

POPULAR TRANSPORT EXPLAINERS

Ensuring personal safety for popular transport in two- and three-wheelers

Media narratives, word-on-the-street anecdotes, and crime statistics often associate two-wheelers, and, to a lesser extent, three-wheelers, with incidents of theft, harassment, violent crimes, and increasingly, militancy.

While some of these concerns are a result of anti-popular transport narratives, motorcycles unfortunately double as an ideal getaway vehicle – cheap, light, easy to manoeuvre – and their resulting usage in crimes and conflict should be mitigated in order to expand their utility for passengers and society at large.

This explainer identifies trends and challenges and recommends ways to make popular transportation in two- and three-wheelers (2 & 3W) safer for users and operators.

Key Trends

Several key trends impact road safety for drivers and passengers of 2&3W.



Motorcycles' versatility, low cost, and widespread usage make them useful for militancy and conflict, even while they provide unparalleled accessibility to local residents.

In the <u>Sahel region in Africa</u>, insecurity, economic dependency on coastal states, the presence of extremist groups, and the suitability of motorcycles for transport in semi-arid landscapes with little infrastructure has led to widespread theft and trafficking of motorcycles. In Togo and Burkina Faso, less than half of the motorcycle fleet is properly taxed and registered due to widespread smuggling.





The conflation of motorcycles and motorcycle-taxis has therefore led to a range of bans and curfews in regions throughout the Sahel by governments and extra-legal armed groups looking to clamp down on conflict and smuggling, both by and of motorcycles. Motorcycle usage in war has been increasing in conflicts as diverse as Ukraine, Myanmar, and the DRC. Motorcycle-taxis are also often hired for use by armed groups, further blurring the lines between legitimate motorcycle-taxi operators and armed motorcycle riders.

2. Anonymity and unregulated environments for motorcycle-taxis create ideal grounds for criminality

The rapid urbanisation occurring across the Global South has brought not only higher numbers of motorcycles, but also greater anonymity. Motorcycles are often in high demand for criminal activity. They are often used as getaway vehicles for crimes like bag-snatching, but they have also been protagonists in other more violent crimes. In Uganda, for instance, motorcycles have been used in assassination attempts on the Minister of Works and Transport, prominent prosecutors, the Assistant Inspector General of Police, as well as in terrorist attacks, with muddled reporting then blaming the attacks on motorcycle-taxi operators.

In less-regulated settings with no clear standard for identification or barriers to entry, there is often no way to know if someone driving a motorcycle is indeed a motorcycle-taxi operator, registered and traceable at some level by the regulatory system. This creates an ideal ecosystem for theft and criminality to thrive.

3. Ride-hailing apps and digital mobility platforms are adding new dimensions of safety and accountability

Ride-hailing companies such as Uber, Gojek, Careem, and Didi offer services on 2&3W through their platforms. Driver and rider rating systems create incentives for moral and lawful behavior, formalizing, and sometimes replacing, the accountability usually found at the stage or parking spot. The ability to identify drivers and passengers, in addition to the possibility of filing complaints and reporting concerns via apps can also improve accountability and personal safety for both passengers and drivers.

GPS tracking, viewable through ride-hailing and messaging apps, also enhances safety by allowing riders and drivers to share their locations. Uber's Ride Check feature uses GPS data to help detect unexpected stops or detours. The ride-hailing app also provides an <u>emergency button</u> that connects to local emergency services.

Drivers benefit from incident support services, audio trip recordings for certain types of trips, and the option to connect to a safety agent by tapping a button to receive live help. Electronic payment options can reduce theft risk by minimizing cash transactions and making drivers a less attractive target for criminals - but can also lead to new forms of fraud.

The increased accountability and legitimacy associated with the apps might also reduce police harassment of drivers. Research in Lagos, Kampala, and Kigali showed that drivers registered to an app felt twice as much respect from police than those not using apps.

Key Challenges

Reactive policy and regulatory approaches

The often-muddled informational environment around popular transport and the informal nature of these services often lead public officials to associate 2&3W with crime. This happens even though reliable quantitative data on the topic is scant, and crime reports are often magnified. The negative perceptions and portrayals in local media, combined with road safety concerns, have led cities like São Paulo, Dhaka, Addis Ababa, and some Nigerian and Colombian cities to ban or severely restrict the operations of these services.

Bans and the lack of clear or uniformly enforced regulations reduce the accessibility offered by 2&3W, can further degrade safety and foster crime when they continue to operate unregulated. Banning reduces transparency, creating a legal grey space where illicit activities can flourish, making it more challenging to regulate, monitor, and protect all actors involved. Often, selectively and unevenly enforced regulations create ideal conditions for corrupt law enforcement officers to extract bribes and protection money. The lack of clear regulations and certifications, like driver registries and IDs, hinders the ability to identify and trace individuals with malicious intent.



Photo by David Emrich on Unsplash

2. Contradictions between user perceptions and media portrayal

The contrast between users' perceptions and the focus of media and public officials on 2&3W points to a broader security issue in public spaces that is not necessarily inherently linked to transport. Cases of harassment, assault or theft associated with these services are over-represented in the media, reinforcing and perpetuating negative perceptions about these

services and potentially overshadowing the benefits and necessity of these transport modes. Across the countries where these vehicles operate, like in Cameroon, Colombia, Costa Rica, and Nigeria, cases of sexual violence, theft, and other linked to 2&3W resound in the press.

When writing about 2&3W, crime is one of the most mentioned topics in the media worldwide. This view is often exacerbated by existing stereotypes and local histories in places like Liberia and Sierra Leone, where high numbers of ex-combatants took up motorcycle-taxi riding as a means of making a living post-conflict. The reactive nature of reporting about these forms of transportation and the lack of community engagement and review of official documents create a predominantly negative media narrative.

In contrast, research that considers <u>security</u> <u>concerns among riders of 2&3W in Nigeria</u>,
Pakistan, Nepal, and Colombia shows diverse results. In Enugu (Nigeria), Barranquilla, and Soledad (Colombia), safety from theft was reported by users of 2&3W as a significant factor in choosing this form of transport. In <u>Pakistan's Punjab Province</u>, out of 300 respondents to a survey, none reported any security incidents (theft, assault, or harassment).

3. Crime and theft affect drivers of popular transport as well

Drivers of 2&3W are also highly vulnerable and often victimized by crime. They are typically

young or middle-aged men who may have few livelihood alternatives and limited access to property insurance or labor protections. They often work at night and provide services in areas other forms of transport are unwilling or unable to go, exposing them to high levels of risk.

Operators' vehicles are very commonly targets of theft, as they can be valued between \$1,000 to \$4,000 depending on their context. Gangs in Kenya have been arrested and charged with theft for over 20 motorcycles, while a raid in October 2022 in Uganda recovered 124 motorcycles.

Personal safety incidents can severely affect drivers' ability to earn a living and support their families, and in extreme cases lead to permanent injury or death. Research on motorcycle taxi drivers in various countries has highlighted the prevalence of crime and police harassment and its impact on their livelihoods.

Because of legal grey areas, police officers and other authorities sometimes extort money from drivers and impound vehicles without justification. In Kenya, 15% of the perpetrators of boda boda-related crimes were traffic police officers. The fact that many interactions with police can be settled with a bribe has engendered a mistrust among popular transport operators in the rule of law and government authorities. Motorcycle-taxi operators are often also underserved by the police. In Uganda, for example, of the nearly 500 reported aggravated robberies of motorcycles in 2023, less than 1% resulted in a conviction.



Policy Recommendations

Local authorities, operators, drivers, driver associations, and communities can all play a part in making 2&3W safer.

1. Improve infrastructure for 2&3W

Most 2&3W services use temporary parking areas to wait for customers and commune with other drivers. Investing in better infrastructure, including improving visibility and lighting at night, can dissuade crime. Better lighting along roads scaled to pedestrians and small vehicles (vs. car-oriented street lighting) also improves both the perception of safety and actual safety.

2. Improve women's representation as drivers and conduct sexual harassment training

Since women suffer the majority of sexual harassment incidents in public transport, encouraging more women drivers provides a more sympathetic workforce that can better address their needs, reduce harassment and cases of sexual violence. Quotas, such as Mumbai's reservation of 5% of auto-rickshaw driver permits for women drivers, can help improve numbers. Public awareness campaigns targeting both current (mostly male) drivers and the general public aimed at destigmatizing women drivers is also critical.

The improved representation of women in the sector must be paired with campaigns and education on sexual harassment for women and men alike. Research shows that some women are not certain of what they can report as sexual harassment, creating uncertainty and fear around the response of authorities. Additionally, some men may not understand what sexual harassment is. Integrating sexual harassment training into registration and vetting processes, whether by governments or ride-hailing apps, can improve operators' understanding and reduce incidents amongst the popular transport community.

These types of efforts can have the double-pronged effect of empowering women to understand their rights and reinforcing what is appropriate behaviour for bystanders and offenders.

3. Involve and enable the operators to address petty crime and harassment

Regulation that encourages the registration and organization of drivers and operators enhances traceability and peer enforcement. Most 2&3W participate in local queues and hailing stations (e.g., the pangkalans of Indonesia, the wins of Bangkok, and the stages in East Africa). They often solicit some form of registry or membership and tend to police their ranks to sustain their businesses. Two- and three-wheeler operators also provide "eyes on the street" and help to both mitigate and report on crime. In Bangkok, for example, <u>crime is lower in areas in</u> proximity to wins. Authorities can support these self-organized groups and deputize them to handle petty grievances and the misbehavior of their members, while setting clear limits to their power. Agencies can also establish direct communication channels for the drivers and operators, such as a dedicated police liaison team, so they can report more serious crimes such as theft and assault.

Drivers' organizations can improve labor conditions if social protections such as group insurance are included in their constitutions, or if they organize for improved protections from the state. In Rwanda, drivers of two wheelers were required to become members of an association. The <u>FERWACOTAMO</u> emerged as an umbrella organization for local cooperatives of around 10 drivers, each feeding into unions. In Kigali, 99% of drivers are paying members of the federation. Since its inception, drivers have been more likely to have a driver's license, formal training, and insurance than those in other cities.

4. Improve accountability and registration processes

In order to clearly identify motorcycle-taxi operators and private users, government registration processes must be improved. In many places like the DRC and Uganda, there are no clear processes for registration for motorcycle-taxis. Simplifying the registration process and reducing the cost of drivers licenses to be in accordance with operators' earnings could significantly improve uptake. In Kampala, a one-year motorcycle driving license costs around \$19, the equivalent of a week's profits, and only around 15% of drivers have one. In Bangkok, however, they cost only \$11 while earning far higher, making it the equivalent of one day's profit - and around 85% of drivers are properly licensed.

Victims of crimes in popular and public transportation often have no clear recourse to report incidents. Authorities, communities, and operators can build on the reporting mechanisms pioneered by mobility platforms with clear protocols and channels to report crimes so victims are encouraged to seek redress. Highly visible emergency alert systems on the vehicles and in the queues can help owners, drivers and users to improve overall security. These could increase the sense of safety and could dissuade criminals if coupled with quick response times.

5. Clear reporting mechanisms, strengthening data collection and sharing

Keeping accurate records of the incidence of crime and better accounting of the popular transport and the 2&3W sector (number of vehicles, number of drivers, miles travelled, passengers volumes, revenues and incomes, etc.) can provide better context on the relative incidence of crimes. This could lead to new, more objective stories in the media and more informed policy approaches to incentivize better behaviors and discourage crime.

6. Data collection can be strengthened by a more sensitive use of GPS devices

In East Africa, these are attached to the vehicle by motorcycle financiers and others, and can help authorities track if they are stolen and pinpoint where incident hotspots may occur. Mapping these incidents can identify times and places where crimes are more likely to occur, leading to better deployment of police forces. Battery-as-a-service and some EV companies already include mechanisms for remotely shutting down the battery to disable and locate the vehicle in case of fraud or theft. While these can be useful, data privacy laws must be strengthened to make sure these tracking and remote-control capabilities are not abused.



This explainer was produced by the Global Network for Popular Transportation (GNPT), a project of the Shared-Use Mobility Center (SUMC). Andrea San Gil León was the project and editorial lead and project manager, with assistance from Camila Barquero and Christian Bernstein. Maria José Nieto and Tom Courtright were the research consultants, analysts, and writers. GNPT and SUMC are grateful to Uber, who made the creation of this explainer possible, particularly for the guidance and input of Harrison Peck and Shin-pei Tsay. The written content and conclusions of this report are solely those of GNPT and SUMC.

Additional Resources

"2W3W Around the Global South: Journalist Narratives and Perceptions Review." The Global Network for Popular Transportation, 2024.

Amone, Charles. "Boda-Boda, Youth Employment and Globalisation in Uganda." *American Research Journal of History and Culture* 7, no. 1 (January 28, 2021): 1–9. https://doi.org/10.21694/2379-2914.21001.

"Annual Crime Report 2023." Uganda Police Force, 2023.

https://upf.go.ug/wp-content/uploads/2024/09/Official-Annual-Crime-Report-2023-web.pdf.

Beevor, Eleanor. "Motorbikes and Armed Groups in the Sahel." Global Initiative Against Transnational Organized Crime, August 23, 2023. https://globalinitiative.net/analysis/motorbikes-trade-armed-groups-sahel/.

Behrens, Roger, Saksith Chalermpong, and Daniel Oviedo. "Informal Paratransit in the Global South." In *The Routledge Handbook of Public Transport*. Routledge, 2021.

Bishop, Tom, and Tom Courtright. "The Wheels of Change: Safe and Sustainable Motorcycles in Sub-Saharan Africa." FIA Foundation, 2022.

Bloomberg.com. "Crime Is Engulfing Abuja, and Authorities Are Blaming Rickshaws." February 9, 2024. https://www.bloomberg.com/news/articles/2024-02-09/nigeria-s-capital-abuja-is-turning-against-rickshaws-and-tricycle-taxis.

Bürge, Michael. "Riding the Narrow Tracks of Moral Life: Commercial Motorbike Riders in Makeni, Sierra Leone." *Africa Today* 58, no. 2 (2011): 59. https://doi.org/10.2979/africatoday.58.2.59.

Courtright, Tom. "Lubyanza Quarterly Boda Report - January 2025." Lubyanza Research Group, February 2025.

Diario Extra. "Protección llega a turistas tras violación," February 19, 2022.

https://www.diarioextra.com/noticia/proteccion-llega-a-turistas-tras-violacion.

Doherty, Jacob. "Life (and Limb) in the Fast-Lane: Disposable People as Infrastructure in Kampala's Boda Boda Industry." *Critical African Studies* 9, no. 2 (2017): 192–209. https://doi.org/10.1080/21681392.2017.1317457.

"Ethiopian Capital Bans Motorbikes to Curb Crime." July 9, 2019. https://www.bbc.com/news/world-africa-48920877.

Ference, Meghan E. "'You Will Build Me': Fiscal Disobedience, Reciprocity and the Dangerous Negotiations of Redistribution on Nairobi's Matatu." *Africa* 91, no. 1 (January 2021): 16–34. https://doi.org/10.1017/S0001972020000820.

"Financial Assessment of MotorcycleTaxi Electrification in Bangkok." GIZ. Accessed February 10, 2025. https://sustmob.org/EMOB/pdf/2_3WheelerConf/20231010%20GIZ%20presentation_Global%20E2_3W%20Conference_UNDP.pdf.

Gardner, Natalie, Jianqiang Cui, and Eddo Coiacetto. "Harassment on Public Transport and Its Impacts on Women's Travel Behaviour." *Australian Planner* 54, no. 1 (January 2, 2017): 8–15. https://doi.org/10.1080/07293682.2017.1299189.

Gekoski, Anna, Jacqueline M Gray, Miranda A H Horvath, Sarah Edwards, Aliye Emirali, and Joanna R Adler. "'What Works' in Reducing Sexual Harassment and Sexual Offences on Public Transport Nationally and Internationally: A Rapid Evidence Assessment," n.d.

Harding, Simon E., Madhav G. Badami, Conor C. O. Reynolds, and Milind Kandlikar. "Auto-Rickshaws in Indian Cities: Public Perceptions and Operational Realities." *Transport Policy* 52 (November 1, 2016): 143–52. https://doi.org/10.1016/j.tranpol.2016.07.013.

Hasan, Md. Musleh Uddin, and Julio D. Dávila. "The Politics of (Im)Mobility: Rickshaw Bans in Dhaka, Bangladesh." *Journal of Transport Geography* 70 (June 1, 2018): 246–55. https://doi.org/10.1016/j.jtrangeo.2018.06.002.

Jeune Afrique.com. "Au Cameroun, Atanga Nji part en guerre contre les motos-taxis - Jeune Afrique.com." Accessed February 10, 2025.

https://www.jeuneafrique.com/1490013/politique/au-cameroun-atanga-nji-part-en-guerre-contre-les-motos-taxi s/.

Kacharo, Deribe Kaske, Emebet Teshome, and Tesfaye Woltamo. "Safety and Security of Women and Girls in Public Transport." *Urban, Planning and Transport Research* 10, no. 1 (December 31, 2022): 1–19. https://doi.org/10.1080/21650020.2022.2027268.

Lenshie, Nsemba Edward, Christian Ezeibe, Mark Ma'aku Joshua, and Chikodiri Nwangwu. "From Motorcycle to Tricycle: Neoliberal Political Economy, Informal Transportation, and Urban/Peri-Urban Mobility in Nigerian Cities." Accessed February 10, 2025. https://onlinelibrary.wiley.com/doi/10.5325/transportationj.61.2.0195.

Márquez, Luis, Ricardo Pico, and Víctor Cantillo. "Understanding Captive User Behavior in the Competition between BRT and Motorcycle Taxis." *Transport Policy* 61 (January 1, 2018): 1–9. https://doi.org/10.1016/j.tranpol.2017.10.003.

Martin, Emilie, Thomas Courtright, Alphonse Nkurunziza, and Oliver Lah. "Motorcycle Taxis in Transition? Review of Digitalization and Electrification Trends in Selected East African Capital Cities." *Case Studies on Transport Policy* 13 (September 1, 2023): 101057. https://doi.org/10.1016/j.cstp.2023.101057.

Mkutu, Kennedy, and Tessa Rhodes Mkutu. "Public Health Problems Associated with 'Boda Boda' Motorcycle Taxis in Kenya: The Sting of Inequality." *Aggression and Violent Behavior* 47 (July 1, 2019): 245–52. https://doi.org/10.1016/j.avb.2019.02.009.

Ojugbana, D., K. Olebunne, C. C. Ojugbana, and A. Okonkwo. "Reducing Harm Associated with Women in Using Commercial Motorcycle Transportation in a Developing Country." *Injury Prevention* 16, no. Suppl 1 (2010): A121. https://doi.org/10.1136/ip.2010.029215.435.

Osmond, J., and A. Woodcock. "Are Our Streets Safe Enough for Female Users? How Everyday Harassment Affects Mobility," 2015. http://www.crcnetbase.com/doi/abs/10.1201/b18293-87.

Rahm, Johan, and Maria Johansson. "Assessing the Pedestrian Response to Urban Outdoor Lighting: A Full-Scale Laboratory Study." *PLOS ONE* 13, no. 10 (October 4, 2018): e0204638. https://doi.org/10.1371/journal.pone.0204638.

Salahmanesh, A., S. A. Armen, V. Kafili, and A. Dehghani Ahmadabad. "The Impact of Electronic Payments on Theft." *Journal of Program and Development Research* 1, no. 3 (August 2020). https://www.journaldfrc.ir/&url=http://www.journaldfrc.ir/article_109251_38dd29f545a9d8b3748cf79cb3da8a03.pdf.

Sereerat, Sirirat, and Warramet Sirijintana. "Bangkok Motorcycle Taxis as Eyes on the Street?" *Transportation Research Interdisciplinary Perspectives* 7 (September 2020): 100220. https://doi.org/10.1016/j.trip.2020.100220.

Starkey, Paul, Zahara Batool, Eng Muhammad Waqas Younis, Atteq Ur Rehman, and Muhammad Sarmad Ali. "Motorcycle Three-Wheelers in Pakistan: Low-Cost Rural Transport Services, Crucial for Women's Mobility." *Transportation Research Interdisciplinary Perspectives* 12 (December 1, 2021): 100479. https://doi.org/10.1016/j.trip.2021.100479.

Theerakosonphong, Kritsada, and Somsak Amornsiriphong. "The Interplay of Labor and Capital Perspectives on Formalization Approaches: Motorcycle Taxi Drivers in Bangkok." *Heliyon* 8, no. 3 (March 5, 2022): e09061. https://doi.org/10.1016/j.heliyon.2022.e09061.

"Tuk-tuk: o que é e por que foi proibido em São Paulo depois de uma semana de estreia," April 25, 2023. https://www.band.uol.com.br/noticias/tuk-tuk-o-que-e-por-que-foi-proibido-em-sao-paulo-16598052.

Find more information at www.populartransportation.net
Produced by GNPT with the support of Uber Technologies Inc.
The Global Network for Popular Transportation is a project of The Shared-Use Mobility Center