Cycling was roughly constant nationwide, with 1.5 percent of Americans cycling daily in 2017, almost identical to the 1.7 percent cycling share in 2001.[77]

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70. FED. HIGHWAY ADMIN., FUNCTIONAL SYSTEM LANE-LENGTH (2019), https://www.fhwa.dot.gov/policyinformation/statistics/2019/pdf/hm60.pdf [https://perma.cc/RCL7-DEH3] (illustrating that only 165,185 miles are on highways, presumably making them unsuitable for bike lanes). Thus, the total number of urban, non-highway miles is just over 2.6 million lane miles, far more than the number of miles served by bike lanes. I have not found comparable data on the number of sidewalks or crosswalks added in recent decades.

71. *Complete Streets*, AUSTINTEXAS.GOV, https://www.austintexas.gov/department/complete-streets [https://perma.cc/KNS8-6KFT] (last visited Nov. 8, 2023).

72. CITY OF AUSTIN AUDIT REPORT SIDEWALK PROJECTS 2 (May 2019), www.austintexas.gov/sites/default/files/files/Auditor/Audit_Reports/Sidewalks_Report_May_2019.pdf [https://perma.cc/4DLT-5427] (explaining that the city has 2,400 miles of sidewalks but needs 2,580 additional miles of sidewalks).

73. METRO. GOV'T OF NASHVILLE AND DAVIDSON CNTY., AMENDED EXECUTIVE ORDER NO. 031 (2016), https://filetransfer.nashville.gov/portals/0/sitecontent/pw/docs/news/2016/031_ExecutiveOrder_CompleteStreetsPolicy.pdf.

74. Addison Wright, *At Issue: Sidewalks*, NASHVILLE BANNER (July 10, 2023), https://nashvillebanner.com/2023/07/10/at-issue-sidewalks [https://perma.cc/9GJH-39Q3].

75. TRANSP. RSCH. BD. 2018 NATIONAL HOUSEHOLD TRAVEL SURVEY WORKSHOP 34 (Nov. 2018), https://nhts.ornl.gov/assets/2018_NHTS_Workshop_E-Circular_238.pdf [https://perma.cc/3PVC-63U9].

76. *Id.* There is some evidence that the number of walking trips declined significantly as a result of the COVID-19 pandemic.

77. *Id.* I note that the data discussed above precedes the COVID-19 pandemic. More recent data suggests that as a result of the pandemic, walking decreased, while cycling increased. *See* Casey Lewis et al., *Walking in America* 4, STREETLIGHT DATA, https://learn.streetlightdata.com/ranking-us-pedestrian-activity-mode-share [https://perma.cc/4Y8Y-4XEX] (last visited Aug. 27, 2024) (asserting that daily walking decreased by 36 percent between 2019 and 2022, while cycling increased by 37 percent); *see* Laura Bliss, *US Bike Trips Have Soared Since 2019*, BL. (Sept. 22, 2023), https://www.bloomberg.com/news/articles/2023-09-22/us-bike-trips-have-soared-since-2019 [https://perma.cc/72ZK-NR8C] (cycling increased during COVID-19 in all but

Conversely, the number of cycling commuters has tripled or more in Seattle, San Francisco, and Portland.[78] These are all cities with relatively large and growing bike lane networks.[79] Thus, it appears that investments in bike lanes are likely to increase the amount of cycling.

Although 27 states have adopted complete streets policies,[80] the number of American pedestrians killed by motorists increased by 54 percent between 2010 and 2021.[81] Moreover, the number of cycling fatalities has risen by just over 30 percent (from 734 to 966) over the past decade.[82] If complete streets policies have had a positive impact on safety, that impact has been overwhelmed by other factors.[83]

In 2012, SGA and the NCSC issued a ranking of complete streets policies.[84] The ranking included statewide policies in 27 states and over 400 issued by local governments.[85] To examine why these policies were not more effective, I chose to review some of the weaker policies and one of the stronger policies.

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6 of the 100 largest U.S. metropolitan areas, with New York seeing a 97 percent increase; however, cycling may decrease as the pandemic winds down); ANGELA FRANCKE, *Cycling During and After the COVID-19 Pandemic*, 10 ADVANCES IN TRANSP. POL'Y & PLAN. 265, 266-67 (2022), (noting that in the first year of the pandemic, bicycle sales increased 57 percent in the U.S. since cycling "enabled social distancing and a low risk of contagiousness."); *How Bicycling Changed During a Pandemic*, PEOPLEFORBIKES (Jan. 20, 2021), https://www.peopleforbikes.org/news/how-bicycling-changed-during-a-pandemic [https://perma.cc/3GQF-CQBG] (highlighting that in 2020, "% of the [adult] U.S. population . . . rode a bike for the first time in one or more years.").

78. Strauss, *supra* note 69 (outlining that in recent decades, workers who commute by bike increased fourfold in Seattle, fivefold in San Francisco, and ninefold in Portland).

79. *See* Julie Brown, *These Are the Most Bikeable Cities in the United States*, UNCOMMON PATH (May 9, 2019), https://www.rei.com/blog/cycle/here-are-the-most-bikeable-cities-in-the-united-states [https://perma.cc/B29P-FALM] (highlighting that Portland has a 385-mile bike network); Jonathan Maus, *Let's Build It! Portland's Protected Bike Lane Design Guide Is Finally Out*, BIKEPORTLAND (Oct. 15, 2021), https://bikeportland.org/2021/10/15/lets-build-it-portlands-protected-bike-lane-design-guide-is-finally-out-339994 [https://perma.cc/4W8C-CMZ5] (explaining that Portland has built 38 miles of protected bike lanes since 2010); Eillie Anzilotti, *Watch San Francisco's Bike Network Bloom,* SFMTA (Nov. 29, 2021), https://www.sfmta.com/blog/watch-san-franciscos-bike-network-bloom [https://perma.cc/6F8Z-YHD7] (describing the growth of San Francisco's bike network and noting that the city now has 42 miles of protected bike lanes and 160 miles of other bike lanes); SEATTLE DEP'T OF TRANSP., SEATTLE BICYCLE MASTER PLAN 9 (2020), https://www.seattlebikeblog.com/wp-content/uploads/2021/02/BMP_Progress_Report_v2.pdf [https://perma.cc/TJ9R-HZYK] (reporting that the city completed 37 percent of the planned 608-mile network of bike lanes as of 2019).

80. SMART GROWTH AM. & NAT'L COMPLETE STS. COAL., *supra* note 41, at 1.

81. SHILL, *supra* note 11, at 195.

82. *Safety*, PEDESTRIAN & BICYCLE INFO. CTR., https://www.pedbikeinfo.org/factsfigures/facts_safety.cfm [https://perma.cc/KPU6-B328] (last visited Nov. 13, 2023).

83. *See infra* Part IV, Section A.

84. SMART GROWTH AM. & NAT'L COMPLETE STS. COAL., THE BEST COMPLETE STREETS POLICIES OF 2012 (Apr. 2013) [hereinafter 2012 BEST POLICIES], https://smartgrowthamerica.org/wp-content/uploads/2016/08/cs-2012-policy-analysis.pdf [https://perma.cc/T8ZN-VVX6].

85. *Id.* at ii (outlining that Complete Streets policies have been implemented in 27 states, 38 counties, and 379 municipalities); *id.* at App. B (listing the ranked policies).

A. Hackensack: One of the Worst

One of the lowest ranked early complete streets policies was enacted by Hackensack, New Jersey. Hackensack created its policy in 2012 through a one-page city council resolution.[86] Hackensack's policy received a 15.6 rating from SGA and the NCSC, the twelfth lowest in the United States.[87] SGA and the NCSC grade complete streets policies based on ten factors; Hackensack received its unusually low score because it got zero points on six factors:[88]

*The Network Connection factor, which favors policies recommending that streets be part of a connected network so that city residents have a variety of transportation options.[89]

*The Jurisdiction factor, which favors policies that apply to private development, or at least acknowledge the need to work with private developers or other governments.[90]

*The Design factor, which favors policies that reference the design manuals they are using for guidance, or at least acknowledge the need for a flexible design approach.[91]

*The Context Sensitivity factor, which favors policies that recommend that the streets be adapted to the character of the surrounding neighborhood.[92]

*The Performance Measures factor, which favors policies that list performance measures that the city can use to evaluate its success, such as miles of sidewalks or bike lanes completed.[93]

*The Implementation factor, which favors policies that detail how the improvements will be executed.[94]

The Hackensack resolution mentions that streets should "whenever feasible to do so . . . safely accommodate travel by pedestrians, bicyclists, and [other road users]."[95] Nonetheless, the resolution does not state what such accommodation would require or what would make an accommodation not feasible.[96] Furthermore, the Hackensack resolution does not mention any

86. COUNCIL OF THE CITY OF HACKENSACK, RES. 226-12 (June. 11, 2012) [hereinafter HACKENSACK], https://njbikeped.org/wp-content/uploads/2022/09/Hackensack-Complete-Streets-Resolution.pdf [https://perma.cc/2JJ6-2GA9].

87. 2012 BEST POLICIES, *supra* note 84, at App. B; *id.* at 6 (noting that the highest possible score was 100).

88. *Id.* at App. B.

89. *Id.* at 11.

90. *Id.* at 12.

91. *Id.* at 12-13.

92. *Id.* at 13.

93. *Id.* at 13-14.

94. *Id.* at 14-15.

95. HACKENSACK, *supra* note 86.

96. *Id.* However, the policy outlines that "[p]edestrian and bicycle facilities shall not be required where they are prohibited by law." *Id.* This statement implies that the policy otherwise favors pedestrian and bicycle facilities. Nonetheless, the policy does not define this term.

specific accommodation type, such as sidewalks or bike lanes.[97] Consequently, the Hackensack resolution gives policymakers almost no direction on how to make streets more walker- or cyclist-friendly.

B. Two Examples of Average Policies

I chose to review two policies that were neither especially high-ranked nor especially low-ranked: one state policy (that of Delaware) and one local policy (that of San Antonio, Texas).

SGA and the NCSC gave Delaware's complete streets policy a 39.2 score, far below the best score (an 84 given to a policy created by New Jersey's Transportation Department) but better than policies of over a dozen other states.[98] The policy includes some fairly general language. For example, it outlines that whenever the state "builds or maintains a roadway or bridge, the agency must whenever possible accommodate other modes of transportation."[99] However, the policy does not state what "accommodation" means or when such an accommodation is impossible.[100] The policy states that Delaware should use "the latest and best design standards as they apply to bicycle, pedestrian, transit, and highway facilities"[101] but does not state what those standards are or mention specific examples of possible accommodations, such as sidewalks or bike lanes. However, the executive order creating the policy did instruct the state Department of Transportation ("DOT") to create a more detailed policy.[102] The Department did so later in 2009.[103]

Nevertheless, the Delaware policy is superior to the Hackensack policy in various ways. In particular, SGA and the NCSC gave Delaware some points on the "network" element,[104] apparently because the Delaware order mentioned the need for a "comprehensive, integrated, connected transportation network."[105] In addition, Delaware won points on the "design" element[106] seemingly because its policy referenced design standards.[107] Finally, SGA and the NCSC gave

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97. *Id.*

98. 2012 BEST POLICIES, *supra* note 84, at App. B (listing of ranked policies). I picked Delaware's policy as an example because some of the other low-ranked state policies have been supplanted by newer, more effective policies. For example, Maryland's Complete Streets statute, enacted in 2010, received a 25.6 rating but has been supplanted by a newer version. MD. TRANSP. CODE § 2-112 (2019).

99. Del. Exec. Order No. 6 (Apr. 24, 2009) [hereinafter Delaware Order].

100. *Id.*

101. *Id.*

102. *Id.*

103. DEL. DEP'T OF TRANSP., REQUEST FOR POLICY IMPLEMENT: COMPLETE STREETS POLICY (2009) [hereinafter DOT IMPLEMENT], https://deldot.gov/Publications/manuals/complete_streets/pdfs/o06_complete_streets_policy.pdf?cache=1681494994681 [https://perma.cc/3XJ4-DP7D].

104. 2012 BEST POLICIES, *supra* note 84, at App. B.

105. Delaware Order, *supra* note 99.

106. 2012 BEST POLICIES, *supra* note 84, at App. B.

107. Delaware Order, *supra* note 99.

Delaware points for implementation[108] since Delaware's executive order urged the state DOT to create a more detailed policy.[109]

The DOT version of the complete streets policy was far more comprehensive than the original executive order. For example, the DOT discussed exceptions to the policy in detail.[110] The DOT also mentioned that it had already adopted statewide bicycle and pedestrian plans.[111] Furthermore, the DOT claimed that it planned to "establish bikeways across the state"[112] and to ensure that sidewalks are accessible to the disabled.[113] The DOT also declared that it planned "to create a prioritization plan for sidewalk installation"[114] and install improved pedestrian signals.[115] However, the DOT apparently set no targets on how rapidly it would do any of these things,[116] so in theory, it could install a foot of sidewalk or a few feet of bike lanes a year without violating these promises. Moreover, the DOT document does not mention some pro-pedestrian and pro-cyclist policies, such as road diets and protected bike lanes.[117]

Despite these apparent flaws, the DOT has given Delaware residents some additional pedestrian and bicycle facilities.[118] Nevertheless, Delaware had the worst pedestrian fatality rate from automobile/pedestrian collisions in the northeast every year between 2018 and 2021.[119] Moreover, Delaware had the

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108. 2012 BEST POLICIES, *supra* note 84, at App. B.

109. Delaware Order, *supra* note 99.

110. DOT IMPLEMENT, *supra* note 103, at 3 (explaining that the exemptions included are: 1) projects on roadways that prohibited use by certain road users (such as limited-access highways), 2) situations where a reasonable alternative exists for certain road users (such as where the existence of a nearby bus stop makes a bus stop unnecessary), 3) ordinary road maintenance, and 4) projects that were already nearly complete at the time of the policy).

111. *Id.* at 4.

112. *Id.*

113. *Id.*

114. *Id.*

115. *Id.*

116. *Id.*

117. *Id.* at 1-5.

118. *See, e.g.*, Jerry Smith, *Connector Road Could Give Dover a Boost*, DEL. ONLINE (Oct. 31, 2016, 7:21 PM), https://www.delawareonline.com/story/news/local/2016/10/31/west-dover-connector-named-pow-mia-parkway/93058996 [https://perma.cc/MQN3-NSNX] (noting that the state added pedestrian and bike paths to new roadway).

119. PEDESTRIAN TRAFFIC FATALITIES BY STATE: 2021 PRELIMINARY DATA, GOVERNORS HIGHWAY SAFETY ASS'N 13, 19 (2022), https://www.ghsa.org/sites/default/files/2022-05/Pedestrian%20Traffic%20Fatalities%20by%20State%20-%202021%20Preliminary%20Data%20%28January-December%29.pdf [https://perma.cc/5DVK-BJKS] (detailing that between 2018 and 2021, each northeastern state had a lower death rate than Delaware). I included the following states in the category of northeastern states: Maine, New Hampshire, Vermont, Rhode Island, Massachusetts, Connecticut, New Jersey, Maryland, New York, and Pennsylvania. *5 US Regions Map and Facts*, MAPPR, https://www.mappr.co/political-maps/us-regions-map [https://perma.cc/55Z5-UFGV] (last visited Nov. 20, 2023).

eleventh worst rate in the U.S. in 2018,[120] the third worst in 2019,[121] the eleventh highest in 2020,[122] and the ninth highest in 2021.[123]

San Antonio's policy, although it was adopted by a local government rather than a state government, displays somewhat similar weaknesses. SGA and the NCSC gave this policy a 40.8 score, slightly below average but still better than over 100 other policies.[124] Like the Delaware policy (and unlike the Hackensack policy),[125] San Antonio got a positive score for mentioning the need for a transportation network.[126] And like the Delaware policy (but unlike the Hackensack policy),[127] the San Antonio policy addressed design by stating that the city's streets should be "designed, constructed and maintained to maximize the benefits to all users . . . [and combine] best engineering practices with best planning practices."[128] However, the policy did not tell us what these "best practices" were, or how the city would balance competing concerns.

San Antonio, unlike Delaware, received points for context,[129] perhaps because its policy mentioned that the nature of each street must be considered. Criteria included a street's level of traffic and the types of land uses (e.g., residential or commercial).[130] But here, San Antonio's policy gives bureaucrats too little guidance to be useful. Does the policy's reference to commercial streets

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120. GOVERNORS HIGHWAY SAFETY ASS'N, *supra* note 119, at 19 (outlining that states with higher death rates were Arizona, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, Nevada, New Mexico, and South Carolina).

121. *Id.* (reporting that only Florida and New Mexico had higher rates).

122. *Id.* at 13 (explaining that states with higher death rates included Arizona, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, Nevada, New Mexico, and South Carolina).

123. *Id*. (revealing that the states with higher death rates included Arizona, Arkansas, Florida, Georgia, Louisiana, Mississippi, New Mexico, and South Carolina). *See also* Amanda Fries, *Fatalities Dip Amid Pandemic, but Delaware Still Among Deadliest States for Pedestrians*, DEL. ONLINE (July 14, 2022), https://www.delawareonline.com/story/news/2022/07/13/delaware-sees-fatalities-dip-but-state-among-deadliest-for-pedestrians/65371836007 [https://perma.cc/U2Q4-GFLC] ("Delaware has consistently ranked among the deadliest states for pedestrian safety, and over the past decade, the number of pedestrian and bicyclist fatalities on the state's roadways has nearly doubled."). Although statistics on cycling crashes are more difficult to find, it appears that Delaware has above-average death rates for cyclists as well. *See State: Biking & Walking Road Safety*, Figure 2.4.9, THE LEAGUE OF AM. BICYCLISTS, https://data.bikeleague.org/data/states-biking-walking-road-safety/#bicyclist-fatalities-per-bicyclist-commuters-over-time (last visited Aug. 1, 2024) (noting that between 2018 and 2022, Delaware had a cyclist death rate of 4.8 per million residents, higher than every state other than Arizona, Florida, and Louisiana).

124. 2012 BEST POLICIES, *supra* note 84, at App. B.

125. *See* 2012 BEST POLICIES, *supra* note 84 at 11, App. B; Delaware Order, *supra* note 99; *supra* text accompanying note 88-89, 103-04.

126. CITY OF SAN ANTONIO, SAN ANTONIO COMPLETE STREETS POLICY 2 (Sept. 29, 2011) [hereinafter SAN ANTONIO POLICY], https://webapp9.sanantonio.gov/FileNetArchive/%7BA95FAC5E-D1F6-4ACC-B0DA-19C73C5470CB%7D/%7BA95FAC5E-D1F6-4ACC-B0DA-19C73C5470CB%7D.pdf [https://perma.cc/R4SE-LKF7]] (stating that the city will support a "transportation network" that allows individuals to use "streets, sidewalks, and bicycle facilities").

127. *See* 2012 BEST POLICIES, *supra* text accompanying note 98 at 105-06.

128. SAN ANTONIO POLICY, *supra* note 126, at 3.

129. 2012 BEST POLICIES, *supra* note 84, at App. B.

130. SAN ANTONIO POLICY, *supra* note 126, at 3.

mean that commercial streets should be the first to be "completed" so that cyclists and walkers can reach shops and jobs safely? Or does it mean that planners should focus on quiet residential streets so people can bike and walk for exercise more easily?

On the other hand, San Antonio's policy does state that travel in commercial areas will be "enhanced so that pedestrians may travel in comfort and safety [and] bicycle travel is welcome."[131] Nonetheless, the policy does not explain how this goal should be balanced against public demand for walkable and bikeable residential streets or drivers' interest in speedy travel. For example, San Antonio has some five or six-lane streets that might accommodate dangerously fast automobile traffic.[132] Should those streets be narrowed to make travel safer for nondrivers? The policy also states that the city will create a comprehensive bicycle network but does not state how extensive the network will be or whether bike lanes will be protected.[133]

Despite the inadequacies of the policy's language, San Antonio's city government appears to be trying to complete its streets. For example, the city's current budget proposes to add twenty-nine miles of sidewalks.[134] But in a city with over 1,500 miles of streets without sidewalks,[135] such reforms are very modest indeed. Similarly, only about 5 percent of the city's street-miles have bike lanes.[136] Of the city's 220 miles of bike lanes, only one mile is protected from automobile traffic.[137]

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131. *Id.* at 2.

132. Shari Biediger, *In a City Built for Cars, the Pedestrian Experience Lags Behind*, SAN ANTONIO REP. (Mar. 20, 2022), https://sanantonioreport.org/pedestrian-walkability-san-antonio [https://perma.cc/UAZ5-AU27] (suggesting that the six-lane Culebra Road is not walkable because of high-speed limits).

133. SAN ANTONIO POLICY, *supra* note 126, at 2.

134. Mariza Mendoza, *City Wants to Build 29 Miles of New Sidewalks*, NEWS4SA (August 10, 2023, 5:13 PM), https://news4sanantonio.com/news/local/137-million-dedicated-to-improving-san-antonio-city-streets-08-10-2023-budget-texas-bexar-county-sidewalks-town-hall-shearer-hills-nirenberg-streets [https://perma.cc/FRN4-GSQK].

135. Troy Kress, *San Antonio Working to Add 129 Miles of Sidewalks Over the Next Five Years*, KENS5 (Nov. 1, 2022, 8:22 PM), https://www.kens5.com/article/news/community/san-antonio-sidewalks-plan-safety-roads-public-works/273-0d7432c8-3da3-4ad5-af82-7a2e3569ac80 [https://perma.cc/L84Q-ULT2] (explaining that the city has "more than 1,500 miles" with no sidewalks); ART REINHARDT, CITY OF SAN ANTONIO TRANSP. & CAP. IMPROVEMENTS BICYCLE & SIDEWALK MITIGATION PROGRAM 1 (2018) https://docsonline.sanantonio.gov/FileUploads/DSD/SidewalkBikeMitigationPCTACPPT.pdf (stating that as of 2018, the city had 1,898 miles worth of "sidewalk gap").

136. Reinhardt, *supra* note 134, at 1 (outlining that the city had over 4,000 miles of streets and 220 miles of bike lanes). *See also City: Infrastructure for People Biking and Walking*, THE LEAGUE OF AM. BICYCLISTS https://data.bikeleague.org/data/cities-infrastructure-for-people-biking-walking/ [https://perma.cc/M9DX-2EXN] (last visited Aug. 1, 2024) (reporting the city's statistics in figure 3.7.2).

137. Topic VII, *supra* note 135.

C. An Excellent Early Policy

The 2012 SGA/NCSC report ranked Indianapolis's policy as the best complete streets policy of 2012, giving Indianapolis an 89.6 score out of a possible 100.[138] In particular, the Indianapolis policy got a positive score in four areas ignored by the San Antonio policy.[139]

First, the city's policy explicitly lists "exceptions" to the policy rather than leaving it to bureaucrats to decide when to ignore that policy.[140] In particular, the ordinance states that exceptions to the policy must be approved by the Director of Public Works and must fall into one of the following four categories: 1) a roadway where some uses are not allowed, such as a limited-access highway or pedestrian mall; 2) ordinary maintenance activities; 3) situations where application of the policy would be unnecessary, cost prohibitive, or contrary to public safety; or 4) there is somehow an absence of need for complete streets.[141] Any exceptions must be "accompanied by supporting documentation and data demonstrating one of the four categories."[142] On the other hand, these exceptions are so unclear that they give the Director ample discretion because the policy does not define terms such as "unnecessary" or "absence of need."[143]

Second, the city scored points under the "jurisdiction" factor because the policy provides that privately built streets shall adhere to the policy[144] and that "[t]he City shall foster partnerships with the State of Indiana, neighboring communities and counties, and business and school districts to develop facilities that further the City's complete streets policy and continue such infrastructure beyond the City's borders."[145] Of course, the latter element is only useful if the entities mentioned are willing to cooperate with the city.

Third, the Indianapolis policy lists a variety of measures of success: miles of bike lanes, linear feet of pedestrian accommodation, number of new curb ramps for the disabled, percentage of transit stops accessible by sidewalk and curb ramp, crosswalk, and intersection improvements, increases in the number of children walking or bicycling to school, and rates of crashes, injuries and fatalities by mode.[146]

Fourth, to facilitate "implementation," the policy requires a variety of city departments to incorporate complete streets principles in the city's comprehensive plan, bicycle and pedestrian master plans, and a variety of other documents.[147] The city also requires some city agencies to review existing street

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138. 2012 BEST POLICIES, *supra* note 84, at 6.
139. *Id.* at App. B.
140. INDIANAPOLIS, IND., CITY CNTY. COUNCIL PROPOSAL NO. 208, § 431-804 (2012).
141. *Id.*
142. *Id.*
143. *Id.* § 431-804
144. *Id.* § 431-803(b).
145. *Id.* § 431-803(c).
146. *Id.* § 431-806.
147. *Id.* § 431-807(a).

design standards to ensure that they are the "best available design standards and guidelines,"[148] encourage staff professional development on non-motorized transportation issues,[149] identify possible sources of funding for street improvements,[150] recommend improvements to project selection criteria,[151] and make annual progress reports to the city council discussing the city's progress.[152]

Although the Indianapolis policy is more specific than the weaker policies discussed above,[153] even the Indianapolis policy does not require the city government to build anything. It requires the city to measure the amount of new bike lanes and sidewalks and states in a general way that the city shall "approach every transportation improvement . . . as an opportunity to create safer, more accessible streets for all users."[154] However, the policy does not require the city to build a sidewalk or a bike lane in any particular place, nor does it require any specific amount of construction.

The Indianapolis policy also does not mention one major flaw in existing streets: street width.[155] The policy does not even suggest that the city do anything to calm traffic on streets with fast-moving cars or reduce the width of any particular street.[156] As a result, even *close-in* parts of Indianapolis have dangerously wide streets. For example, one newspaper story suggests that families living near 38th Street were uncomfortable walking to a nearby park because this street, less than five miles from downtown, is six lanes wide.[157] The same story refers to a traffic death on 86th Street, another six-lane street.[158]

Nevertheless, the city has made progress in making its streets more

148. *Id.* § 431-807(b).
149. *Id.* § 431-807(c).
150. *Id.* § 431-807(d).
151. *Id.*
152. *Id.* § 431-807(f).
153. *See supra* notes 138-50 and accompanying text.
154. INDIANAPOLIS, IND., CITY CNTY. COUNCIL PROPOSAL NO. 208, *Id.* § 431-803(d).
155. *See supra* notes 1-4 and accompanying text.
156. I note, however, that if new bike lanes and sidewalks are placed on land previously used for vehicle traffic, the city thereby reduces street width and thus slows traffic.
157. Kayla Dwyer, '*Complete Streets' 2.0: Eyeing Safety, Indianapolis Revises 10-Year-Old Road Design Policy*, INDYSTAR (June 7, 2022) [hereinafter *Complete Streets 2.0*], https://www.indystar.com/story/news/local/transportation/2022/06/07/amid-fatal-crashes-indianapolis-revises-complete-streets-policy/7505115001 [https://perma.cc/2SZU-TR3A]; *see Street View of 217 W. 38th St., Indianapolis, Ind.*, GOOGLE MAPS, http://maps.google.com (enter address in the search bar).
158. *Complete Streets 2.0*, *supra* note 157; *see Street View* of *4801 W. 86th St., Indianapolis, Ind.*, GOOGLE MAPS, https://www.google.com/maps/place/4801+W+86th+St,+Indianapolis,+IN+46268/@39.9113522,-86.2435244,17z/data=!3m1!4b1!4m5!3m4!1s0x886b554f48e45939:0xc00ef626bade036f!8m2!3d39.9113522!4d-86.2409495?entry=ttu&g_ep=EgoyMDI0MDgyMS4wIKXMDSoASAFQAw%3D%3D [https://perma.cc/4EKR-XABA]; *Street View of 198 W. 86th St., Indianapolis, Ind.*, GOOGLE MAPS, https://www.google.com/maps/place/198+W+86th+St,+Indianapolis,+IN+46260/@39.9124962,-86.1644482,17z/data=!3m1!4b1!4m5!3m4!1s0x886b534e847bda89:0x7e70918b018bc162!8m2!3d39.9124962!4d-86.1618733?entry=ttu&g_ep=EgoyMDI0MDgyMS4wIKXMDSoASAFQAw%3D%3D [https://perma.cc/9FRV-MRNW].

complete. In the past decade, the city has built 100 miles of bike lanes, 3,000 new or rehabilitated crosswalks, and 1 million linear feet (or 189 miles) of sidewalks.[159] But because Indianapolis has 3,400 miles of roads, including 2,000 miles without sidewalks, these improvements are relatively modest.[160] Unfortunately, this modest progress has not affected safety. From 2017 to 2022, 150 pedestrians were killed in Indianapolis car crashes, a 50 percent increase from the early 2010s.[161]

Why hasn't Indianapolis been more successful? First, the complete streets policies discussed above give the government a great deal of discretion that can be used to avoid reforms such as new sidewalks, bike lanes, and road diets.[162] Second, street improvements may be too expensive for Indianapolis. For example, to put a sidewalk on every street, Indianapolis would have to spend $7.2 billion, more than five times the city's annual budget.[163] Third, even if a city put a sidewalk and a protected bike lane on every street and made the most dangerous streets narrower, the positive impact of these reforms might be outweighed by broader forces that have led to higher traffic crash rates, such as larger cars and an increase in distracted drivers.[164]

III. COMPLETE STREETS: THE NEXT GENERATION

To resolve the problems discussed above, complete streets lobbyists have proposed a variety of reforms to make complete streets policies more effective. In particular, a 2023 "Policy Framework" (hereinafter "Framework") recently written by SGA and the NCSC suggests that the best complete streets policies: 1) establish a general vision; 2) prioritize underserved communities; 3) apply to all projects; 4) have clear exceptions; 5) mandate coordination among government agencies; 6) adopt excellent design guidance; 7) require proactive land-use planning; 8) measure progress; 9) set criteria for choosing projects; and

159. *Complete Streets 2.0*, *supra* note 157. *See* CONVERTUNITS.COM, https://www.convertunits.com/from/linear%20foot/to/MILES (type 1 million linear feet and hit convert).

160. Kayla Dwyer, *Indianapolis Should Spend 5 Times What it Currently Does on Infrastructure, Study Says*, INDYSTAR (Mar. 16, 2022) [hereinafter *Indianapolis Infrastructure*], https://www.indystar.com/story/news/local/transportation/2022/03/16/indianapolis-infrastructure-billion-dollar-gap-roads-bridges-sidewalks/7006898001 [https://perma.cc/6LGC-SUH9]. (explaining that some money has been spent on road diets but does not specify the extent of the changes).

161. *Complete Streets 2.0*, *supra* note 157 ("Nearly 150 pedestrians have died from car crashes in the last five years, compared to about 100 the previous five years and 80 the five years before that.").

162. *See, e.g.*, *supra* note 132 and accompanying text.

163. *Indianapolis Infrastructure*, *supra* note 160 (outlining that the annual city budget is $1.3 billion).

164. *See infra* Part IV, Section A.

10) include plans for implementation.[165] Each of these elements will be evaluated below.

A. Vision

The Framework suggests that a strong complete streets policy "establishes commitment and a vision."[166] This includes explaining the purposes behind complete streets policies, such as protecting walkers and cyclists and, more generally, creating a balanced, equitable street network.[167] In addition, a visionary policy does not merely set broad goals but makes it clear that the policy is binding.[168]

For example, the NCSC gave a perfect score to the complete streets policy of Howard County, Maryland.[169] The Howard County policy uses mandatory language in its statement of vision, by providing that Howard County streets "*shall* be safe and convenient for residents of all ages and abilities who travel by foot, bicycle, public transportation or automobile."[170] Although this language is technically mandatory, it does not do much to limit local discretion, since it doesn't specify what makes streets "safe and convenient." Thus, standing alone, the "vision" element of a complete streets policy is unlikely to change the status quo.

B. Underserved Communities

The Framework adds that a complete streets policy should "prioritize

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165. SMART GROWTH AM. & NAT'L COMPLETE STS. COAL., THE COMPLETE STREETS POLICY FRAMEWORK 2 (2023) [hereinafter 2023 FRAMEWORK], https://smartgrowthamerica.org/resources/elements-complete-streets-policy [https://perma.cc/XZM8-88BD]. *Cf.* 2012 BEST POLICIES, *supra* note 84, at 2. The only elements missing from the 2012 list are prioritizing underserved communities (element 2), proactive land use planning (element 7), and setting criteria for choosing projects (element 9). *Id.* Readers will note that I have chosen to analyze the 2012 ratings by examining examples of complete streets policies, while my discussion of the 2023 policy focuses on the abstract criteria set forth by SGA and NCSC. This is because early complete streets policies have been in effect for some years; as a result, I felt it was more appropriate to treat some of those policies as case studies.

166. 2023 FRAMEWORK, *supra* note 165, at 5.

167. *Id.* at 6 (explaining that policies gain points for mentioning the motivation for the policy, points for stating equity as a motivation, points for mentioning biking and walking, and points for mentioning the "need to create a complete, connected network").

168. *Id.* at 5 (noting that rather than being a non-binding resolution, a policy must use "clear, binding, and enforceable language like 'shall' or 'must' in the legislative text itself").

169. *Complete Streets Implementation*, HOWARD CNTY., MD., https://www.howardcountymd.gov/transportation/complete-streets-implementation [https://perma.cc/52SZ-B6RU] (last visited Dec. 18, 2023).

170. HOWARD CNTY., MD., HOWARD COUNTY COMPLETE STREETS POLICY 1 (2019) [hereinafter *Howard County Policy*] (emphasis added), https://www.howardcountymd.gov/sites/default/files/media/2019-10/CS%20Policy%20as%20adopted.pdf [https://perma.cc/Z6MB-CJ86].

underinvested or underserved communities."[171] The Framework theorizes that any street network is likely to have gaps,[172] and that these gaps are most likely to exist in neighborhoods that have been "discriminated against, ignored, or deprioritized."[173] Underserved communities may include Black communities but also areas with an unusually high percentage of lower-income people, disabled people, people without vehicles, or older adults.[174] The Framework concludes that the ideal policy would a) define specific demographic groups or neighborhoods as "priority groups or places,"[175] and b) require the government to prioritize underserved communities, including areas "with insufficient infrastructure or neighborhoods with a concentration of people who are disproportionately represented in traffic fatalities."[176] For example, the Howard County policy created a "Vulnerable Population Index" ("VPI") for each census tract in the county based on various measurements of social disadvantage and provided that priority should be given to projects in high-VPI tracts.[177]

At first glance, this element makes sense. Obviously, if a city's goal is to improve safety for nondrivers, the most unsafe areas and the areas with the most nondrivers need the most assistance. However, the effectiveness of a complete streets policy depends as much on the number of resources devoted to non-drivers as on the distribution of those resources. If, for example, city X only decides to build two new miles of sidewalks, its policies will not affect most residents, even if those sidewalks are in the most underserved communities.

C. Consistent Application

The Framework provides that an excellent complete streets policy "applies

171. 2023 FRAMEWORK, *supra* note 165, at 8.

172. *Id.*

173. *Id.* at 8-9 (contending that these gaps exist in low-income neighborhoods and black neighborhoods, which makes these groups disproportionately more likely to be victims of pedestrian/automobile crashes). However, I am not sure that inadequate street infrastructure is the only cause of these inequalities. One possible alternative cause is that members of these groups are less likely to own cars and, thus, more likely to be victimized in pedestrian/automobile crashes. *See* DEBORAH N. ARCHER, *Transportation Policy and the Underdevelopment of Black Communities,* 106 IOWA L. REV. 2125, 2141-44 (2021) (noting that "Black people . . . are disproportionately unable to afford a car" and lower-income people are especially likely to rely on public transit rather than cars).

174. 2023 FRAMEWORK, *supra* note 165, at 8-9 (outlining that there have been "inadequate transportation safety investments in predominantly Black communities"). The Policy Framework also mentions "specific neighborhoods with historic disinvestment" as a category. *Id.* However, I would assume that neighborhoods with historic disinvestment are usually low-income neighborhoods. Thus, I am not sure why this category was listed separately.

175. *Id.* at 8

176. *Id.* at 10.

177. *Howard County Policy*, *supra* note 170, at 4-5 (explaining that the criteria for VPI included the number of disabled, those without access to a car, and elderly persons in a census tract. Furthermore, the VPI considered a population's racial makeup and the number of persons with limited English proficiency).

to all transportation projects, in every phase."[178] This means that all road maintenance projects, not just the construction of new roads, should "account for the needs of all modes of transportation."[179] However, this element applies only to changes in "roadway geometry or operations" as opposed to truly minor changes such as "mowing, sweeping, and spot repair."[180]

This certainly seems like a step in the right direction, but its practical impact might be limited for two reasons. First, this element does not explain what it means to "account for the needs of all modes of transportation." Thus, a city could adopt this element but do the bare minimum to account for the needs of cyclists and pedestrians. For example, a city resurfacing a six-lane mini-highway could put a bike lane in the middle of the road without doing anything to protect the bike lane from traffic, ensuring that cyclists have to fight for space with cars going fifty miles per hour.[181] Second, most streets are not altered frequently; streets should ideally be resurfaced once every decade or two, [182] and a fiscally stressed city may repair its streets less frequently.[183] In such a city, complete streets projects will be rare only because all types of road maintenance projects will be infrequent.

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178. 2023 FRAMEWORK, *supra* note 165, at 12.

179. *Id.* at 13. For complete streets policies enacted by state governments or metropolitan government organizations, the Policy Framework suggests applying a similar requirement to projects receiving state or federal funding.

180. *Id.* at 16; *cf. A Guide for Maintaining Pedestrian Facilities for Enhanced Safety, Section 5.2.7*, FED. HIGHWAY ADMIN., https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa13037/chap5.cfm [https://perma.cc/T8CK-J8WA] (describing "spot repair" of a sidewalk as resetting sidewalk material to reduce the risk of pedestrians tripping on the sidewalk).

181. *See, e.g.*, *'Do I Risk It?' Your Photos of the World's Best and Worst Cycling Infrastructure*, THE GUARDIAN (June 27, 2019), https://www.theguardian.com/cities/2019/jun/27/do-i-risk-it-your-photos-of-the-worlds-best-and-worst-cycling-infrastructure [https://perma.cc/BE3U-Y5MF] (showing numerous examples of badly constructed bike lanes, including lanes surrounded by automobile lanes); Kea Wilson, *Study: Some Paint-Only Bike Lanes May Increase Crashes*, STREETSBLOG USA (Sept. 7, 2023), https://usa.streetsblog.org/2023/09/07/study-paint-only-bike-lanes-may-increase-crashes?utm_source=substack&utm_medium=email [https://perma.cc/LM4D-2W57] (explaining that studies are divided on whether unprotected bike lanes are safer than streets with no bike lanes at all).

182. *See* Giovanni Valle, *How Often Do Roads Need to Be Paved*?, BUILDER SPACE (Sept. 26, 2021), https://www.builderspace.com/how-often-do-roads-need-to-be-paved [https://perma.cc/MJ4Y-QPC3] (outlining that resurfacing, which is the addition of a layer of asphalt to an existing road surface, is necessary every 10 to 15 years for busier roads and every 20-30 years for quieter streets); *How Often Should Asphalt Be Resurfaced*?, K.O. ASPHALT (Oct. 30, 2019), https://koasphalt.com/2019/10/how-often-should-asphalt-be-resurfaced [https://perma.cc/6Z58-KJT2] (supporting the same recommendation as above).

183. *See* Jonathan Walsh, *Feedback from Viewers Strong About Broken Roads, Broken System Investigation*, NEWS 5 CLEVELAND (Aug. 5, 2016), https://www.news5cleveland.com/news/feeback-from-viewers-strong-about-broken-roads-broken-system-investigation [https://perma.cc/K2EE-WNZQ] (reporting that between 2009 and 2016, "only one in 16 streets in Cleveland has been paved").

D. Clear Exceptions

Even a city that scores highly on the Framework's first three elements will rarely accommodate all users if it creates too many exceptions to its complete streets policy. The Framework tries to solve this problem by rating policies based on the clarity of their exceptions; in particular, a policy should state who is responsible for granting an exception to the policy and have some sort of notice to the public, such as a public hearing, before an exception is granted.[184]

More importantly, a policy can get the Framework's best possible rating only if exceptions are limited to those on the Framework's exception list.[185] Some of these exceptions are quite narrow, such as emergency repairs and repairs to limited-access highways.[186] On the other hand, some exceptions are quite broad. A city can still have a highly rated complete streets policy if it reserves the right to ignore the policy in case of a "documented absence of current and future need" or if the cost of accommodating nondrivers "is excessively disproportionate to the need or probable use [of an improvement]."[187] These exceptions are so broad as to swallow up the general rule that the government should accommodate walkers and cyclists. For example, the government could decide that any attempts to narrow a street are too costly or that because most people drive on a street, there is no real need to accommodate nondrivers. Thus, the Framework's "exceptions" element does little to limit government discretion. On the other hand, a large city might have such a diverse collection of streets and neighborhoods that significant flexibility might be necessary.

E. Coordination

The Framework states that the best policies mandate coordination among government agencies.[188] Under this element, the Framework suggests two separate rules for local governments. First, the Framework suggests that local governments "require[] private development projects to comply."[189] Thus, private developers will be "required to address how they will incorporate complete streets into the project being reviewed, if applicable."[190] Without a

184. 2023 FRAMEWORK, *supra* note 165, at 16.

185. *Id.* I say "more importantly" because these procedural elements are unlikely to be a significant limit on exceptions unless the public is unusually aroused. Even if a hearing is held on an exception to a complete streets policy, the hearing is unlikely to lead to a modification of the exception if the public is apathetic about or hostile to the interests of nondrivers.

186. *Id.* (explaining that complete streets accommodations are not necessary "where specific users are prohibited, such as interstate freeways or pedestrian malls" or as part of "emergency repairs such as a water main leak that require an immediate, rapid response").

187. *Id.*

188. *Id.* at 18 (noting that element 5 requires "coordination between jurisdictions, agencies, and departments").

189. *Id.* at 19.

190. *Id.* at 18.

clear description of what developers must do to "incorporate complete streets," this requirement might be too vague to be helpful. Second, the Framework requires coordination among agencies "such as public health, housing, planning, engineering, transportation, public works, city council, and/or mayor or executive office."[191] This requirement seems more procedural than substantive. If these agencies do not know what the results of their coordination should be, it does not matter whether they collaborate or not.

F. Design

It could be argued that the sixth element in the Framework answers the question left open by the fifth element—that is, what the ultimate goal of agency coordination should be. The Framework's discussion of this element states that a strong complete streets policy "adopt[s] excellent street design guidance"[192] and adds that it awards points for policies that adopt "best state-of-the-practice design guidance" and set "a specific time frame for implementation."[193]

Although this language may seem vague at first glance, the Framework's discussion tries to clarify what sort of guidance is *not* "state-of-the-practice." The Framework notes that design guides are "at odds with the Complete Streets approach" if they "prioritize vehicle throughput over all other uses of the street" by "encouraging wider lanes and fewer crossings . . . at the expense of safety and mobility for anyone not in a vehicle."[194] The Framework also lists a dozen design guides that apparently avoid this flaw.[195]

Thus, the Framework contains a vague "letter of the law" rule (the requirement of "excellent design guidance") and a discussion that explains the spirit of the law.[196] The former rule allows municipalities to give themselves a little more flexibility than the "spirit of the law" discussion suggests. For example, the Howard County complete streets policy states that the county relies on "street design guidelines including but not limited to national guidance from the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), and the National Association of City Transportation Officials (NACTO) . . . [and] will be flexible and responsive to the evolving nature of transportation needs and innovation in design practice."[197]

This language allows the county to deviate from the best design guides in three ways. First, the "including but not limited to" language implies that the

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191. *Id.* at 19. I note that for state governments and metropolitan-level organizations, the Policy Framework suggests a separate requirement that projects accommodating all users be "awarded extra weight for funding and/or inclusion in Transportation Improvement Plans."

192. *Id.* at 21.

193. *Id.* at 21-23.

194. *Id.* at 21.

195. *Id.* at 21-22.

196. *Id.* at 21.

197. *Howard County Policy*, *supra* note 170, at 3.

county could use street design guides that are more vehicle-oriented than those listed by the Framework.

Second, by referring to three organizations (FHWA, AASHTO, and NACTO) rather than individual guides by those organizations mentioned in the Framework, the county's policy suggests that if it can find more automobile-oriented language in anything published by those organizations, it reserves the right to pick such terminology over the more pedestrian-oriented language in their guides. This is not a hypothetical risk. FHWA publishes the Manual on Uniform Traffic Control Devices ("MUTCD"),[198], which encourages local governments to set high-speed limits and discourages crosswalk construction.[199] Similarly, AASHTO's manual on the geometric design of streets is not as pro-pedestrian as it could be.[200]

Third, the "flexible and responsive" language gives the county the right to deviate from all manuals. This flexibility could be used to support policies that prioritize automobile speed over pedestrian or cyclist safety.

To a much greater extent than some other parts of the Framework, the "best design" section gives guidance to cities that want to enact pro-pedestrian, pro-cyclist complete streets policies. Nonetheless, it also gives cities some flexibility to follow the letter of the Framework while ignoring its spirit.

G. Land Use Planning

According to the Framework, complete streets policies should include "proactive and supportive land-use planning."[201] This means that a city's policy should require zoning ordinances and other land use-related documents to "specify how they will support and be supported by the community's Complete Streets vision."[202] In addition, a policy should require transportation plans to "specify how transportation projects will serve current and future land use."[203]

For example, a Smart Growth America/NCSC case study praises the policy of El Paso, Texas, which calls upon the city to "review and, in coordination with our development community, revise land-use policies, plans, zoning ordinances, and/or other relevant documents . . . to incorporate the vision of the Complete

198. *See* SARA C. BRONIN & GREGORY H. SHILL, *Rewriting Our Nation's Deadly Traffic Manual*, 135 HARV. L. REV. F. 1, 2 (2021).

199. *Id.* at 5. The manual empowers traffic officials to adjust the speed limit to the speed at or below that of which 85% of vehicles are traveling, thus encouraging speed limits that may be too high to be safe for pedestrians. *Id.* Furthermore, the manual requires engineering studies before new crosswalks are installed, thus raising the installation cost; also, the manual requires a minimum amount of pedestrian activity before the crosswalk can be installed. *Id.*

200. *See* SARA C. BRONIN, *Rules of the Road: The Struggle for Safety and the Unmet Promise of Federalism*, 106 IOWA L. REV. 2153, 2165-79 (2021) (contending that this manual, generally known as the "Green Book," is focused on "how to move cars quickly" and thus tends "to prioritize cars at the expense of non-driver safety").

201. 2023 FRAMEWORK, *supra* note 165, at 25.

202. *Id.* at 26.

203. *Id.*

Streets policy."[204] However, this language is unclear, because it does not explain what sort of land use changes would incorporate this vision. Should the government allow more density? Less density? More large houses? More apartments? This language, and the Framework language cited above, does not explain.

The Framework also gives municipal policies points for requiring "consideration of the community context as a factor in decision-making."[205] For example, the Howard County policy addresses land use planning by stating that improvements should "take into consideration . . . adjacent land use, type of community, and plans and guidelines, in particular The Howard County General Plan."[206] But such references to "context" are too vague to be useful. For instance, does this language mean that residential streets should be more "complete" than commercial streets, or vice versa?[207] Does it mean that relatively dense urban areas should be targeted for improvements, or should suburban streets receive the first new sidewalks or bike lanes? If sidewalks or bike lanes are rare in suburbs,[208] one might argue that as a matter of equity, suburbs should be brought to a minimum standard of walkability and, therefore, should receive the first complete streets improvements. On the other hand, one might argue that because some suburbs are not compact enough to support walking,[209] pedestrian-oriented safety improvements in suburbs are less

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204. SMART GROWTH AM. & NAT'L COMPLETE STS. COAL., BEST COMPLETE STREETS POLICIES 2023, 30 (2023) [hereinafter BEST 2023], https://smartgrowthamerica.org/wp-content/uploads/2023/05/Best-Complete-Streets-Policies-2023_0524.pdf.

205. 2023 FRAMEWORK, *supra* note 165, at 27. In addition, the Framework provides that a perfect policy should address the need to mitigate displacement caused by safer streets. *Id.* at 26 ("[T]ransforming certain streets to become less dangerous and better serve everyone in those communities . . . [could lead to] the displacement of residents due to rising costs of living . . ."). *Id.* But as noted above, complete streets policies tend to be implemented at a glacial place. *See supra* notes 159-61 and accompanying text (outlining that even in a city with a highly rated complete streets policy, sidewalks and bike lanes have been added at a slow pace, and their impact upon safety is unclear). Thus, the Framework's fear that policies will be so successful as to lead to displacement seems unlikely to reflect reality anytime soon.

206. *Howard County Policy*, *supra* note 170, at 4.

207. *See supra* notes 132-33 and accompanying text (making similar points about San Antonio complete streets policy).

208. *See* Green v. Town of Wilmington, 158 N.E.2d 143, 145 (1959) ("It is a matter of common knowledge that there are many streets in the suburbs and in rural communities on which there are no sidewalks . . . .").

209. *See* Adina Solomon, *Why Aren't Modern Suburbs Built on a Walkable Grid*?, HOWSTUFFWORKS, (Mar. 12, 2024), https://science.howstuffworks.com/engineering/civil/why-so-many-suburban-streets-twist-and-turn.htm (explaining that city streets often have a walkable grid, while suburbs tend to have winding streets that are less walkable); EMILY R. CASEY, *Going the Extra Mile: Expanding the Promoting Affordable Housing Near Transit Act*, 57 U. RICH. L. REV. 1369, 1389-90 (2023) ("Suburbs often lack the density of cities . . . ."); DOUGLAS G. FRENCH, *Cities Without Soul: Standards for Architectural Controls with Growth Management Objectives*, 71 U. DET. MERCY L. REV. 267, 273 (1994) (stating that suburbs are often "insufficiently dense to allow walking"); JAMES A. KUSHNER, *The Life and Death of Great Cities in the Time of Climate*

efficient than in cities that are often already somewhat walkable.[210] Thus, the Framework's references to "community context" are unnecessarily vague.

H. Measuring Progress

As noted above, some cities with complete streets policies have done little to actually complete the streets.[211] The Framework seeks to solve this problem by urging cities to establish specific performance measures, regularly collect such measures, and publicize those measures.[212] According to the Framework's scoring system, policies get points not only for establishing specific measures but also for establishing a time frame for recurring collection of those measures, requiring them to be publicly released, and assigning responsibility to a specific person or government agency.[213]

However, this element of the Framework does not dictate what should be measured. It instead lists over twenty possible measures of progress, including sidewalk conditions, number and severity of crashes, travel time by mode, the number of street trees, amount of street lighting, number of trips by various modes, access to jobs by travel mode, number of staff trained, and air quality.[214] The Framework adds that these twenty measurements are not an exclusive list and links to a manual that lists over eighty measures of progress.[215]

By giving municipalities almost unlimited flexibility to decide how to

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Change and the COVID-19 Pandemic, 4 J. COMPAR. URB. L. & POL'Y 133, 172 (2020) (noting that in low-density suburbs, "virtually nothing is walkable" because "destinations are far from home").

210. *See* Kaid Benfield, *The Ten Steps to Walkable Cities*, SMARTCITIESDIVE (2012), https://www.smartcitiesdive.com/ex/sustainablecitiescollective/ten-steps-walkability/96836 [https://perma.cc/5G3V-7PFD] (citing one author's suggestion that cities seeking to improve walkability should focus on already-walkable areas because in those areas, smaller investments can make a bigger difference).

211. *See supra* Part II.

212. 2023 FRAMEWORK, *supra* note 165, at 29 (outlining that an ideal policy should "establish specific performance measures across a range of categories," set "a timeline for the recurring collection" of these measures, require the measures "to be publicly shared," and "[a]ssign responsibility for collecting and publicizing" the measures).

213. *Id.* at 31. In addition, the Framework seeks to incorporate equity into this process in two ways. *Id.* First, the Framework gives points for performance measures tracking how well "the public engagement process reaches underrepresented populations." *Id.* However, since the most engaged public might be apathetic or support automobile-oriented speedways, this factor may not serve the broader goals of complete streets policies. Second, the best policies measure disparities by "income/race/vehicle access/language/etc. as relevant to the jurisdiction." *Id.* In other words, if the city has a complete streets policy that publicizes the amount of bike lanes added every year, it should publicize whether those bike lanes are equally distributed between different types of neighborhoods.

214. *Id.* at 30.

215. *Id.* (citing AARP, SMART GROWTH AM. & NAT'L COMPLETE STS. COAL., EVALUATING COMPLETE STREETS PROJECTS: A GUIDE FOR PRACTITIONERS 8-36 (2015) [hereinafter GUIDE], https://smartgrowthamerica.org/resources/evaluating-complete-streets-projects-a-guide-for-practitioners-2 [https://perma.cc/4CTJ-VTEK].

measure progress, the Framework increases the likelihood that even a city with a highly rated policy might not improve the lives of walkers and bikers. Many of the listed performance measures are, at best, indirectly related to the safety or comfort of nondrivers. For example, a city's complete streets policy could choose to measure the number of internal policies and documents updated, the number of staff trained, the effectiveness of the community engagement process, building vacancy rates, and the number of art installations in the city.[216] These are all measurements listed in the Framework[217] and none are directly related to the ability to walk or bike on a street without being crushed by a speeding vehicle.

I. Criteria for New Projects

The Framework notes that many communities' criteria for selecting transportation projects prioritize "the needs of people who are driving rather than [the needs of] all people within a community."[218] As an alternative, the Framework understandably suggests spending money on projects that "advance Complete Streets."[219] To get the highest possible score on this element, a complete streets policy would establish "specific criteria to encourage funding prioritization for Complete Streets implementation" and also include equity considerations in those criteria.[220]

A Smart Growth America/NSCC case study praises Tucson for its achievements in this area, stating that in Tucson, "potential projects were prioritized using criteria plainly laid out in the ordinance."[221] Tucson's policy establishes a committee to "develop a project prioritization tool based on a point system to prioritize projects that improve safety and increase multimodal levels of service."[222] This point system will include various criteria "including an analysis of walking/bicycling/transit demand, network connectivity, existing crashes/fatalities, multimodal level of service improvements, and inclusion of Complete Streets elements."[223]

However, it is unclear what these "Complete Streets elements" are or how the factors listed support any given project. For instance, suppose there is low transit ridership on Avenue X and little evidence of widespread walking. One might argue that this data shows that there is little demand for non-automotive

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216. *Id.* at 30.

217. 2023 FRAMEWORK, *supra* note 165, at 30.

218. *Id.* at 33.

219. *Id.*

220. *Id.* at 34.

221. BEST 2023, *supra* note 204, at 16.

222. CITY OF TUCSON, COMPLETE STREETS TUCSON: EXHIBIT A TO ORDINANCE NO. 11621, 9 (2019) [hereinafter TUCSON EXHIBIT A] https://www.tucsonaz.gov/files/sharedassets/public/v/1/government/departments/department-of-transportation-and-mobility/documents/tucson_complete_streets_policy_2.5.2019.pdf.

223. *Id.*

transportation on Avenue X and, thus, the city should do nothing to promote walking or biking. On the other hand, one might argue that if the city installed or widened a sidewalk on Avenue X, walking would be safer, and thus, there would be more demand for walking and transit use. Therefore, even Tucson's factors could be more explicit.

J. Implementation

The final element in the Framework's rating system is implementation; that is, an effective complete streets policy must "make a measurable impact on what gets built and where."[224] In particular, the Framework grades complete streets policies on numerous implementation-related criteria, some of which relate to procedure instead of substance.[225]

For example, the Framework gives credit for creating "a community engagement plan . . . [that] addresses how the jurisdiction will overcome barriers to engagement for underrepresented communities."[226] Community engagement is a fine idea if community members know things about their streets that planners do not. However, community engagement is no substitute for a substantive vision. Communities may be divided. Some people will favor retaining car-dominated streets no matter how many people die in car crashes. Others will prefer reforming streets to make them safer for non-drivers. And some will favor a little of both. Because the majority of low-income adults have access to cars,[227] this may be the case even in less privileged communities.

The Framework also gives points to policies that create a special implementation committee that includes representatives of a wide range of groups and constituencies, including "underinvested communities, and vulnerable populations such as people of color, older adults, children, low-income communities, non-native English speakers, those who do not own or cannot access a car, and those living with disabilities."[228] Certainly, such diversity may be helpful. However, a diverse committee does not guarantee complete streets. For example, suppose a committee has one or two nondrivers but is dominated by drivers who belong to one of the other listed groups. In that case, it still might reflect the interests of motorists and thus favor the status quo.

The Framework gives points to policies that require "workshops or other training opportunities for transportation staff."[229] This idea makes sense if the workshops train the staff in complete streets principles; the staff might be more likely to favor projects implementing those principles. However, it is no guarantee of success, either because staff might favor the status quo or because

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224. 2023 FRAMEWORK, *supra* note 165, at 36.
225. *Id.*
226. *Id.* at 37.
227. *See* Cournoyer, *supra* note at 68 and accompanying text.
228. 2023 FRAMEWORK, *supra* note 165, at 37.
229. *Id.*

higher-ups override their opinions.

Finally, the Framework gives points to policies that require relevant plans and regulations to be updated.[230] Tucson's policy, which SGA and the NCSC single out for praise on the implementation element,[231] clarifies this point by stating that the city should "revise existing relevant procedures, plans, regulations, and other processes for consistency with the Complete Streets Policy."[232] This requirement, however, is only as good as the rest of a city's complete streets policy. If the underlying policy gives bureaucrats unlimited discretion, updating existing plans will do little to change the status quo.

K. Summary

As noted above, even the best early complete streets policies were of limited value. They often used vague language and did not require the government to build anything at all.[233] But as explained above, the Framework and newer complete streets policies do not always remedy these defects. The Framework explains the spirit of complete streets policies by emphasizing that governments should consider the needs of non-drivers rather than focusing solely on encouraging ever-faster automobile traffic.[234] But because the Framework is not always clear about how to achieve this goal, it does not guarantee meaningful change. Is there any way to improve on the most recent policies?

IV. CAN COMPLETE STREETS BE MADE MORE COMPLETE?

There is reason to believe that the apparent failures of complete streets policies are at least partially caused by factors unrelated to those policies.[235] Nevertheless, making these policies at least somewhat more specific is possible.[236]

A. Limitations Unrelated to Complete Street Policies

One obstacle to more complete streets is the reality of fiscal scarcity. Even if a city wanted to devote every street-reform dollar to a specific reform, such as sidewalk installation, it might be unable to afford to create a complete network of sidewalks for many years. For example, as noted above, Indianapolis would have to spend $7.2 billion to put a sidewalk on every street.[237] In 2023,

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230. *Id.*

231. BEST 2023, *supra* note 204, at 16 (referring to "the specificity of the policy's plan for implementation").

232. TUCSON EXHIBIT A, *supra* note 222, at 12.

233. *See* discussion *supra* Parts II, III.

234. *See supra* notes 168, 199 and accompanying text.

235. *See infra* Part IV, Section A.

236. *See infra* Part IV, Section B.

237. *See* Dwyer, *supra* note 160 and accompanying text.

the city budgeted just under $8.9 million for capital expenses related to sidewalks.[238] If the city ignored the maintenance of existing sidewalks and put every dollar of sidewalk spending into installing new sidewalks, it would need about 800 years to complete its sidewalk network. The city's overall capital budget for streets is $118 million, [239] so even if it added its entire streets budget to the sidewalk budget, it would still be unable to complete the sidewalk network for over 50 years. As noted above, a complete streets policy might address bike lanes, street design, and sidewalks, so a complete streets policy that sought to meet every possible need would be even more expensive than my Indianapolis hypothetical suggests.[240]

Moreover, American streets have become more dangerous for pedestrians for reasons unrelated to street design.[241] As noted above, the number of pedestrians killed by motor vehicles has increased in recent years.[242] Between 2010 and 2021, the number of pedestrians killed by motorists increased by 54 percent.[243] The trend towards wider American streets and faster car speeds began long before 2010,[244] yet pedestrian fatalities did not begin to increase until that year.[245] Thus, it appears that defective street design is not the only cause of rising pedestrian fatalities.

One possible explanation for this trend is the growth of sport utility vehicles and other light trucks.[246] In 2009, only 33 percent of new vehicles were trucks;

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238. CITY OF INDIANAPOLIS, ADOPTED 2023 BUDGET FOR THE CONSOLIDATED CITY OF INDIANAPOLIS - MARION COUNTY 83 (2023) [hereinafter INDIANAPOLIS BUDGET], https://media.graphassets.com/3D51znlxS8G4AYBMgRsS?_gl=1*3lj1e7*_ga*MTQ2NTE1ODIwNS4xNjc1NjkxOTk5*_ga_G6FYGSYGZ4*MTY3OTkyMzc0Mi4xNi4xLjE2Nzk5MjQwMDIuMjUuMC4w [https://perma.cc/CA9D-WR4G] (listing this amount for 2023). In the context of public works, capital spending is related to construction or long-term maintenance, while operating spending is related to day-to-day expenses such as employee salaries. *See Understanding Capital vs. Operating Funding and Why It Matters*, REG'L TRANSP. AUTH. (Feb. 2, 2023), https://www.rtachicago.org/blog/2023/02/02/understanding-capital-vs-operating-funding-and-why-it-matters [https://perma.cc/NYC5-35W7] (explaining the distinction in the context of public transit). Thus, the construction and maintenance of streets is capital spending.

239. INDIANAPOLIS BUDGET, *supra* note 238, at 83.

240. *See supra* Part III, Section A.

241. *See* SHILL, *supra* note 11, at 195.

242. *See supra* note 79 and accompanying text.

243. SHILL, *supra* note 11, at 195.

244. *See* Adam Greenfield, *Modern Streets: Why They're Wide and Why It Matters*, THE PLAZA PERSP. (Feb. 11, 2016), https://plazaperspective.com/why-are-modern-streets-so-wide/ [https://perma.cc/K6GK-MMKT] (reporting that the trend began in early 20th century); EMILY TALEN, CITY RULES: HOW REGULATIONS AFFECT URBAN FORM 162 (2012) (noting that in New York's 1898 building code, no street was required to be more than 79 feet wide; by contrast, Tucson, Arizona, required major streets to be as wide as 150 feet in 2012).

245. *See Fatality Facts 2021 Pedestrians*, IIHS HLDI (2023), https://www.iihs.org/topics/fatality-statistics/detail/pedestrians#trends (outlining those deaths generally decreased between 1977 and 2010 and then increased after 2010).

246. U.S. ENV'T PROT. AGENCY, THE 2020 EPA AUTOMOTIVE TRENDS REPORT 30 (2021) [hereinafter 2020 TRENDS], https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf.

this percentage increased to 57 percent in 2020.[247] These vehicles tend to be taller than ordinary automobiles.[248] Taller vehicles are more likely to strike pedestrians in parts of the body that are more easily injured, such as their torso, head, and internal organs.[249] Furthermore, persons driving tall vehicles are unlikely to see not-so-tall people; for example, one study showed that a traffic cone the size of a toddler was visible from a small car only 39 inches away but was not visible from a sport utility vehicle unless it was more than 10 feet away.[250] Thus, even if streets had become slightly narrower or begun including more sidewalks in recent decades, automobile crash rates might nevertheless have increased because of the growth of sport utility vehicles and other trucks.[251]

B. But Nevertheless, Complete Street Policies Can Be Improved

As noted above, complete streets policies are often so vaguely written that they give bureaucrats enormous discretion—discretion that can easily be used to avoid significant reform.[252] To some extent, this vagueness is unavoidable. For example, the "vision" section of a complete streets policy is, by definition, vague because it is designed to describe the overall goals of a policy rather than suggest any specific rules.[253] Similarly, I am not sure that the "exceptions" part of a complete streets policy could be made any more specific without occasionally leading to absurd results.[254]

On the other hand, a few elements of complete streets policies could be made more specific. For instance, the Framework notes that a good complete

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247. *Id*. By contrast, the market share for trucks decreased from 2004 to 2009 from 48 percent to 33 percent.

248. *See* ANGIE SCHMITT, RIGHT OF WAY: RACE, CLASS, AND THE SILENT EPIDEMIC OF PEDESTRIAN DEATHS IN AMERICA 83 (2020) (citing an example of a sport utility vehicle that is almost four feet tall, which is 50 percent taller than one traditional car model); Shill, *supra* note 11, at 204 n.42 (citing John F. Saylor, *The Road to Transportation Justice: Reframing Auto Safety in the SUV Age*, 170 U. PA. L. REV. 487, 494 (2022)).

249. SHILL, *supra* note 11, at 204.

250. Schmitt, *supra* note 248, at 80.

251. Deaths from traditional cars have also risen. SHILL, *supra* note 11, at 204 n.48 (citing GOVERNORS HIGHWAY SAFETY ASS'N, PEDESTRIAN TRAFFIC FATALITIES BY STATE: 2020 PRELIMINARY DATA 4 (2021)). However, it is unclear why this is the case. One might think that the COVID-19 pandemic has led to more reckless driving. However, pedestrian deaths began to increase as early as 2010. SHILL, *supra* note 11, at 195 (reporting that even during the 2010s, deaths rose by 46 percent). Moreover, deaths of vehicle occupants only increased by 2.2 percent during the 2010s, *id.* at 202, which suggests that driver recklessness may be only a minor factor. Shill notes that vehicles have become heavier since the 1980s and suggests that heavier vehicles are more likely to kill pedestrians. *Id.* at 203-04. However, after rising during the 1990s, vehicle weights seem to have stabilized in the 21st century. *See* 2020 TRENDS, *supra* note 246, at 19. *See also* MICHAEL LEWYN, *Pedestrians Under Attack*, 49 REAL EST. L.J. 365, 367-72 (2021) (criticizing other possible explanations, including the movement of population to the suburbs with more dangerous streets, the aging of the U.S. population, and increased pedestrian recklessness).

252. *See* discussion *supra* Parts II, III.

253. *See supra* Part III, Section A (describing the "vision" section of policies).

254. *See supra* Part III, Section D (describing exceptions to policies in more detail).

streets policy should "account for the needs of all modes of transportation"[255] and adopt "excellent design guidance."[256] It seems to me that complete streets policies should be able to say with more detail what it means to "account for the needs" of nondrivers.

For example, streets generally should have sidewalks to limit conflicts between walkers and motorists.[257] A city's complete streets policy should assert that sidewalks should eventually be universal, or nearly so, on city streets. Of course, there will be exceptions. For instance, a car-free pedestrian mall does not need a sidewalk. In addition, some streets may be so narrow that cars move too slowly to be a threat to pedestrians; on such "shared streets," a sidewalk might not be necessary.[258] Nevertheless, a complete streets policy should provide that sidewalk installation must be a high-priority improvement and that, in the long run, sidewalks should be almost universal.

Similarly, it seems that any street that walkers are likely to cross should be designed to discourage cars from driving fast enough to kill pedestrians. As noted above, a pedestrian is unlikely to die when hit by a vehicle going 20 miles per hour (mph) and is likely to die when hit by a car going 40 mph.[259] Thus, a complete streets policy should provide that streets likely to be used by pedestrians, like streets with residences or shops, should not be designed for any speed high enough to lead to death in case of a collision. This means that no street likely to be used by pedestrians should be designed for 40 mph traffic and that a maximum design speed should be somewhere in the 20-35 mph range.

Complete streets policies should also include a menu of possible policies that might achieve this goal, such as road diets that reduce the number of vehicle lanes[260] or lane widths of 10 feet or fewer.[261] On the other hand, not every street needs such interventions. A limited-access highway does not particularly need to be slowed down, nor does a rural road with almost no foot traffic.

Just as pedestrians are safer when they are protected from cars, cyclists are also safer when they are protected from automobiles.[262] It logically follows that complete streets policies should single out protected bike lanes as an appropriate area for investment. If protected bike lanes are desirable, they should be used on the streets most likely to attract bike traffic, such as commercial streets. In

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255. 2023 FRAMEWORK, *supra* note 165, at 13.

256. *Id.* at 21.

257. *See* U.S. DEPT. OF TRANS. FED. HIGHWAY ADMIN., *supra* note 33 and accompanying text (describing the benefits of sidewalks).

258. *See* ERIC A. CESNIK, *The American Street*, 33 URB. LAW. 147, 154-55 (2001) (describing the concept of "shared streets," on which cars go at a walking pace).

259. BRONIN & SHILL, *supra* note 4, at 10.

260. *See supra* notes 15-17 and accompanying text; *see supra* notes 39-40 and accompanying text.

261. *Urban Street Design Guide*, NAT'L ASS'N OF CITY TRANSP. OFFS., https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width [https://perma.cc/7QVC-6NXA] (recommending 10-foot lanes in urban areas and noting that where lanes are wider, traffic typically exceeds 40 mph).

262. *See supra* notes 34-37 and accompanying text (describing benefits of bike lanes).

addition, bike lanes are especially appropriate where injury-producing collisions are most common. For instance, such collisions may be especially likely on streets with on-street parking due to the risk of "dooring" accidents caused by drivers opening their doors after parking their vehicles.[263]

Both the Framework and earlier policies urge planners to consider an area's context without explaining what contexts justify which policies.[264] However, the discussion above suggests ways for a city to clarify this point. In particular, a complete streets policy should indicate that if a street has a destination that is likely to attract walkers or cyclists, it should have a minimum level of safety for walkers and/or cyclists. Because housing and businesses tend to attract walkers and cyclists who might live in the housing or shop or work at the businesses,[265] streets with housing or workplaces should generally have sidewalks, automobile traffic slow enough to minimize the risk of death, and protected bike lanes.

Furthermore, according to the Framework, the best complete streets policies include multiple ways to measure progress; however, these criteria are so numerous and go so far beyond the goals suggested above that they allow almost any government to claim progress.[266] Instead, a complete streets policy should focus on a few key goals. Based on the analysis above, such goals might include increasing the number of streets with sidewalks and bike lanes and creating street designs that slow automobile traffic to a safe level.[267] As noted above, cities may have difficulty raising funds to implement widespread reforms relating to these goals.[268] Thus, projects such as art installations,[269] which might make streets attractive but do little for safety, should not be a high priority.

Additionally, the Framework notes that the best complete streets policies set criteria for selecting new street design projects.[270] As stated previously, these criteria may be so vague as to give cities unlimited discretion.[271] A better policy would limit discretion by including some more specific guidelines. For example, if a municipality wishes to focus on installing sidewalks or bike lanes on

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263. *See* MCLEOD, *supra* note 37 and accompanying text (describing the risk of "dooring").

264. 2012 BEST POLICIES, *supra* note 84, at 13; 2023 FRAMEWORK, *supra* note 165, at 27.

265. *Cf.* New York City DOT, NYC Mobility Plan, at https://www.nyc.gov/html/dot/html/pedestrians/pedestrian-mobility.shtml [https://perma.cc/Z389-UGQY] (describing businesses as one of several types of "pedestrian generators"); FRENCH, *supra* note 209 (dense areas tend to be more walkable).

266. *See supra* Part III, Section H.

267. *See supra* Part I, Section A.

268. *See supra* Part IV, Section A. In addition, some complete streets policies address outputs (that is, possible results of complete streets policies). For example, the Framework's examples of appropriate performance measures include the number of crashes, travel times by mode of transportation, the amount of travel by various modes, emergency vehicle response times, and air quality. 2023 FRAMEWORK, *supra* note 165, at 30. However, these outputs are often affected by so many variables that they should be used with great caution. *See supra* Part IV, Section A (discussing possible causes of rising pedestrian fatality rates that are unrelated to street design).

269. *Cf.* GUIDE, *supra* note 215, at 22 (metrics for transportation projects should include the "[n]umber of permanent (or temporary) [art] installations" on streets).

270. 2023 FRAMEWORK, *supra* note 165, at 33.

271. *See* discussion *supra* Parts II, III.

commercial streets, its policy should say so. Or if a city's leadership thinks that placing such improvements in areas with significant public transit or bike lanes is less critical than improving areas where walking is the only non-automotive way to reach key neighborhood destinations, its policy should say so.[272]

Finally, the Framework suggests that a special implementation committee should oversee the execution of complete streets plans and lists various underrepresented groups that should be involved in such a committee.[273] However, the ideal policy might be narrower and more specific. If, as suggested above, the policy's primary goal is to make walking and biking safer, the committee should have more than one or two persons without cars and multiple representatives of pedestrian/cyclist advocacy groups.

All these reforms would encourage cities to focus their street maintenance dollars on a few key priorities to improve pedestrian and cyclist safety more effectively, which in turn might lead to increased walking and biking.

V. CONCLUSION

This article began with the question: why have complete streets policies not been more successful? As detailed above, answers to this question fall into two categories. First, factors unrelated to policy language have slowed implementation, such as the fact that city public works departments do not have unlimited funds. Second, the language of complete streets policies is often so vague as to justify almost any conceivable policy.

The first problem is not easily solved as long as resources are scarce. The second problem, however, can be mitigated if complete streets policies were more explicit. That is, policies should precisely state what they are designed to achieve and what means should be used to achieve those goals. Rather than suggesting dozens of possible reforms, complete streets policies should focus on a few key reforms designed to slow down high-speed automobile traffic and to protect nondrivers from such traffic.

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272. On the other hand, this may be politically infeasible because setting priorities might be controversial. For example, a complete streets ordinance that states improvements should be predominantly in less walkable suburb-like areas might be unpopular with legislators from the city's urban core.

273. *See supra* Part III, Section J.