

## References

- American Lung Association. (2024, October 21). Volatile organic compounds. <https://www.lung.org/clean-air/indoor-air/indoor-air-pollutants/volatile-organic-compounds>
- American Lung Association. (2025, February 4). What makes air unhealthy: Particle pollution. <https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/particle-pollution>
- American Public Transportation Association. (2020). Economic impact of public transportation investment. <https://www.apta.com/research-technical-resources/research-reports/economic-impact-of-public-transportation-investment/>
- Bureau of Transportation Statistics. (2023). Is transportation still affordable? U.S. Department of Transportation. <https://www.bts.gov/data-spotlight/household-cost-transportation-it-affordable>
- Centers for Disease Control and Prevention. (2024, January 23). Active People, Healthy Nation: At a glance. <https://www.cdc.gov/active-people-healthy-nation/php/at-a-glance/index.html>
- Chen, S., Kuhn, M., Prettnner, K., & Bloom, D. E. (2019). The global macroeconomic burden of road injuries: Estimates and projections for 166 countries. *The Lancet Planetary Health*, 3(9), e390–e398. [https://doi.org/10.1016/S2542-5196\(19\)30170-6](https://doi.org/10.1016/S2542-5196(19)30170-6)
- Chester, M., Fraser, A., Matute, J., Flower, C., & Pendyala, R. (2015). Parking Infrastructure: A Constraint on or Opportunity for Urban Redevelopment? A Study of Los Angeles County Parking Supply and Growth. *Journal of the American Planning Association*, 81(4), 268–286. <https://doi.org/10.1080/01944363.2015.1092879>
- DePillis, L. (2023, October 6). The true cost of car ownership. *The New York Times*. <https://www.nytimes.com/interactive/2023/10/07/business/car-ownership-costs.html>
- Dhakal, S., Minx, J. C., Toth, F. L., Abdel-Aziz, A., Figueroa Meza, M. J., Hubacek, K., Jonckheere, I. G. C., Kim, Y.-G., Nemet, G. F., Pachauri, S., Tan, X. C., & Wiedmann, T. (2022). Emissions trends and drivers. In P. R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, & J. Malley (Eds.), *Climate Change 2022: Mitigation of climate*

change. *Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Chap. 2). Cambridge University Press. <https://doi.org/10.1017/9781009157926.004>

Ewing, J. (2025, May 3). Trump's auto parts tariffs set off U.S. alarm. *The New York Times*. <https://www.nytimes.com/2025/05/03/business/trump-auto-parts-tariffs.html>

European Commission, Eurostat. (2023, March 27). How high are household energy costs in the European Union? <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/DDN-20230327-2>

Gonçalves, A. (2020, February 10). Diesel or petrol engines: Which pollutes more? A complex question. *Youmatter*. <https://youmatter.world/en/category-economy-business/diesel-or-petrol-what-pollutes-more/>

Institute for Transportation & Development Policy. (2024, January 24). The high cost of transportation in the United States. <https://itdp.org/2024/01/24/high-cost-transportation-united-states/>

International Energy Agency. (2025, January 23). Cars and vans. In *Energy system in transition: Transport*. <https://www.iea.org/energy-system/transport/cars-and-vans>

Jaffe, E. (2015, December 4). How parking conquered Los Angeles in 14 facts, maps and figures. *Bloomberg*. <https://www.bloomberg.com/news/articles/2015-12-03/how-parking-conquered-los-angeles-in-14-facts-maps-and-figures>

Jaramillo, P., Kahn Ribeiro, S., Newman, P., Dhar, S., Diemuodeke, O. E., Kajino, T., Lee, D. S., Nugroho, S. B., Ou, X., Hammer Strømman, A., & Whitehead, J. (2022). Transport. In P. R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, & J. Malley (Eds.), *Climate Change 2022: Mitigation of climate change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Chap. 10). Cambridge University Press. <https://doi.org/10.1017/9781009157926.012>

Lwasa, S., Seto, K. C., Bai, X., Blanco, H., Gurney, K. R., Kılış, Ş., Lucon, O., Murakami, J., Pan, J., Sharifi, A., & Yamagata, Y. (2022). Urban systems and other settlements. In P. R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, & J. Malley (Eds.), *Climate Change 2022: Mitigation of climate change. Contribution of Working Group III to*

*the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Chap. 8). Cambridge University Press. <https://doi.org/10.1017/9781009157926.010>

Manisalidis, I., Stavropoulou, E., Stavropoulos, A., & Bezirtzoglou, E. (2020). Environmental and health impacts of air pollution: A review. *Frontiers in Public Health*, 8(14). <https://doi.org/10.3389/fpubh.2020.00014>

Milman, O. (2024, December 29). Extreme car dependency linked to unhappiness in United States, study finds. *The Guardian*.  
<https://www.theguardian.com/us-news/2024/dec/29/extreme-car-dependency-unhappiness-americans>

Miner, P., Smith, B. M., Jani, A., McNeill, G., & Gathorne-Hardy, A. (2024). Car harm: A global review of automobility's harm to people and the environment. *Journal of Transport Geography*, 115, Article 103817.  
<https://doi.org/10.1016/j.jtrangeo.2024.103817>

National Accident Helpline. (2019, April). *Make It Right Campaign: The hidden impacts of crash injuries*.  
<https://cdn.national-accident-helpline.co.uk/media/old/n/a/NAH-Make-It-Right-Campaign.pdf>

Pilkington, B. (2022, June 23). *Gasoline vs diesel: Which is more polluting?* AZoCleantech. <https://www.azocleantech.com/article.aspx?ArticleID=1580>

Saadaoui, R., Salon, D., Jamme, H.-T., Corcoran, N., & Hitzeman, J. (2025). Does car dependence make people unsatisfied with life? Evidence from a U.S. national survey. *Travel Behaviour and Society*, 39, 100954. <https://doi.org/10.1016/j.tbs.2024.100954>

"Transportation Statistics Annual Report." (2023). <https://doi.org/10.21949/1529944>

Union of Concerned Scientists. (2023, September 15). Cars, trucks, buses and air pollution. <https://www.ucs.org/resources/cars-trucks-buses-and-air-pollution>

U.S. Department of Energy. (2013, November 22). Internal combustion engine basics. <https://www.energy.gov/eere/vehicles/articles/internal-combustion-engine-basics>

U.S. Environmental Protection Agency. (2024, June 20). What is particle pollution? <https://www.epa.gov/pmcourse/what-particle-pollution>

U.S. Environmental Protection Agency. (2025, February 7). The true cost of car ownership. <https://www.epa.gov/greenvehicles/true-cost-car-ownership>

U.S. Environmental Protection Agency. (2025, February 24). What are volatile organic compounds (VOCs)?

<https://www.epa.gov/indoor-air-quality-iaq/what-are-volatile-organic-compounds-vocs>

U.S. Environmental Protection Agency. (2025, April 4). Smog, soot, and other air pollution from transportation.

<https://www.epa.gov/transportation-air-pollution-and-climate-change/smog-soot-and-other-air-pollution-transportation>

U.S. Environmental Protection Agency. (2025, April 18). Clean Air Act title IV: Noise pollution.

<https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution>

World Health Organization. (2023). *Global status report on road safety 2023*.

<https://www.who.int/teams/social-determinants-of-health/safety-and-mobility/global-status-report-on-road-safety-2023>

World Health Organization. (2024, April 4). Ambient (outdoor) air quality and health.

[https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

=====

**Secondary sources for Manisalidis et al. (2020):**

Bellinger, D. C. (2008). Very low lead exposures and children's neurodevelopment.

*Current Opinion in Pediatrics*, 20(2), 172–177.

<https://doi.org/10.1097/MOP.0b013e3282f4f97b>

Chen, T. M., Gokhale, J., Shofer, S., & Kuschner, W. G. (2007). Outdoor air pollution: Nitrogen dioxide, sulfur dioxide, and carbon monoxide health effects. *American Journal of the Medical Sciences*, 333(4), 249–256.

<https://doi.org/10.1097/MAJ.0b013e31803b900f>

Drakaki, E., Dessinioti, C., & Antoniou, C. (2014). Air pollution and the skin. *Frontiers in Environmental Science & Engineering*, 15(1), 2–8.

<https://doi.org/10.3389/fenvs.2014.00011>

Hatch, G. E., Slade, R., Harris, L. P., McDonnell, W. F., Devlin, R. B., Koren, H. S., ... Nunn, B. L. (1994). Ozone dose and effect in humans and rats: A comparison using oxygen-18

labeling and bronchoalveolar lavage. *American Journal of Respiratory and Critical Care Medicine*, 150(3), 676–683. <https://doi.org/10.1164/ajrccm.150.3.8087337>

Hesterberg, T. W., Bunn, W. B., McClellan, R. O., Hamade, A. K., Long, C. M., & Valberg, P. A. (2009). Critical review of the human data on short-term nitrogen dioxide (NO<sub>2</sub>) exposures: Evidence for NO<sub>2</sub> no-effect levels. *Critical Reviews in Toxicology*, 39(9), 743–781. <https://doi.org/10.3109/10408440903294945>

Kan, H., Chen, R., & Tong, S. (2012). Ambient air pollution, climate change, and population health in China. *Environment International*, 42, 10–19. <https://doi.org/10.1016/j.envint.2011.03.003>

Kelishadi, R., & Poursafa, P. (2010). Air pollution and non-respiratory health hazards for children. *Archives of Medical Science*, 6(4), 483–495. <https://doi.org/10.5114/aoms.2010.14458>

Karl, T. R., Melillo, J. M., & Peterson, T. C. (Eds.). (2009). *Global Climate Change Impacts in the United States*. In *Climate Change Impacts by Sectors: Ecosystems*. Cambridge University Press. <https://www.globalchange.gov/browse/reports/global-climate-change-impacts-united-states>

Kumar, A., Singh, B. P., Punia, M., Singh, D., Kumar, K., & Jain, V. K. (2014). Assessment of indoor air concentrations of VOCs and their associated health risks in the library of Jawaharlal Nehru University, New Delhi. *Environmental Science and Pollution Research International*, 21(3), 2240–2248. <https://doi.org/10.1007/s11356-013-2150-7>

Molhave, L., Clausen, G., Berglund, B., Ceaurriz, J., Kettrup, A., Lindvall, T., ... Wong, L. T. (2004). Total Volatile Organic Compounds (TVOC) in Indoor Air Quality Investigations. *Indoor Air*, 7(3), 225–240. <https://doi.org/10.1111/j.1600-0668.1997.00002.x>

Prüss-Ustün, A., Fewtrell, L., Landrigan, P. J., & Ayuso-Mateos, J. L. (2004). Lead exposure. In *Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors, Volume 2* (pp. 1495–1542). World Health Organization. <https://www.who.int/publications/i/item/9241546204>

Richmont-Bryant, J., Owen, R. C., Graham, S., Snyder, M., McDow, S., Oakes, M., ... Auten, R. L. (2017). Estimation of on-road NO<sub>2</sub> concentrations, NO<sub>2</sub>/NO<sub>x</sub> ratios, and related roadway gradients from near-road monitoring data. *Air Quality, Atmosphere & Health*, 10(5), 611–625. <https://doi.org/10.1007/s11869-016-0455-7>

World Health Organization, Regional Office for Europe. (2000). *Air Quality Guidelines, Second Edition: Sulfur Oxides*. World Health Organization.  
[https://www.euro.who.int/\\_data/assets/pdf\\_file/0020/123086/AQG2ndEd\\_7\\_4Sulfuroxide.pdf](https://www.euro.who.int/_data/assets/pdf_file/0020/123086/AQG2ndEd_7_4Sulfuroxide.pdf)

Zuhara, S., & Isaifan, R. (2018). The impact of criteria air pollutants on soil and water: A review. *Journal of Environmental Science and Pollution Research*, 278–284.  
<https://doi.org/10.30799/jespr.133.18040205>

=====

=====

**Secondary sources for Miner et al. (2024):**

Allen, R. W., & Adar, S. D. (2011). Are both air pollution and noise driving adverse cardiovascular health effects from motor vehicles? *Environmental Research*, 111, 184–185. <https://doi.org/10.1016/j.envres.2010.11.004>

Anenberg, S., Miller, J., Henze, D., & Minjares, R. (2019). A Global Snapshot of the Air Pollution-Related Health Impacts of Transportation Sector Emissions in 2010 and 2015. *International Council on Clean Transportation*, Washington, DC.

Attademo, L., Bernardini, F., Garinella, R., & Compton, M. T. (2017). Environmental pollution and risk of psychotic disorders: A review of the science to date. *Schizophrenia Research*, 181, 55–59. <https://doi.org/10.1016/j.schres.2016.10.003>

Bakolis, I., Hammoud, R., Stewart, R., Beevers, S., Dajnak, D., MacCrimmon, S., Broadbent, M., Pritchard, M., Shiode, N., Fecht, D., Gulliver, J., Hotopf, M., Hatch, S. L., & Mudway, I. S. (2021). Mental health consequences of urban air pollution: Prospective population-based longitudinal survey. *Social Psychiatry and Psychiatric Epidemiology*, 56, 1587–1599. <https://doi.org/10.1007/s00127-020-01966-x>

Blair, R. M., Waldron, S., Phoenix, V. R., & Gauchotte-Lindsay, C. (2019). Microscopy and elemental analysis characterisation of microplastics in sediment of a freshwater urban river in Scotland, UK. *Environmental Science and Pollution Research*, 26, 12491–12504.  
<https://doi.org/10.1007/s11356-019-04678-1>

Boogaard, H., Patton, A. P., Atkinson, R. W., Brook, J. R., Chang, H. H., Crouse, D. L., Fussell, J. C., Hoek, G., Hoffmann, B., Kappeler, R., Kutlar Joss, M., Ondras, M., Sagiv, S. K., Samoli, E., Shaikh, R., Smargiassi, A., Szpiro, A. A., Van Vliet, E. D. S., Vienneau, D., Weuve, J., Lurmann, F. W., & Forastiere, F. (2022). Long-term exposure to traffic-related

air pollution and selected health outcomes: A systematic review and meta-analysis. *Environment International*, 164, 107262. <https://doi.org/10.1016/j.envint.2022.107262>

Bull, F. C., Al-Ansari, S. S., Biddle, S., Borodulin, K., Buman, M. P., Cardon, G., Carty, C., Chaput, J.-P., Chastin, S., Chou, R., Dempsey, P. C., DiPietro, L., Ekelund, U., Firth, J., Friedenreich, C. M., Garcia, L., Gichu, M., Jago, R., Katzmarzyk, P. T., Lambert, E., Leitzmann, M., Milton, K., Ortega, F. B., Ranasinghe, C., Stamatakis, E., Tiedemann, A., Troiano, R. P., van der Ploeg, H. P., Wari, V., & Willumsen, J. F. (2020). World Health Organization 2020 guidelines on physical activity and sedentary behaviour. *British Journal of Sports Medicine*, 54, 1451–1462. <https://doi.org/10.1136/bjsports-2020-102955>

Caciari, T., Rosati, M. V., Casale, T., Loreti, B., Sancini, A., Riservato, R., Nieto, H. A., Frati, P., & Tomei, F. (2013). Noise-induced hearing loss in workers exposed to urban stressors. *Science of the Total Environment*, 463–464, 302–308. <https://doi.org/10.1016/j.scitotenv.2013.06.009>

Chen, H., Kwong, J. C., Copes, R., Tu, K., Villeneuve, P. J., van Donkelaar, A., Hystad, P., Martin, R. V., Murray, B. J., Jessiman, B., Wilton, A. S., Kopp, A., & Burnett, R. T. (2017). Living near major roads and the incidence of dementia, Parkinson's disease, and multiple sclerosis: A population-based cohort study. *The Lancet*, 389, 718–726. [https://doi.org/10.1016/S0140-6736\(16\)32399-6](https://doi.org/10.1016/S0140-6736(16)32399-6)

Chester, M. V., & Horvath, A. (2009). Environmental assessment of passenger transportation should include infrastructure and supply chains. *Environmental Research Letters*, 4, 024008. <https://doi.org/10.1088/1748-9326/4/2/024008>

Co-based nanoparticles in key brain target cells and organelles in young urbanites: Culprit hidden in plain sight in Alzheimer's disease development. *Journal of Alzheimer's Disease*, 59, 189–208. <https://doi.org/10.3233/JAD-170012>

Cozzi, L., Petropoulos, A., Paoli, L., Huismans, M., & Dasgupta, A. (2023). As their sales continue to rise, SUVs' global CO2 emissions are nearing 1 billion tonnes. *International Energy Agency*, Paris.

Curl, A., Clark, J., & Kearns, A. (2018). Household car adoption and financial distress in deprived urban communities: A case of forced car ownership? *Transportation Policy*, 65, 61–71. <https://doi.org/10.1016/j.tranpol.2017.01.002>



Derryberry, E. P., Phillips, J. N., Derryberry, G. E., Blum, M. J., & Luther, D. (2020). Singing in a Silent Spring: Birds respond to a half-century soundscape reversion during the COVID-19 shutdown. *Science*, 370, 575–579. <https://doi.org/10.1126/science.abd5777>

Dibben, C., & Clemens, T. (2015). Place of work and residential exposure to ambient air pollution and birth outcomes in Scotland, using geographically fine pollution climate mapping estimates. *Environmental Research*, 140, 535–541. <https://doi.org/10.1016/j.envres.2015.05.010>

Dolan, L. M. J., van Bohemen, H., Whelan, P., Akbar, K. F., O'Malley, V., O'Leary, G., & Keizer, P. J. (2006). Towards the sustainable development of modern road ecosystems. In J. Davenport & J. L. Davenport (Eds.), *The Ecology of Transportation: Managing Mobility for the Environment* (pp. 275–331). Springer, Dordrecht. [https://doi.org/10.1007/1-4020-4504-2\\_12](https://doi.org/10.1007/1-4020-4504-2_12)

Dolganova, I., Rödl, A., Bach, V., Kaltschmitt, M., & Finkbeiner, M. (2020). A review of life cycle assessment studies of electric vehicles with a focus on resource use. *Resources*, 9, 32. <https://doi.org/10.3390/resources9030032>

Drakaki, E., Dessinioti, C., & Antoniou, C. (2014). Air pollution and the skin. *Frontiers in Environmental Science & Engineering*, 15(1), 2–8. <https://doi.org/10.3389/fenvs.2014.00011>

Derryberry, E. P., Wells, P. L., & Blum, M. J. (2020). Rural–urban acoustic differences before and during the COVID-19 shutdown of the city of Davis, CA, USA. *Environmental Research Letters*, 15(12), 124043. <https://doi.org/10.1088/1748-9326/abc8c8>

Edwards, M., & Leonard, D. (2022). Effects of large vehicles on pedestrian and pedalcyclist injury severity. *Journal of Safety Research*, 82, 275–282. <https://doi.org/10.1016/j.jsr.2022.06.005>

Fritschi, L., Brown, A.L., Kim, R., Schwela, D., & Kephelopoulos, S. (2011). *Burden of Disease from Environmental Noise: Quantification of Healthy Life Years Lost in Europe*. World Health Organization, Regional Office for Europe.

Gössling, S., Choi, A., Dekker, K., & Metzler, D. (2019). The social cost of automobility, cycling and walking in the European Union. *Ecological Economics*, 158, 65–74. <https://doi.org/10.1016/j.ecolecon.2018.12.016>

González-Maciel, A., Reynoso-Robles, R., Torres-Jardón, R., Mukherjee, P. S., & Calderón-Garcidueñas, L. (2017). Combustion-derived nanoparticles in key brain target



cells and organelles in young urbanites: Culprit hidden in plain sight in Alzheimer's disease development. *Journal of Alzheimer's Disease*, 59, 189–208.  
<https://doi.org/10.3233/JAD-170012>

Guimarães, T. (2015). A Principal Causa da morte de Animais Silvestres no Brasil. *BBC News Brasil*.

Hatch, G. E., Slade, R., Harris, L. P., McDonnell, W. F., Devlin, R. B., Koren, H. S., ... Nunn, B. L. (1994). Ozone dose and effect in humans and rats: A comparison using oxygen-18 labeling and bronchoalveolar lavage. *American Journal of Respiratory and Critical Care Medicine*, 150(3), 676–683. <https://doi.org/10.1164/ajrccm.150.3.8087337>

Jain, R. K., Cui, Z. Cindy, & Domen, J. K. (2016). *Environmental Impact of Mining and Mineral Processing*. Elsevier. <https://doi.org/10.1016/B978-0-12-804040-9.00001-2>

Jacobsen, P. L., Racioppi, F., & Rutter, H. (2009). Who owns the roads? How motorised traffic discourages walking and bicycling. *Injury Prevention*, 15, 369–373.  
<https://doi.org/10.1136/ip.2009.022566>

Kan, H., Chen, R., & Tong, S. (2012). Ambient air pollution, climate change, and population health in China. *Environment International*, 42, 10–19.  
<https://doi.org/10.1016/j.envint.2011.03.003>

Kioumourtzoglou, M.-A., Power, M. C., Hart, J. E., Okereke, O. I., Coull, B. A., Laden, F., & Weisskopf, M. G. (2017). The association between air pollution and onset of depression among middle-aged and older women. *American Journal of Epidemiology*, 185, 801–809.  
<https://doi.org/10.1093/aje/kww163>

Khan, J., Ketzel, M., Kakosimos, K., Sørensen, M., & Jensen, S. S. (2018). Road traffic air and noise pollution exposure assessment – A review of tools and techniques. *Science of the Total Environment*, 634, 661–676. <https://doi.org/10.1016/j.scitotenv.2018.03.374>

Khreis, H., Kelly, C., Tate, J., Parslow, R., Lucas, K., & Nieuwenhuijsen, M. (2017). Exposure to traffic-related air pollution and risk of development of childhood asthma: A systematic review and meta-analysis. *Environment International*, 100, 1–31.  
<https://doi.org/10.1016/j.envint.2016.11.012>

Kleinschroth, F., Laporte, N., Laurance, W. F., Goetz, S. J., & Ghazoul, J. (2019). Road expansion and persistence in forests of the Congo Basin. *Nature Sustainability*, 2, 628–634. <https://doi.org/10.1038/s41893-019-0310-6>

Kole, P. J., Löhr, A. J., Van Belleghem, F. G. A. J., & Ragas, A. M. J. (2017). Wear and tear of tyres: A stealthy source of microplastics in the environment. *International Journal of Environmental Research and Public Health*, 14, 1265.

<https://doi.org/10.3390/ijerph14101265>

Kosai, S., Matsui, K., Matsubae, K., Yamasue, E., & Nagasaka, T. (2021). Natural resource use of gasoline, hybrid, electric and fuel cell vehicles considering land disturbances. *Resources, Conservation and Recycling*, 166, 105256.

<https://doi.org/10.1016/j.resconrec.2020.105256>

Laidlaw, M. A. S., Zahran, S., Mielke, H. W., Taylor, M. P., & Filippelli, G. M. (2012). Resuspension of lead contaminated urban soil as a dominant source of atmospheric lead in Birmingham, Chicago, Detroit and Pittsburgh, USA. *Atmospheric Environment*, 49, 302–310. <https://doi.org/10.1016/j.atmosenv.2011.11.030>

Lambert, T. E., Srinivasan, A. K., & Katirai, M. (2012). Ex-urban sprawl and fire response in the United States. *Journal of Economic Issues*, 46, 967–988.

<https://doi.org/10.2753/JEI0021-3624460407>

Laurance, W. F., Clements, G. R., Sloan, S., O'Connell, C. S., Mueller, N. D., Goosem, M., Venter, O., Edwards, D. P., Phalan, B., Balmford, A., Van Der Ree, R., & Arrea, I. B. (2014). A global strategy for road building. *Nature*, 513, 229–232.

<https://doi.org/10.1038/nature13717>

Loss, S. R., Will, T., & Marra, P. P. (2014). Estimation of bird–vehicle collision mortality on U.S. roads. *Journal of Wildlife Management*, 78(5), 763–771.

<https://doi.org/10.1002/jwmg.721>

Mattioli, G. (2017). 'Forced car ownership' in the UK and Germany: Socio-spatial patterns and potential economic stress impacts. *Social Inclusion*, 5, 147–160.

<https://doi.org/10.17645/si.v5i4.1081>

Merkisz-Guranowska, A. (2018). Waste recovery of end-of-life vehicles. *IOP Conference Series: Materials Science and Engineering*, 421, 032019.

<https://doi.org/10.1088/1757-899X/421/3/032019>

Mindell, J. S., & Karlsen, S. (2012). Community severance and health: What do we actually know? *Journal of Urban Health*, 89, 232–246.

<https://doi.org/10.1007/s11524-011-9637-7>

Molhave, L., Clausen, G., Berglund, B., Ceaurriz, J., Kettrup, A., Lindvall, T., ... Wong, L. T. (2004). Total Volatile Organic Compounds (TVOC) in Indoor Air Quality Investigations. *Indoor Air*, 7(3), 225–240. <https://doi.org/10.1111/j.1600-0668.1997.00002.x>

Morabia, A., Mirer, F. E., Amstislavski, T. M., Eisl, H. M., Werbe-Fuentes, J., Gorczynski, J., & Goranson, C. (2010). Potential health impact of switching from car to public transportation when commuting to work. *American Journal of Public Health*, 100, 2388–2391. <https://doi.org/10.2105/AJPH.2009.190132>

Mudway, I. S., Dundas, I., Wood, H. E., Marlin, N., Jamaludin, J. B., Bremner, S. A., Cross, L., Grieve, A., Nanzer, A., Barratt, B. M., Beevers, S., Dajnak, D., Fuller, G. W., Font, A., Colligan, G., Sheikh, A., Walton, R., Grigg, J., Kelly, F. J., Lee, T. H., Griffiths, C. J., & ... Kelly, F. J. (2019). Impact of London's low emission zone on air quality and children's respiratory health: A sequential annual cross-sectional study. *The Lancet Public Health*, 4, e28–e40. [https://doi.org/10.1016/S2468-2667\(18\)30202-0](https://doi.org/10.1016/S2468-2667(18)30202-0)

Muller, C., Sampson, R. J., & Winter, A. S. (2018). Environmental inequality: The social causes and consequences of lead exposure. *Annual Review of Sociology*, 44, 263–286. <https://doi.org/10.1146/annurev-soc-073117-041222>

Nakano, K., & Shibahara, N. (2017). Comparative assessment on greenhouse gas emissions of end-of-life vehicles recycling methods. *Journal of Materials Cycles and Waste Management*, 19, 505–515. <https://doi.org/10.1007/s10163-015-0454-z>

Nall, C. (2018). *The Road to Inequality: How the Federal Highway Program Polarized America and Undermined Cities*. Cambridge University Press. <https://doi.org/10.1017/9781108277952>

Needleman, H. L. (2000). The removal of lead from gasoline: Historical and personal reflections. *Environmental Research*, 84, 20–35. <https://doi.org/10.1006/enrs.2000.4069>

Newbury, J. B., Arseneault, L., Beevers, S., Kitwiroon, N., Roberts, S., Pariente, C. M., Kelly, F. J., & Fisher, H. L. (2019). Association of air pollution exposure with psychotic experiences during adolescence. *JAMA Psychiatry*, 76, 614–623. <https://doi.org/10.1001/jamapsychiatry.2019.0056>

Oliver, M., Mavoa, S., Badland, H., Parker, K., Donovan, P., Kearns, R. A., & Witten, K. (2015). Associations between the neighbourhood built environment and out of school physical activity and active travel: An examination from the Kids in the City study. *Health & Place*, 36, 57–64. <https://doi.org/10.1016/j.healthplace.2015.09.005>

Oda, H., Noguchi, H., & Fuse, M. (2022). Review of life cycle assessment for automobiles: A meta-analysis-based approach. *Renewable and Sustainable Energy Reviews*, 159, 112214. <https://doi.org/10.1016/j.rser.2022.112214>

Oudin, A., Bråbäck, L., Åström, D. O., Strömgren, M., & Forsberg, B. (2016). Association between neighbourhood air pollution concentrations and dispensed medication for psychiatric disorders in a large longitudinal cohort of Swedish children and adolescents. *BMJ Open*, 6, e010004. <https://doi.org/10.1136/bmjopen-2015-010004>

Paul, K. C., Haan, M., Mayeda, E. R., & Ritz, B. R. (2019). Ambient air pollution, noise, and late-life cognitive decline and dementia risk. *Annual Review of Public Health*, 40, 203–220. <https://doi.org/10.1146/annurev-publhealth-040218-044058>

Peris, E., Blanes, N., Fons, J., Sainz de la Maza, M., José Ramos, M., Domingues, F., Biala, K., Peterlin, M., Ganzleben, C., & Adams, M. (2020). *Environmental noise in Europe, 2020*. European Environment Agency, Luxembourg.

Power, M. C., Weisskopf, M. G., Alexeeff, S. E., Coull, B. A., Spiro, A., & Schwartz, J. (2011). Traffic-related air pollution and cognitive function in a cohort of older men. *Environmental Health Perspectives*, 119, 682–687. <https://doi.org/10.1289/ehp.1002767>

Raz, R., Roberts, A. L., Lyall, K., Hart, J. E., Just, A. C., Laden, F., & Weisskopf, M. G. (2015). Autism spectrum disorder and particulate matter air pollution before, during, and after pregnancy: A nested case-control analysis within the Nurses' Health Study II Cohort. *Environmental Health Perspectives*, 123, 264–270. <https://doi.org/10.1289/ehp.1408133>

Resongles, E., Dietze, V., Green, D. C., Harrison, R. M., Ochoa-Gonzalez, R., Tremper, A. H., & Weiss, D. J. (2021). Strong evidence for the continued contribution of lead deposited during the 20th century to the atmospheric environment in London of today. *Proceedings of the National Academy of Sciences*, 118, e2102791118. <https://doi.org/10.1073/pnas.2102791118>

Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., Drüke, M., Fetzer, I., Bala, G., von Bloh, W., Feulner, G., Fiedler, S., Gerten, D., Gleeson, T., Hofmann, M., Huiskamp, W., Kummu, M., Mohan, C., Nogués-Bravo, D., ... Rockström, J. (2023). Earth beyond six of nine planetary boundaries. *Science Advances*, 9, eadh2458. <https://doi.org/10.1126/sciadv.adh2458>

Rivadeneyra, A. T., Shirgaokar, M., Deakin, E., & Riggs, W. (2017). Building more parking at major employment centers: Can full-cost recovery parking charges fund TDM

programs? *Case Studies on Transport Policy*, 5, 159–167.  
<https://doi.org/10.1016/j.cstp.2016.10.002>

Seiler, A., & Helldin, J.-O. (2006). Mortality in wildlife due to transportation. In J. Davenport & J. L. Davenport (Eds.), *The Ecology of Transportation: Managing Mobility for the Environment* (pp. 165–189). Springer, Dordrecht.  
[https://doi.org/10.1007/1-4020-4504-2\\_8](https://doi.org/10.1007/1-4020-4504-2_8)

Sheller, M., & Urry, J. (2000). The city and the car. *International Journal of Urban and Regional Research*, 24, 737–757. <https://doi.org/10.1111/1468-2427.00276>

Shoup, D. (2011). *The High Cost of Free Parking*. Routledge, New York.

Smith, R. B., Fecht, D., Gulliver, J., Beevers, S. D., Dajnak, D., Blangiardo, M., & Ghosh, R. E. (2017). Exposure to traffic-related air pollution and risk of development of childhood asthma: A systematic review and meta-analysis. *Environment International*, 100, 1–31.  
<https://doi.org/10.1016/j.envint.2016.11.012>

Smithers, (2021). *Tire industry rebounds to reach \$264.0 billion in 2021, and \$325.6 billion in 2026 according to latest Smithers research*.

Step toe, A., Shankar, A., Demakakos, P., & Wardle, J. (2013). Social isolation, loneliness, and all-cause mortality in older men and women. *Proceedings of the National Academy of Sciences of the United States of America*, 110(15), 5797–5801.  
<https://doi.org/10.1073/pnas.1219686110>

Sun, X., Liu, J., Hong, J., & Lu, B. (2016). Life cycle assessment of Chinese radial passenger vehicle tire. *The International Journal of Life Cycle Assessment*, 21, 1749–1758. <https://doi.org/10.1007/s11367-016-1139-0>

Tian, Z., Zhao, H., Peter, K. T., Gonzalez, M., Wetzel, J., Wu, C., Hu, X., Prat, J., Mudrock, E., Hettinger, R., Cortina, A. E., Biswas, R. G., Kock, F. V. C., Soong, R., Jenne, A., Du, B., Hou, F., He, H., Lundeen, R., Gilbreath, A., Sutton, R., Scholz, N. L., Davis, J. W., Dodd, M. C., Simpson, A., & ... Kolodziej, E. P. (2021). A ubiquitous tire rubber-derived chemical induces acute mortality in coho salmon. *Science*, 371, 185–189.  
<https://doi.org/10.1126/science.abd6951>

Trowbridge, M. J., Gurka, M. J., & O'Connor, R. E. (2009). Urban sprawl and delayed ambulance arrival in the U.S. *American Journal of Preventive Medicine*, 37, 428–432.  
<https://doi.org/10.1016/j.amepre.2009.06.016>

Tubelo, R., Rodrigues, L., & Gillott, M. (2021). Characterising Brazilian housing through an investigation of policies, architecture, and statistics. *Journal of Architecture*, 26, 191–211. <https://doi.org/10.1080/13602365.2021.1895279>

Urry, J. (2006). Inhabiting the car. In S. Böhm, C. Jones, C. Land, & M. Paterson (Eds.), *Against Automobility* (pp. 17–31). Blackwell, Oxford, UK.

van Kempen, E. E. M. M., Kruize, H., Boshuizen, H. C., Ameling, C. B., & Staatsen, B. A. M. de H. A. E. M. (2002). The association between noise exposure and blood pressure and ischemic heart disease: A meta-analysis. *Environmental Health Perspectives*, 110, 307–317. <https://doi.org/10.1289/ehp.02110307>

Waygood, E. O. D., Friman, M., Olsson, L. E., & Taniguchi, A. (2017). Transport and child well-being: An integrative review. *Travel Behaviour and Society*, 9, 32–49. <https://doi.org/10.1016/j.tbs.2017.04.005>

Willson, R. W. (2013). *Parking Reform Made Easy*. Island Press, Washington, DC.

World Health Organization (2018). *Global Status Report on Road Safety 2018*. World Health Organization, Geneva.

World Health Organization, UN Environment Programme (2021). *Era of leaded petrol over, eliminating a major threat to human and planetary health* [Press release]. <http://www.unep.org/news-and-stories/press-release/era-leaded-petrol-over-eliminating-major-threat-human-and-planetary>

Xiong, Y., Partha, D., Prime, N., Smith, S. J., Mariscal, N., Salah, H., & Huang, Y. (2022). Long-term trends of impacts of global gasoline and diesel emissions on ambient PM<sub>2.5</sub> and O<sub>3</sub> pollution and the related health burden for 2000–2015. *Environmental Research Letters*, 17, 104042. <https://doi.org/10.1088/1748-9326/ac9422>

Zuhara, S., & Isaifan, R. (2018). The impact of criteria air pollutants on soil and water: A review. *Journal of Environmental Science and Pollution Research*, 278–284. <https://doi.org/10.30799/jespr.133.18040205>

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