TOWARDS A CARE-CENTERED APPROACH TO URBAN TRANSPORTATION

CHANGE

CITY HUB AND NETWORK FOR GENDER EQUITY

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The City Hub and Network for Gender Equity (CHANGE) is a global network of cities working together to advance gender equity through local action. CHANGE connects city leaders and practitioners across six continents to share knowledge, adapt promising approaches across contexts, and develop practical solutions to the challenges women, girls, and gender-diverse communities face in urban life. Its work focuses on areas where local governments can make a tangible difference, including care, safety and gender-based violence, mobility and public space, gender-responsive data, and inclusive governance. Learn more at citieschange.org.

EXECUTIVE SUMMARY

Transportation systems shape how people access work, education, healthcare, public services, and one another. Yet despite their central role in daily life, most transport systems continue to be designed around a narrow understanding of mobility: the journey between home and paid employment. This approach overlooks a significant share of the travel that sustains households, communities, and economies—the travel associated with providing and receiving care.

Caregiving responsibilities generate distinct mobility patterns. Caregivers are more likely to make multiple linked trips throughout the day, travel at off-peak times, accompany children, older adults, or people with disabilities, carry goods, and access services distributed across neighborhoods. These "mobility of care" journeys are essential to the functioning of cities, yet they remain largely invisible in transportation planning, investment, and evaluation. As a result, caregivers—most often women—bear disproportionate costs in the form of longer travel times, higher expenses, reduced access to opportunity, and increased time poverty.

This guidance note positions transportation not only as an economic system, but also as part of a city's care infrastructure. When transport systems fail to support caregiving, the burden does not disappear—it shifts onto households and individuals, reinforcing the gender inequalities that already shape who provides care. Conversely, transport systems that recognize and support caregiving can improve gender equity, increase labor force participation, strengthen access to essential services, reduce social isolation, and build more resilient communities.

The guidance draws on feminist scholarship on care and mobility, the practical experience of city leaders within the CHANGE network and beyond, and insights generated through a participatory workshop convened at the Care Pavilion during Women Deliver 2026 in Melbourne.[1] There, municipal leaders, transport practitioners, urban planners, researchers, and care experts participated in a neighborhood walk and facilitated debrief exploring how transportation and the built environment shape caregivers' everyday mobility, and what cities can do to make care-related journeys easier.

To help cities integrate care into transportation decision-making, the guidance applies the "3Rs" framework adopted by international organizations including the International Labour Organization and UN Women. The framework calls on policymakers to:

- **Recognize** caregiving and care-related mobility as essential social and economic activities;
- **Reduce** the time, cost, complexity, and stress associated with providing care; and
- **Redistribute** care responsibilities by improving access to services, support networks, and public infrastructure.

The guidance demonstrates how these principles can be incorporated across the transport investment cycle—from planning and needs assessment through project design, implementation, operations, and evaluation. It provides practical questions, actions, and planning tools to help transport agencies identify hidden caregiving needs, reduce mobility burdens, and strengthen connections between transportation and broader systems of care.

Case studies from Nairobi and Bogotá illustrate both the costs of care-blind transportation and the opportunities for more inclusive approaches. In Nairobi, women and care workers face long, complex journeys shaped by caregiving responsibilities, informal employment, and limited accessibility. In Bogotá, nearly 800,000 care-related trips occur every day, more than 70 percent of them made by women, demonstrating that care is not a marginal transport issue but a major source of urban mobility demand. These examples highlight the need for transportation systems that respond not only to commuter flows but also to the everyday journeys that sustain life.

Ultimately, care-centered transportation is not a niche concern. It is a practical strategy for creating transportation systems that better reflect how people actually move through cities. By recognizing the mobility of care as an essential transportation function, cities can design systems that are more equitable, accessible, efficient, and resilient—delivering benefits not only for caregivers, but for all residents across the life course.

This guidance is designed for policymakers, transport authorities, planners, operators, development finance institutions, funders, and technical advisors seeking to better account for care in transportation investments and decision-making.

PURPOSE OF THIS GUIDANCE NOTE

This guidance is intended for the people and institutions that shape transportation systems and investments—including policymakers, transport authorities, planners, operators, engineers, development finance institutions, funders, and technical advisors. Its purpose is to help them recognize how care shapes mobility and to identify practical opportunities to better account for caregivers, care receivers, and paid care workers in transport decisions.

The guidance does not propose a separate approach to transportation planning. Rather, it asks practitioners to apply a care perspective to the decisions they already make: what data are collected, whose journeys are valued, how projects are appraised and financed, where infrastructure and services are located, how systems are designed and operated, and how success is measured. The aim is to make care a more visible consideration throughout the transport investment cycle—from planning and appraisal through design, operations, and monitoring—and, in doing so, support transport systems that reduce rather than compound the time, financial, and mobility burdens associated with care.

Photo: Metropolitan Transportation Authority / CC BY 2.0. Cropped from original.

WHY CARE BELONGS IN TRANSPORTATION

The Invisible Infrastructure of Care

Care is the work that sustains people, households, and entire communities in daily life, from cradle to grave. It encompasses direct unpaid care work—such as caring for children, older adults, and family members with disabilities—and indirect care work, including cooking, cleaning, and shopping for household necessities.

It also includes paid care work performed by childcare providers, healthcare workers, domestic workers, and others whose labor sustains individual and collective wellbeing. The essential role of these workers becomes especially visible during moments of crisis: healthcare and other frontline care workers kept communities functioning throughout the COVID-19 pandemic and continue to provide critical support during public health emergencies, disasters, and other periods of disruption. Yet despite its essential role in sustaining societies and economies, care often remains invisible. Much of it takes place outside formal workplaces or markets; much of it is unpaid; and most of it is performed by women, whose labor has historically been undervalued. As a result, the work of caring for others is often treated as a private responsibility rather than a public concern worthy of policy attention and investment.

The scale of this invisible contribution is enormous. Globally, an estimated 16.4 billion hours are spent on unpaid care work every day—the equivalent of two billion people working eight hours without pay. If valued at an hourly minimum wage, this work would amount to approximately US$11 trillion, or 9 percent of global GDP; women perform more than three-quarters of it.[2]

Yet because much of this work falls outside conventional measures of economic activity, its contribution—and the infrastructure required to support it—remains largely invisible in public investment decisions.

While care is often associated with activities that take place within the home, caregiving depends on a much broader network of relationships, institutions, and services. Grandparents provide childcare, neighbors check on one another, community organizations offer support, and families rely on schools, healthcare facilities, and social services. Maintaining these networks requires movement across neighborhoods and cities.

Scholars of mobility and care have emphasized that care is inherently relational and spatial.[3] Care does not happen in one place; it is sustained through journeys between homes, schools, workplaces, health services, shops, parks, and community networks.

Transportation systems therefore do more than connect people to destinations: they enable the relationships and support systems through which care is provided and received. They also make it possible for people to participate in the economy. When caregivers can more easily reach childcare, healthcare, schools, jobs, and other sources of support, they have more time and opportunity for paid work. And when paid care workers can get to work reliably and affordably, the care systems that families and economies depend on function better. Transportation that supports care is therefore not just good social policy; it is an important part of a functioning economy.

Photo by Vlad Ionita on Unsplash

From Commuter Mobility to Mobility of Care

Historically, transportation planning has been organized around the mobility patterns of a full-time worker traveling between home and paid employment.4 This model has shaped everything from peak-hour service schedules and infrastructure investments to travel demand forecasting and project evaluation. Feminist transport scholars have long argued that this approach fails to capture the more complex travel patterns associated with caregiving, household management, and other forms of social reproduction. Women, who continue to shoulder a disproportionate share of these responsibilities, are more likely to make shorter, multi-purpose, trip-chained journeys —combining work with school drop-offs, shopping, healthcare, and other care-related travel—while men are more likely to make single-purpose trips. The result, as research on gender and mobility has consistently found, is that transport systems undervalue and underprovide for the mobility needs of people combining paid work with household management, community participation, and care for children and other relatives.5 This matters because care-related travel does not simply add more journeys to a person's day; it changes the structure of those journeys.

Caregivers may need to combine several destinations into a single trip, travel with dependents or goods, transfer between modes, and travel outside conventional peak hours. Managing these complex travel patterns can also create a significant mental load, as caregivers must continually coordinate routes, schedules, transfers, appointments, and the needs of the people traveling with them. Unlike time or financial costs, this cognitive burden is difficult to quantify, but it is an important and often overlooked dimension of care-related mobility.

Transport systems designed around direct home-to-work commuting can therefore impose disproportionate time and financial costs on people making care-related journeys. Fare structures, for example, can make multiple stops more expensive, while less frequent off-peak service can make already complex journeys take even longer.

In 2009, Ines Sánchez de Madariaga introduced the concept of the mobility of care to describe the travel required to provide care, maintain households, and support everyday life.[6] While earlier research had documented differences in how women and men travel, her contribution was to identify these diverse activities as a distinct category of mobility linked to caregiving and social reproduction. The concept encompasses trips such as accompanying children to school, taking family members to healthcare appointments, shopping for household necessities, visiting older relatives, and coordinating the many tasks that keep households and communities functioning. The mobility of care gives transport planners a way to see these journeys as a connected category rather than a collection of miscellaneous trips. This is important because conventional transport data and planning approaches can obscure care-related travel, making it harder to understand who is traveling, why, and where transport systems are creating additional burdens.

The Consequences of Care-Blind Transport

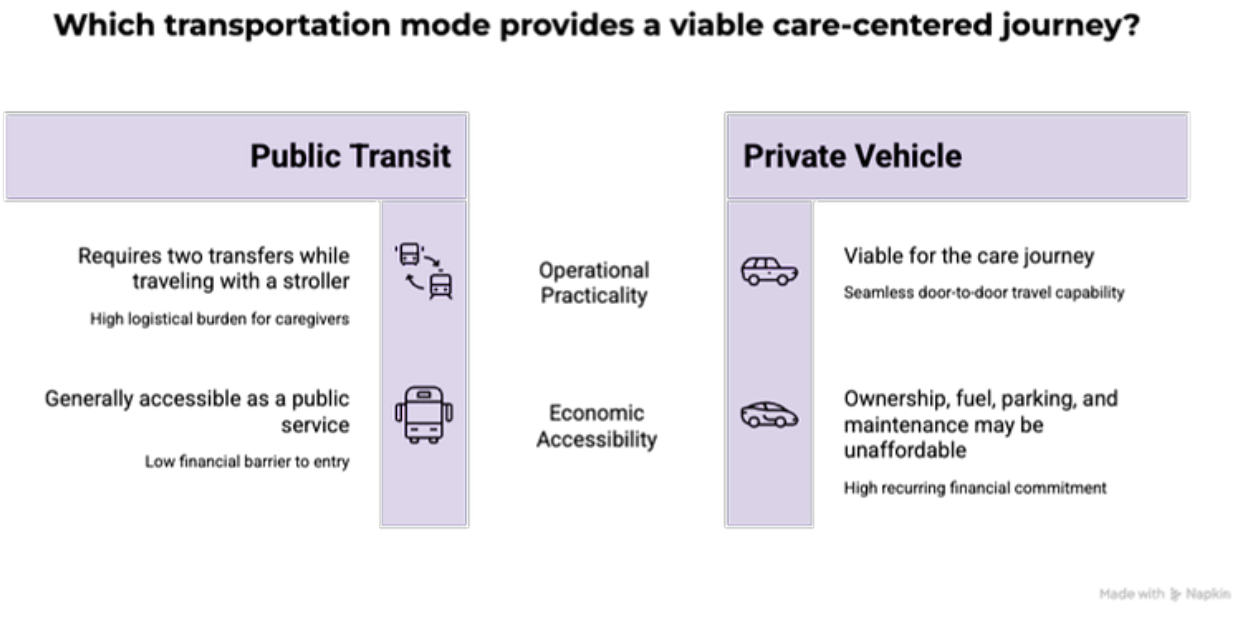
Care responsibilities also shape *how* people can travel. A mode that appears affordable or efficient for an individual traveler may become impractical when someone is accompanying a child or older relative, carrying groceries, making several stops in succession, or traveling under tight time constraints. The relevant question is therefore not simply whether transport is available, but whether caregivers have meaningful choices among modes that can accommodate the journeys they need to make.

These constraints can be obscured by conventional measures of transport accessibility.

A bus may be cheaper than driving but difficult to use with a stroller and multiple transfers. Walking may be free and relatively quick but feel unsafe while accompanying a child or traveling after dark.

Cycling may offer substantial time savings but can be impractical without safe infrastructure or equipment to carry children or goods. A private vehicle may offer the flexibility needed to combine multiple care-related destinations, but it can impose substantial costs on a household, including purchasing, maintaining, fueling, and parking.

A care-centered approach therefore asks not only whether a destination is technically accessible by different modes, but which modes are genuinely viable for the journey being made, the person making it, and the people or goods traveling with them. In other words, the question is not simply whether different modes are available, but whether caregivers can realistically choose among them.



Recognizing the role private vehicles can play in facilitating care does not mean treating car dependency as the solution. Instead, it can reveal what other parts of the mobility system are failing to provide: flexibility, reliability, safety, carrying capacity, accessibility, or proximity. A care-centered transport system should provide these qualities across modes rather than assuming private vehicles or public transport as the default.

For caregivers, one of the most significant consequences of limited mobility choice is **time poverty**: the shortage of discretionary time created by competing demands of paid work, caregiving, and household responsibilities. Time spent navigating inefficient care-related journeys cannot be used for paid work, education, rest, or even civic participation. Because women perform more than three-quarters of unpaid care work globally, these costs are highly gendered.

In rural Ethiopia, for example, one study found that meeting household needs—including collecting water, fuel, and food—accounted for 61 percent of women's travel time and 20–25 percent of their working time.[7]

Transport disadvantage can also become a form of social exclusion.[8,9] When transport is unavailable, unaffordable, unsafe, inaccessible, or poorly connected to essential destinations, people can be effectively excluded from employment, education, healthcare, social networks, and other opportunities. For caregivers, these constraints intensify because they must reach multiple destinations at specific times, accompany others, and navigate services spread across a city or region.

The consequences can include higher costs and greater time poverty, as well as reduced social and community participation, increased isolation and stress, and poorer wellbeing.

Reliable mobility is equally important for paid care workers, including healthcare, childcare, and home care workers, many of whom travel at early, late, or irregular hours. Their ability to reach workplaces and care recipients depends on transport systems that function outside conventional commuting patterns—including during emergencies, when both demand for care and disruption to transport may increase.

Recognizing the mobility of care therefore requires a shift from viewing transport primarily as a means of moving workers efficiently to understanding it as a system that supports the full range of activities that sustain human life.

This becomes especially important as climate-related hazards increase care needs while disrupting the systems that make care possible. During extreme weather and other emergencies, mobility can be lifesaving—allowing people to evacuate, reach healthcare, and access food, shelter, and other essential services.[10] In the aftermath, restoring reliable mobility is critical to recovery, enabling caregivers to return to work, take children to school, reach health and social services, and continue caring for family and community members.[11]

Designing transport systems around the realities of care is therefore a gender equity imperative and a fundamental component of inclusive, resilient, and sustainable development.

THE RIPPLE EFFECTS OF CARE-BLIND TRANSPORT

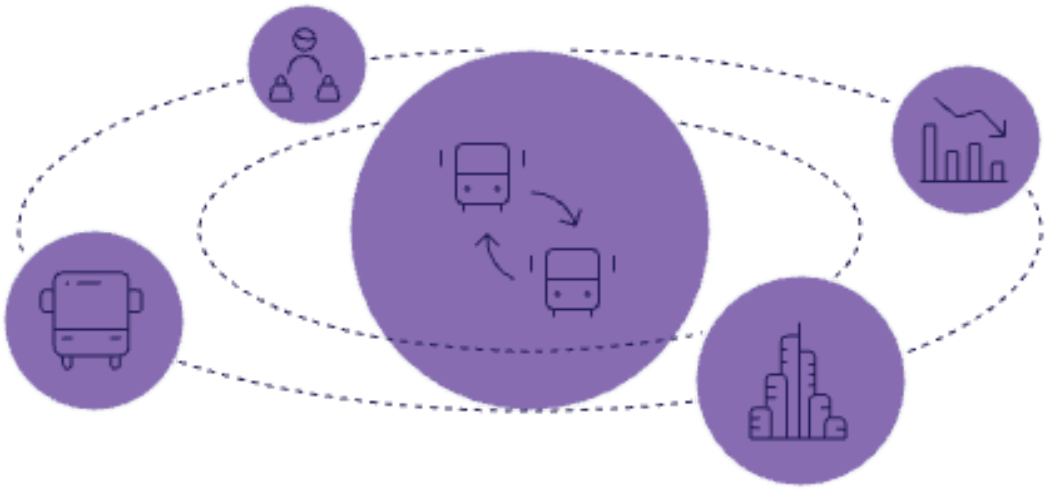
When transport systems fail to account for care, the consequences extend beyond individual caregivers, affecting transport networks, economic participation, and urban resilience.

Caregivers

Experience increased time, costs, and stress

Economies

Suffer from lower labor participation and productivity



Transport Systems

Face unmet demand and inefficient networks

Cities

See deeper inequality and weaker resilience

Made with Napkin

GENDERED COSTS OF MOBILITY

Quito

Transport costs extend well beyond fares. World Bank research in Quito found that women without access to a car faced substantially higher costs associated with travel time than men: 23% higher for time spent in a vehicle, 29% higher for waiting, and 42% higher for walking to and from transit. For a typical journey modeled by the researchers, these differences translated into a total travel cost approximately 25% higher for women than men.[12]

Rio

Safety imposes its own economic cost. An ieConnect study in Rio de Janeiro found that one in five women was willing to forgo the equivalent of 20% of the fare to travel in a women-reserved train car, where physical harassment was reduced by 50%.[13]

CARE MOBILITY LOOKS DIFFERENT ACROSS CONTEXTS

While the principles of care-centered transportation apply across contexts, the ways in which care is provided vary significantly between cities. Much of the existing literature on caregiving and mobility originates in Europe, North America, and Australia, where discussions often focus on commuting patterns, public transit systems, and individual travel behavior. In many low- and middle-income cities, however, the primary challenge is not simply mobility but accessibility: the ability to reach essential services, jobs, or social opportunities that sustain daily life and contribute to positive wellbeing.

Recent research on mobility systems in Latin America emphasizes the importance of improving access to opportunities and services, particularly through flexible and demand-responsive transport options that address gaps in conventional transport networks.[14]

Access is shaped not only by transportation networks but also by land use patterns, the location of services, the availability of time, and household circumstances.[15] For caregivers, transportation is ultimately about access: the ability to reach the services, opportunities, and relationships that sustain daily life.[16]

In many low- and middle-income cities, care mobility also depends heavily on informal and semi-formal transport systems. Shared taxis, minibusses, motorcycle taxis, community transport services, and other demand-responsive modes frequently provide the flexibility required for complex caregiving journeys. These services often connect neighborhoods underserved by formal transit networks. Although transportation planners often overlook them, these systems function as an essential part of the care infrastructure that supports daily life.

The consequences of inadequate transport extend beyond longer travel times. Caregivers frequently adapt by changing where they live, work, shop, or access services.[17] They may rely on extended family networks, pay more for informal transport, forgo employment opportunities, postpone healthcare visits, or reduce participation in community life. These coping strategies help households manage care responsibilities, but they often remain invisible in conventional transportation analysis. **The result is a hidden transfer of costs from public systems to individuals and families, particularly women.**

A care-centered approach therefore requires planners to look beyond traditional transportation metrics and consider the broader ecosystem that enables care. This includes recognizing walking as an essential mode of transport, particularly in contexts where caregivers rely on walking to reach schools, markets, healthcare, public transport, and other essential services.[18]

Photo by Stefano Intintoli on Unsplash

Safe, accessible sidewalks, crossings, lighting, shade, and protection from road traffic are therefore an important part of care infrastructure.[19] In some cases, however, the most effective way to improve mobility may not be a transportation intervention at all. Co-locating childcare, healthcare, education, social services, and community facilities can reduce the need for travel and significantly lessen caregiver time poverty.

Recognizing these realities does not require a different framework for low- and middle-income cities. Rather, it requires broadening how transportation investments are planned and evaluated to account for who can use the system, for what purposes, and under what conditions—including affordability, accessibility, safety, care-related travel, trip-chaining, and the experience of people traveling with dependents.

CASE STUDY: LA ROLITA
CARING FOR THE PEOPLE WHO KEEP THE CITY MOVING

Bogotá established La Rolita, the city's first public transport operator, to address two interconnected challenges: limited transport provision in underserved areas and the fact that women represented less than 1% of the city's bus drivers.[20] Recognizing that this disparity reflected the unequal distribution of care responsibilities and longstanding barriers to entering the profession, the operator adopted a care-centered employment model. Women received training, support to obtain or reclassify professional driving licenses, and access to a workplace designed to better accommodate workers' wellbeing and care needs.[21] By redesigning recruitment and working conditions through a care lens, La Rolita has expanded women's participation in a traditionally male-dominated sector while improving access to public transport for the city.

Photos by Alcaldia de Bogota, 2023

THE 3RS OF CARE-CENTERED TRANSPORTATION

This guidance note draws on the original "3Rs" framework developed by feminist economists and care policy advocates to address the unequal distribution of unpaid care work.[22] The framework calls on policymakers to **Recognize**, **Reduce**, and **Redistribute** care, providing a practical lens for understanding how public investments shape the provision and receipt of care. While the framework has since been expanded to include additional dimensions, this guidance focuses on the original three Rs because they are particularly relevant to transportation planning and investment.

Applied to transportation, the 3Rs help decision-makers understand how mobility systems influence who provides care, how much time care requires, and how care responsibilities are shared across households, communities, markets, and governments. Together, they provide a practical framework for integrating care into transportation planning and investment.

RECOGNIZE

Recognizing care means acknowledging and valuing the true social and economic contribution of all care work, both paid and unpaid. Applying a care lens to transport conversations requires understanding:

- Who provides care;
- Who receives it;
- Where care-related journeys occur; and
- How these travel patterns differ from conventional commuter trips.

Recognition is the first step toward ensuring that transportation systems reflect the realities of everyday life rather than an idealized model of travel centered on paid work.

REDUCE

Reducing care burdens means minimizing the time, cost, complexity, and stress associated with providing care. Transportation systems can reduce these burdens by:

- Improving connectivity to childcare, healthcare, schools, and community services;
- Reducing travel times and transfers;
- Improving accessibility; and
- Creating safer, more reliable journeys.

Because caregiving often involves multiple destinations and accompanying others, reducing travel burdens can directly address time poverty and expand opportunities for work, education, rest, and participation in community life.

REDISTRIBUTE

Redistributing care recognizes that care is a collective responsibility that should be shared among households, communities, employers, and governments. Transportation plays an important role in determining whether this is possible. When childcare, healthcare, eldercare, schools, and community services are difficult to reach, families—most often women—must absorb the burden through their time and labor. Conversely, transportation systems that connect people efficiently to services, jobs, and support networks make it easier to share caregiving responsibilities and access formal sources of care. Integrated approaches that combine transportation with housing, land use, and care infrastructure can help shift care from an individual burden to a shared social responsibility.

APPLYING THE 3RS TO TRANSPORTATION

Applying the 3Rs across the transport investment cycle helps ensure that care is considered at every stage of decision-making, from identifying mobility needs to evaluating outcomes. Rather than treating care as a separate policy issue, the framework integrates caregiving into existing transportation processes and provides practical guidance for designing investments that support caregivers, reduce unnecessary burdens, and contribute to a more equitable sharing of care responsibilities.

TRANSPORT INVESTMENT CYCLE	RECOGNIZE	REDUCE	REDISTRIBUTE
PLANNING & NEEDS ASSESSMENT	Identify caregiving journeys, informal mobility practices, walking routes, and unmet accessibility needs. Map where caregivers live relative to childcare, healthcare, schools, markets, and support networks. Assess meaningful mobility choice. Examine which modes are genuinely viable for common care journeys, accounting for accompaniment, trip chaining, carrying needs, safety, accessibility, reliability, time, and cost—not simply whether a destination is technically accessible by different modes.	Identify where transport barriers increase the time, cost, and stress of caregiving. Assess gaps in access to childcare, healthcare, schools, and other essential services.	Examine who bears care responsibilities and how transport systems may reinforce or alleviate unequal burdens, particularly for women, low-income households, and marginalized groups.

TRANSPORT INVESTMENT CYCLE	RECOGNIZE	REDUCE	REDISTRIBUTE
APPRAISAL & PRIORITIZATION	Incorporate caregiving needs and care-related mobility into project evaluation criteria. Include care-related accessibility and informal transport users in project appraisal.	Value reductions in time poverty and care-related travel burdens as project benefits.	Prioritize investments that improve access to care services and support networks.
PROJECT DESIGN	Design infrastructure and services around real caregiving journeys, not only commuter travel needs, including span of service, architecture of transit stations or vehicle seat layouts. Consider the needs of people traveling with children, older adults, or dependents. Design infrastructure to make different modes genuinely viable when traveling with children, older people, disabled people, or goods.	Reduce travel times, transfers, costs, and safety risks associated with care-related trips. Improve accessibility, reliability, and proximity to essential services. Include walking and informal transport connections in design considerations.	Connect neighborhoods to networks of care and support. Consider gendered destinations and equitably integrate transport with childcare, health, social, and community services so access is available to all genders, making care more of a shared societal responsibility.

TRANSPORT INVESTMENT CYCLE	RECOGNIZE	REDUCE	REDISTRIBUTE
IMPLEMENTATION & OPERATIONS	Monitor how caregivers use the system and whether services are meeting care-related mobility needs. Assess whether schedules, fares, transfers, vehicle design, and service reliability enable caregivers to use public or shared transport rather than requiring private vehicle access.	Adjust routes, schedules, fares, and service delivery to reduce time poverty and mobility burdens. Prioritize reliability and accessibility for care-related travel.	Coordinate across agencies and sectors to link transport investments with broader care infrastructure and community support systems.
MONITORING & EVALUATION	Measure whether care-related travel and access to services are becoming more visible in transport planning and decision-making. Measure the viability of different modes for care journeys—not simply whether destinations are technically accessible by them.	Track changes in travel time, cost, safety, accessibility, and caregiver wellbeing. Assess reductions in time poverty and mobility barriers.	Evaluate whether transport investments are enabling more equitable access to care and helping shift care from an individual household burden toward a shared community and public responsibility.

At each stage, planners and decision-makers can use the framework to identify key questions and select appropriate care-centered planning tools. During planning, cities might ask whose mobility needs are invisible in existing data. During appraisal, they might examine how an investment affects access to essential services. During design and operations, they can identify ways to reduce the time, cost, complexity, and stress of care-related travel and improve the safety and quality of the journey. Finally, monitoring and evaluation can assess whether investments are reducing time poverty and improving access to care. Together, these questions help ensure that care remains visible throughout the transport investment cycle.

CONSIDERATIONS FOR TRANSPORT FUNDERS AND DECISION-MAKERS

When evaluating transportation investments, planners, financiers, and policymakers should consider:

- How will this investment affect caregivers' ability to access essential services and destinations?
- Will it reduce or increase the time required for care-related travel?
- How will it affect people traveling with children, older adults, or people with disabilities?
- Does the project improve access to childcare, healthcare, schools, markets, and community services?
- Will it strengthen access to employment opportunities for paid care workers?
- How are benefits and burdens distributed across women, men, caregivers, care workers, and care receivers?
- Does the project reduce time poverty and mobility barriers for those with caregiving responsibilities?
- How does the investment contribute to broader care infrastructure and community resilience?

When visioning and comprehensive planning, decision-makers should also consider:

- Are households effectively forced into vehicle ownership because alternatives do not accommodate care? What does that cost them?
- When do taxis, rideshare, and paratransit fill gaps in care journeys, and who can afford them? Are they safe and accessible?

MEASURING CARE

In addition to traditional transport metrics, project evaluation frameworks can incorporate care-related indicators that capture not only whether people can reach essential services, but how much time, effort, and expense those journeys require. Wherever possible, indicators should be established at baseline and tracked over time, with data disaggregated by gender and other relevant characteristics—including age, disability, income, household composition, and mode of travel—to identify differences that aggregate measures may obscure. Quantitative measures should also be complemented by qualitative feedback from caregivers, care workers, and care receivers, whose experiences may not be fully captured through conventional transport data. This approach reflects lessons from the Los Angeles Metro's Gender Action Plan, which combines disaggregated data, targeted surveys, focus groups, and both process- and outcome-oriented measures to assess progress.

Accessibility

- Percentage of residents able to reach childcare, healthcare, schools, eldercare, and other essential care services within a specified travel time.
- Number of care-related destinations accessible by walking, cycling, or public transport.
- Proximity of household- and care-serving destinations to transport stops and stations.
- Percentage of routes to care-related destinations that meet defined standards for safety, comfort, accessibility, and ease of use.
- Mode split for care-related trips compared with other trip purposes, particularly trips more likely to be made without dependents or accompaniment.

Travel Time and Reliability

- Average travel time and distance for care-related trips.
- Number of transfers required for common caregiving journeys.
- Reliability of journeys to care-related destinations.
- Reported stress, comfort, and ease associated with care-related journeys.
- Percentage of care-related destinations that remain accessible within a reasonable travel time when the primary mode or route is unavailable.

Safety and Inclusion

- Reported perceptions of safety among caregivers, care workers, and care receivers, including differences by time of day.
- Accessibility for people traveling with strollers, mobility devices, luggage, or dependents.
- Use of services by women, older adults, people with disabilities, and other groups whose travel patterns may be poorly captured by conventional transport data, including at nighttime relative to daytime.

MEASURING CARE

Economic and Social Outcomes

- Changes in labor force participation among caregivers.
- Access to employment opportunities for paid care workers.
- Changes in reported time poverty.
- Measures of caregiver wellbeing and social participation.
- Changes in dollars spent on transportation.

Start with a Baseline

Measurement should begin before an intervention is implemented. Establishing a baseline makes it possible to assess whether an investment has actually reduced travel burdens or improved access over time. Evaluation should also consider both implementation and outcomes: whether a proposed care-centered intervention was delivered as intended, and whether it meaningfully changed the experiences of caregivers, care workers, and care receivers. Where conventional datasets cannot answer these questions, targeted surveys, focus groups, travel diaries, or participatory evaluation can help fill the gap.

Valuing Time Savings for Caregivers

Transport appraisal frameworks typically assign economic value to travel time savings because time spent traveling can otherwise be used for work, leisure, or other productive activities. However, care-related travel is often undervalued because it falls outside traditional measures of economic productivity.

Photo by Devin Berko on Unsplash

Rather than treating care-related travel as a secondary or private concern, transport appraisal should recognize that time savings for caregivers represent a meaningful public benefit. Investments that reduce time poverty and improve access to care can produce returns comparable to other transportation objectives, while advancing gender equity, social inclusion, and community resilience.

CARE AS A LENS FOR ALL TRANSPORTATION INVESTMENTS

Care-centered transportation is often misunderstood as a niche concern focused on a specific set of users or projects. In reality, applying a care lens does not require creating a separate category of "care investments." Instead, it changes how transportation agencies define success, identify beneficiaries, and evaluate impacts across all transportation decisions.

Every transportation investment affects caregiving, whether intentionally or not. A highway expansion may shorten a commuter's journey while making it harder for a parent to walk a child safely across the street to school. A rail extension may determine whether a domestic worker can reach employment opportunities without spending hours in transit each day. A sidewalk improvement may make it easier for an older adult to reach a health clinic independently. A fare policy may determine whether a low-income caregiver can afford to make multiple trips without sacrificing other household needs. **The question is not whether a project affects care, but whether those impacts are visible and considered.**

A care lens encourages decision-makers to ask not only how a project moves people, but whom it enables to provide and receive care, how it affects time poverty, and whether it strengthens or weakens the systems that sustain everyday life.

Highway and Road Projects

Traditional appraisal often focuses on vehicle throughput, congestion reduction, and travel time savings. A care-centered approach asks additional questions:

- Will the project improve or reduce access to schools, childcare centers, healthcare facilities, and community services?
- Does it create barriers for people walking with children, older adults, or mobility aids?
- How does it affect neighborhood connectivity and access to support networks?
- Are time savings distributed equitably among different groups of users?

For example, a road widening project that increases traffic speeds but makes crossings more difficult may reduce travel times for drivers while increasing mobility burdens for caregivers making local trips on foot.

Public Transport Investments

Transit projects are frequently evaluated based on ridership, commute times, and economic development impacts. A care lens broadens these considerations:

- Does the route connect residential areas with schools, clinics, childcare facilities, libraries, parks, and markets?
- Does service operate at the times caregivers and paid care workers actually travel, including early mornings, evenings, nights, and other off-peak hours?
- Are service levels during these periods comparable to those offered during traditional commuting hours—for example, with sufficiently frequent service and short headways? Where they are not, are alternative options available, such as on-demand transit, to maintain the usability, reliability, and safety of the system?
- Are vehicles and stations accessible to people traveling with strollers, children, or mobility devices?
- Do fare structures and timetables accommodate multi-stop and accompaniment-based journeys?

A transit system designed around commuting alone may overlook the travel patterns that sustain households and communities.

Walking and Cycling Infrastructure

Pedestrian and cycling investments are often framed as safety, health, or environmental interventions. They are also care infrastructure.

Many care-related trips are short, local, and undertaken on foot. Sidewalk quality, street lighting, crossings, shade, seating, public toilets, and accessibility features can significantly affect the ability of caregivers and care receivers to move safely and independently.

For many caregivers, a safe footpath is not an amenity—it is a transportation lifeline. Consider:

- Are walking routes safe, shaded, accessible, stroller-friendly, well-lit, and comfortable for people moving at different speeds?
- Can people safely cycle with children or goods? Is appropriate parking/storage available?

Stations, Interchanges, and Mobility Hubs

When designed with care in mind, mobility hubs can become gateways to broader networks of support. A care-centered approach considers:

- Safe waiting areas for children and older adults.
- Accessible toilets and changing facilities.
- Clear wayfinding and barrier-free design.
- Secure and comfortable spaces for transfers.
- Co-location of transport with childcare, healthcare, grocery stores, pharmacies, libraries, play areas, or other community services.

Fare and Funding Policies

Fare and funding decisions often affect care as much as infrastructure.

Caregivers frequently make multiple short trips throughout the day, accompany dependents, or travel during off-peak periods. Fare structures designed around a single commuter journey may disproportionately increase the cost of caregiving. Even where discounted fares or other concessions exist, complicated enrollment processes, limited sign-up locations, or poor awareness can prevent eligible travelers from benefiting from them. Fare policies should therefore consider not only what support is available, but how easily people can learn about, enroll in, and use it. A care lens encourages policymakers to consider:

- Transfer discounts and fare integration.
- Concessions for caregivers, older adults, and care receivers.
- Affordability for low-income households and paid care workers.
- Ease of accessing fare concessions, including awareness, eligibility verification, enrollment, and where and how people can sign up.
- Whether discounts can be accessed through the same channels as standard fares, rather than requiring additional trips to designated service centers or other administrative steps.
- The distribution of costs and benefits across different user groups.

Photo by Michael Njoroge on Unsplash

Transport and Land Use Planning

Perhaps the greatest opportunity lies in connecting transportation investments with broader systems of care.

Transportation decisions influence where services are located, how easily people can reach them, and whether care can be shared across society. Integrating transportation with housing, childcare, healthcare, public space, and community facilities can reduce travel burdens while strengthening care infrastructure.

This is the logic behind approaches such as Care Blocks, 15-minute cities, mobility hubs, and other neighborhood-based models that bring essential destinations closer to where people live.

Consider: Could the need for motorized travel be reduced altogether by locating care and essential services closer to where people live?

From Moving People to Sustaining Life

Viewing transportation through a care lens does not replace traditional transport objectives. When transportation investments are evaluated through this broader lens, projects that appear unrelated to care reveal significant implications for who can provide care, who can access it, and how its costs are distributed. In this way, care becomes not a specialized transport issue but a fundamental consideration for any transportation investment seeking to improve wellbeing, opportunity, and urban resilience.

CARE-CENTERED TRANSPORTATION IN PRACTICE

POTENTIAL FOR TRANSFORMATION: BUILDING CARING TRANSPORT SYSTEMS IN NAIROBI

Nairobi illustrates both the cost of care-blind transport and the early steps several actors are taking to address it. UN-Habitat and the Flone Initiative applied the "mobility of care" framework to a survey of more than 450 minibus “matatu” commuters, finding that women's daily trips are shaped by trip-chaining rather than a single commute.

For paid care workers, a survey of domestic workers in Nairobi's Mukuru informal settlement found that respondents often walked long distances in search of work in middle-class districts because they lacked bus fares, leaving them too exhausted to be productive even once they found work, while Oxfam estimates that women in Nairobi's informal settlements spend an average of 11.1 hours daily on unpaid care work, leaving little room for added unpaid travel time.

Care receivers face parallel barriers: in informal settlements, women and caregivers report a lack of accessibility ramps at train stations, pushing them toward alternative transport options when traveling with children, older relatives, or mobility aids. Nairobi's experience suggests care-centered transport is needed, and new efforts (including a planned BRT Line--a roughly 12.5-kilometer corridor connecting hospitals, the Dandora rail station, and key market areas) should center caregivers as priority transport users.

CARE-CENTERED TRANSPORTATION IN PRACTICE

BOGOTÁ: MAKING THE CASE FOR CARE IN TRANSPORT PLANNING

Bogotá offers a revealing window into a challenge that many cities share but few have measured: how transport systems can better respond to the mobility needs of caregivers. Two interconnected patterns stand out. First, care-related travel constitutes a large and distinctly gendered share of daily mobility, following patterns that differ fundamentally from conventional commuting.23 Second, paid care workers — particularly domestic workers — face long, complex, and time-intensive journeys shaped by the spatial inequalities of the city.24 Together, these dynamics show that care is not peripheral to how cities move; it is one of its structuring logics.

The city's 2023 Mobility Survey found that care-related travel is far from marginal: around 794,500 care trips are made daily across the city region, and more than 70% of them are made by women (Secretaría Distrital de Movilidad, 2023). These are not exceptional journeys — they are the daily fabric of how households function, and they fall overwhelmingly on one group. What makes these trips distinctive is not just who makes them, but how.

The Survey found that nearly 60% of care journeys happen on foot.

This is not a lifestyle choice; it reflects the short, chained, and accompaniment-based nature of care travel — dropping a child at school, accompanying an elderly relative to a clinic, returning home, going out again. These trips do not follow the linear, peak-hour logic that most transit systems are built around. They move through neighbourhoods, not across cities.

This has a direct planning implication: pedestrian infrastructure is not a secondary concern for caregivers — it is their transport system. Safe footpaths, well-lit crossings, and continuous walking routes are as essential to their mobility as bus frequency is to a commuter. Public transport accounts for only around 10% of care trips (Secretaría Distrital de Movilidad, 2023). This points to an important planning need: transit networks must be able to serve not just peak-hour, point-to-point commuting, but also the short, chained, and flexible trips that care journeys require.

CONCLUSION

Transport systems do more than connect workers to jobs. They connect children to schools, older adults to healthcare, families to support networks, and caregivers to the people who depend on them. When transportation investments account for care, they not only advance gender equity; they deliver stronger economic outcomes, greater accessibility, improved safety, and more resilient communities. Recognizing care as essential urban infrastructure requires recognizing mobility of care as an essential transportation function.

TOOLS AND RESOURCES FOR CARE-CENTERED TRANSPORT

This guidance builds on a growing body of research and practice on gender-responsive transport, accessibility, transport-related exclusion, walking, and the mobility of care. The following resources provide additional evidence, practical tools, and guidance for practitioners seeking to apply these approaches.

Gender-responsive and feminist transport

- **Women Mobilize Women / Transformative Urban Mobility Initiative (TUMI) — Self-Assessment Tool for Gender-responsive Public Transport (SAT-GPT).** A practical self-assessment tool for public transport authorities and operators to identify gaps and opportunities for integrating gender across planning, implementation, operations, and monitoring. The tool addresses issues including care-related mobility, safety, accessibility, travel experience, data, and institutional practice.

- **Transformative Urban Mobility Initiative (TUMI) — Women Mobilize Women.** A global knowledge hub and network focused on gender-responsive and inclusive mobility, with research, case studies, tools, and practitioner resources on topics including mobility of care, safety, accessibility, and women's participation in transport decision-making.

- **Global Alliance for Feminist Transport (GAFT)** — Tools and Toolkits for Gender-Inclusive Transport Systems. A useful entry point to a wider collection of feminist transport tools, including Women Mobilize Women's SAT-GPT, the Asian Development Bank's Gender Equality in Transport Tool Kit, and other resources for incorporating gender into mobility planning and implementation.

Transport inequality, accessibility, and social exclusion

- International Network for Transport and Accessibility in Low Income Communities (INTALInC), University of Manchester. A research network focused on transport poverty, accessibility, and social exclusion in cities in the Global South. Its work is particularly useful for understanding how affordability, reliability, safety, land use, and individual circumstances interact to determine whether people can reach essential opportunities and services.

- Karen Lucas — Transport and Social Exclusion. Lucas's research provides a foundational framework for understanding transport disadvantage not simply as a lack of mobility, but as a barrier to participation in employment, education, healthcare, social relationships, and other aspects of economic and social life.

- Daniel Oviedo — Accessibility, Inequality and Social Exclusion in Latin American Cities. Research applying accessibility and transport-related social exclusion frameworks in Latin American contexts, with particular attention to how transport and land-use systems affect low-income and historically excluded populations.

Walking and everyday mobility

- **Volvo Research and Educational Foundations (VREF)** — Walking as a Mode of Transport. An international research program focused on walking as an essential but frequently overlooked component of urban transport, particularly in the Global South. Its research examines equity, safety, accessibility, governance, and the everyday experience of people who depend on walking.

- **VREF — Walking Cities Lab.** A global research initiative examining walking through the interconnected themes of equitable cities, climate resilience, caring cities, governance, and implementation. Its Caring Cities work is particularly relevant to understanding how walking environments can better support caregivers and others whose everyday mobility needs have often been overlooked in transport planning.

Mobility of care

- **Inés Sánchez de Madariaga — Mobility of Care.** Sánchez de Madariaga's work introduced the mobility of care as an analytical category for making visible the travel associated with caregiving and household maintenance that conventional transport data often obscures. Her research provides an important conceptual foundation for understanding why trip purpose, trip-chaining, accompaniment, time of travel, and proximity to services matter for gender-responsive transport planning.

- **TUMI — Planning Transport with the Mobility of Care in Mind.** A practitioner-oriented introduction to Sánchez de Madariaga's mobility of care framework and its implications for transport data, planning, and policy.

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