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### Widespread Information and Intensive Awareness on Welfare Common Shared **Transportation System for the Working Poor in South Africa**

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#### **Abstract**

This article identifies lack of ample information to employers on the need to use available welfare policy to low income workers to be able to assist them in using common shared transportation to commute as a viable solution to address the problem. Similarly, the article accentuates on the need to avail low income earners every available assistance to make their lives with the while one of which is access to affordable transportation considering that transport fares are quiet expensive and take large chunk of the meagre wages being paid to these low income workers. The article notes that while there is law and policy that could be used by employers to invoke providing assistance through welfare benefits on common shared transportation for poor workers, there is paucity of information and awareness programme to impress this on them for purposes of implementation. As such, only few employers intervene by using this measure of common shared transportation for the benefits of workers to commute to work. The article highlights the importance of common shared transportation but impressed that workers would benefit immensely if there is ample awareness and information motivating employers to use this welfare benefits for the poor workers. The article points out that while common shared transport is good for commuting low income workers to work, it also has inherent impediments such as delays, defects, repairs challenges, attitudes of the drivers and so on. It shows that with the proper information and oversight, management and good attitudes by the stakeholders and the role players, common shared transportation would be a more effective mode to commute.

**Keywords:** Widespread information; Intensive awareness creation; Working poor; Common shared transportation; Intervention; Welfare benefits

#### Introduction

It is a common cause that lack of information that could be used to alleviate transportation systems challenges and problems being used for the purposes of assisting low income earners is not readily available to them or their employer and as such poor workers spend huge chunk of their meagre salary on expensive transportation to commute to work. This is said against the backdrop that majority of the developing countries are facing inadequate transportation systems for the working class, especially the working poor to commute to work [1]. For instance, in South Africa, the transportation systems are inadequate to meet the basic accessibility needs of working poor who live very far away, in informal settlements from their workplaces which are usually situated far away from the urban cities where most of the job opportunities are located [2]. Similarly, low income workers are constrained in many ways such as inability to own vehicles because of their they meagre incomes, which are often inadequate to meet even their basic needs such as food, education od their children, health care, housing and so on. Their situation is exacerbated because most times they are unable to commute with privately owned/ operated public transport because of the exorbitant transportation fares and other vices such as delays, criminality, excessive speeding and so on [3]. There is also an ample information available on how the apartheid spatial planning prevented many of the working poor, predominantly black South Africans who live far away from places and destinations of work and other urban activities hate to go through hardships of all types before they can go to their places of works [4]. Worst still, in post-apartheid, despite all the available information available to employers on how to correct the past transportation apartheid injustices, majority of them seem to resist to heed in order to tackle the transportation challenges of their workers because the issue of transportation is considered the sole responsibility of the workers to find their way to work. Most of the employer's reluctance to facilitate or provide transportation for low income workers deemed this as extra cost to them [5]. Consequently, due to these transportation impediments, low income workers usually find it difficult to retain their jobs because of the lack of

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transportation to commute to their workplaces [5]. It is against the backdrop of the challenges inherent in lack of ample access to adequate transportation that this article makes a modest contribution by accentuating the need for the employment based common shared transportationsolutions for low income working class commuters [5]. Using this mode of transportation merely requires the employer to be sensitized and receive ample information on how to integrate it as part of the welfare package which the low income workers can benefit from.

In South Africa, as a result of widespread campaign and information presented on various platforms and websites of government and Non-Governmental Organizations (NGOs), employers are now showing interest and coming to the party by lending their hands in providing assistance to low income earners by intervening through the offering of common shared transportation systems as welfare benefits to employees in their establishments. While there are different types of transportation, this article considered that information and awareness on common shared transportation is best suitable in for the working poor because of its numerous benefits to the low income earners. Therefore, much attention is being paid to the role of common shared transportation systems in employment-related mobility for the working poor because of different challenges inherent in other types of transportation systems [6].

To realize the object of transportation for alleviating low income workers, widespread awareness creation that will inform employees is an impetus that is driving the recognition that transportation plays a significant role in the socioeconomic growth and development of any country. Pursuant to this, responsible government and employers have responsibility to intervene where there is inadequate transportation by providing robust transportation to the working poor to commute to their workplaces regardless of the location.

Undoubtedly, there is enough information on the issue that the government is responsible for high quality and standardized road infrastructure networks as platforms upon which all vehicles will ride, it is imperative for employers to partner with the government by offering and providing common shared transportation systems to their indigent workers as a welfare package to serve as impetus for punctuality and committed to work, and for efficiency at work, by so doing, transportation is used as a catalyst to promote socio-economic growth and development [7]. Therefore, this article suggests that employers who have the capacity and the wherewithal to offer common shared transportation to its poor employees are therefore encouraged to come on board. More importantly, common shared transportation, as a welfare package is able to fulfill the aspiration of the government that seeks to use transport to drive socioeconomic growth and development in the country [8]. Also, common shared transportation system aims to minimize constraints in the mobility of employees, maximizing speed and improve the safety, security, reliability, quality, and speed

of transporting employees because it is economically and financially viable to offer such to the employees [9].

Generally speaking, it is important to point out that the employers is now realizing through available information that common shared transportation services are reliable means of commuting workers to and from their workplaces [10]. This assertion is made against the backdrop that difficulty in accessing transportation to commute to work could be a daunting impediment for the purposes of going to work [5]. Against the backdrop of this, employers are now embracing this common shared transportation intervention and some of have decided to introduce common shared transportation for employees as a form of welfare benefit, but with a reasonable transport fare payable and being deducted from the employees' wages [11]. In other instances, employers offer common shared transportation for free to the employees as full welfare benefits where no transportation fare is charged for transportation [12]. The common characteristics of the full or partial welfare benefits package for transportation is that the employer is responsible for providing transportation to its employees as opposed to employees using their own private or public vehicles to commute [13]. Often times, this type of welfare benefits and incentives are usually provided for low income employees in the workplace to serve as a cushion effect and to aid punctuality to work. This is a win-win situation because the employer is assured that the employees would resume working at the designated time and employees' travel cost will be minimized. Nevertheless, there are inherent challenges as well as opportunities in the different forms of common shared transportation provided by employers. Hence, this article provides insights and perspectives of both modes in order to establish their weaknesses and possibility to improve and strengthen them [14].

## Methodology

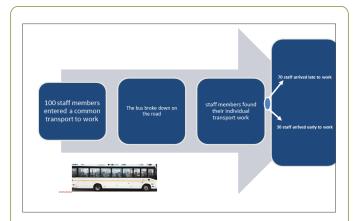
This article recognizes that information and awareness regarding common shared transportation systems for commuting in South Africa is very limited hence employers' inability to use this transportation assistance to alleviate transportation challenges of the working poor. To offer solution and address this problem, this article draws on literature in transportation, commuting travel behavior, settlements, planning, vehicle defects, drivers, oversight, employers and employees, welfare benefits and incentives and management. Considering that low-income workers use private taxi and bus services which in terms of the fares are very expensive which left low income workers with little to spend on other necessary goods and services required for human existence, the reason why the information, awareness and idea of common shared transportation systems being provided by the employers for employees to travel to and from work is welcomed and embraced.

#### **Problem Statement**

There is ample information on the fact that most of the low income workers work far away from their homes, and as such,

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have longer commuting times on a daily basis. A major factor contributing to this is the spatial separation of workers' residences from suitable jobs as they are often far apart. Hence, the daily routine of commuting to work in peripheral suburbs and central business center is daunting and reflects an especially heavy load on the lives of the working poor and thus shape their personal experience. More so, common shared transportation services being provided by the employer as a form of welfare benefits interventions is not devoid of challenges and problems ranging from breakdowns, drivers' attitudes, insensitivity, drop offs and take offs and being late to work. Figure 1 below depicts situation where for 100 workers were commuting to work using common shared transport which broke down in the middle of the road. In order to get to work, workers either look for alternative accommodation or wait till the vehicle is repaired if possible and continue with the journey. The diagram shows that 70 workers arrived late to work while only 30 staff members who got alternative transportation on time were able to arrive early to work.



**Figure 1:** Diagram of workers using a common shared transport to work and late arrival due to breakdown.

#### Literature Review

Due to lack of reliable information, most of the employers are unaware that low income workers could be assisted and benefit from access to ample transportation to and from workplaces provided by the employers as welfare benefits [15]. Most of the studies on access to transportation mainly dealt with spatial separation of workers' residences from suitable jobs and other related problems without providing information on other alternative means of transportation that would benefit the low income earners [16]. In the same vein, most analyses concentrate on commuting time or distance as a function of auto use [16]. However very few studies have considered challenges being faced by low income workers' access to transportation for the purposes of commuting to and from their workplaces [17]. It is against the backdrop of this gap in literature that this article makes a modest contribution on how to assist low income earners to access affordable and sustainable transportation to their workplaces by focusing on the welfare-to-work transportation systems benefits, challenges and opportunities [18].

It is therefore imperative to continue to sensitize so as to be fully informed that transportation assistance in whatever form is an essential component of any meaningful commitment by the employer to making life and work less stressful especially for low income workers [19]. In South Africa, government subsidizes transportation for certain levels of workers who earn low wages [20]. At the same time, private companies also offer different transportation benefits and incentives to workers in order for them to be able to travel easily to and from workplace. These welfare benefits interventions are being used to assist most of the low income workers because of the exorbitant cost of commuting on a daily basis which is usually caused by ever increasing price of petrol and cars. Therefore, the Welfare-to-work transportation systems are generally predicated on the fact that most of the workers in South Africa who use subsidized common shared transportation to commute live very far away from their workplace and the only affordable means is by commuting to work using common shared transportation [21]. However, the common shared transportation is fraught with many challenges. It is against this backdrop that government and private companies should endeavor to address the transportation challenges and needs of the low-income workers [10]. Blumenberg emphatically describes the complex nature of work and means to get to the workplace thus "the critical perspective in job accessibility research argues that access to employment opportunities in an urban area is a complex process." Employees or job seekers are constantly confronted with the problems of "where to live, where to work, and how they will commute between these locationsthe residential-commuting-employment nexus" [10].

In South Africa, there is ample information on how lowincome commuters are usually concentrated in peripheral settlements usually referred to as townships, locations or informal settlements. Majority of these commuters are blacks and are mostly casual workers who earn meagre wages. Most of them cannot afford to pay for residential accommodation close to their workplaces in the urban centers and suburbs hence; they have to live very far away and commute to work on a daily basis. Consequently, these commuters are dependent on few travel options considering their affordability, especially transportation being offered by privately owned public transports. Sometimes, public transit, though an important mode to enhance low-income commuters' travel mobility, are fraught with many challenges such as punctuality, breakdowns, exceeding number being commuted and so on. Recognizing these problems, some private companies and institutions decided to intervene by offering welfare benefits for the purposes of ensuring punctual and smooth transportation for their staff members, particularly the low income workers [22].

Over and above, it is pertinent to point out that while this article focuses on common shared transport for employees to commute, the employees who elect to use other means of transportation other than the common shared transportation is entitled to because South Africa is a constitutional state that respects and protects the right of an individual to movement. Therefore, one's choice of transportation is equally a right

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which is exercisable within the ambit of the law. However, in most cases, employers who wish that an employee should use common shared transportation services should be able to sensitize the employee on the reasons and needs to use common shared transportation and be able to present the welfare aspects of the benefits to the employee [23].

Undoubtedly, due to widespread information, common or shared mobility is now emerging as a complement to the historically under-resourced South African public transit system. Despite the massive investment in public transport, it is still unable to cater for commuters' need because of planning and management challenges coupled with endemic corruption, maintenance, and so on that are inherent in the government public transportation services.

However, it is also critically important that the issue of lack of transportation for low income workers is becoming an increasingly daunting problem because unavailability, unaffordability and inaccessibility are impediments standing in the way of the black majority who live in faraway informal settlements to accessing job opportunities. If transportation systems in South Africa could be laid out so as to provide an opportunity for poor people to get meaningful employment, then they could begin to move into the mainstream of South African life. As a matter of fact, most of the road networks have been laid out for the convenience of car owners as opposed to the working poor who commute to their jobs in the central business district and the suburbs. The road networks virtually have no consideration for connecting the working poor people with their jobs. The reason for this is not far-fetched, as the apartheid systems denied and segregated the majority blacks from accessing social infrastructures and other opportunities.

# Challenges Inherent in Using Public Transport

Even though this article seeks to showcase that information on the use of common shared transportation for working poor is imperative, it is not necessarily the sole responsibility of the employers to provide transportation for workers to workplaces [24]. The responsibility lies solely on the workers because the employers' obligation is to pay wages and salaries as negotiated and agreed to. The government has to ensure that road and transportationis of high quality with many networks that lead and link to different places and locations. It is also important to point out that circumstances surrounding employment and income distribution in South Africa have remained notably unequal as the low income earners earn income that are below the poverty line. Even though the government has continued to raise the minimum wage, the cost of living keeps increasing at an accelerated rate while wages are unable to meet the pace of cost of living thereby making the poor very destitute. Worse still, the poor would have benefited from public transport, but the problem is that "poorly integrated residential and employment location patterns and poor public transportation service as critical

obstacles to improving the economic and social conditions of low-income persons" [17].

Although, government might intervene by providing public transport to its citizens, both working and non-working class, the problem is that public transportation is usually faced with many challenges ranging from planning, operations and management which are all currently in a state of flux in South Africa. Most of the public transportation in South Africa are part and parcel of the provision of "basic services for lowincome communities, whose travel choices do not extend to walking, cycling or driving to their destinations like in most medium-to high-income areas" [13]. The significance of this is that "public transport services in South Africa have been designed to serve the perceived need to assemble labor from distant suburbs and satellite low-income dormitories, at centralized workplaces." The physical reality is that commuters experience various harrowing experiencesusing these services. This is why low income commuters have to either spend huge part of their wages on expensive private transportation or be forced to walk to work. It is pertinent to point out that there are many private individuals who are operating public transport these days. Government activities regarding public transport is dwindling on a daily basis while private individuals are now dominating in terms of providing public transport services to commuters using "minibus taxis, which do not run to schedule. These mini buses also tend to follow the line/ route of least resistance through the townships and settlements, in order to give operators, the opportunity of maximizing the number of journeys, and thus their profits. Obviously, service to customers is not a primary concern to them. In addition, employees using public transport to commute to work also face multiple problems, including overcrowding and infrequent service which could jeopardize the job" [13].

It is a common knowledge that transportation expenses take a huge chunk of the wages of the low-income workers. Mobility constraints being faced by the working poorhave significant impact on their coping strategies because necessary basic items like food and medication might be compromised [25]. Also, sometimes, it is a matter of opportunity cost when a good chunk has been expended on transportation to work, walking "remain critical in providing the mobility needed to access food-shopping destinations for these families" [26].

Over and above, regardless of who operates the public transports, transportation generally is a particular daunting barrier for low-income workers who earn meagre wages, live very far away from workplaces and yet expected to be punctual at work on a daily basis [27]. Undoubtedly, going through harrowing experience of commuting to work would definitely impact the employment and productivity outcomes of a worker who finds himself or herself in this precarious situation.

Therefore, a common transport to commute to work could make a moderate contribution to increasing the probability of employment and transit use for work-related trips [13].

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## Opportunities Presented by Common Shared Transportation Systems

In order to shift paradigm, effective and widespread information and intensive campaign on the opportunities presented by common shared transportation for is crucially imperative for the purposes of offering poverty alleviation transportation system to the working poor. Broadly, the goal of transport is the smooth and efficient interaction that allows society and the economy to assume their preferred form. To play this role, policies in the transport sector must be outward looking, shaped by the needs of society in general, of the users or customers of transport, and of the economy that transport has to support. Transport can play a leadership role in acting as a catalyst for development or in correcting spatial distortions. It follows from these that the priorities in providing and using the transport system should be consistent with those that have been set for the country as a whole. These priorities are meeting basic needs, growing the economy, developing human resources, and democratizing the state and society" [3]. In so doing, all the role players within the economic and development landscape in South Africa have to intervene meaningfully. As such, employers are doing remarkably well by offering Welfare-to-work transportation systems as welfare package to their employees regarding commuting to and from work using common transportation provided by the employers.

Common shared transportation systems offer a wide range of human dignity to the commuters such as comfort, reliability, environmental awareness, sense of belongings and so on. The driver of the vehicle is usually a worker in the same company hence, there is level of control. This is said against the backdrop that even though low-income commuters mostly share the same travel preferences, they possess different attitudes, characteristics and socioeconomic profiles. They however all enjoy reliable operation environment and high quality services [22].

Common shared transportation provides social, economic and financial benefits to commuters especially those who travelled long distance to work [28]. They are able to relax during the course of travelling because they are not behind the steering. The driver of the vehicle shoulders the responsibility of driving the commuters to work. Undoubtedly, using common transportation will enable the workers to get to work at the scheduled time all things being equal. The employer would be the beneficiary of punctual resumption to work because the workers will maximize their capacity becoming a catalyst for increase in production, effectiveness, efficiency and output.

Common shared transportation is imperative because the average wage of a low income worker is not adequate to support automobile ownership [18]. Worse still, most of the available "programs and opportunities recommended by employment program administrators are located far from low income neighborhoods and may informally require automobile ownership or are located in areas not well served by public transit" [18]. Thus, common shared transportation being

provided by the employers is a critical mobility option for low income workers to address the high cost of automobile ownership" [18].

Accessibility and boarding of common shared transport by workers on a daily basis remove the stress of seeking or waiting for public transport which might not arrive as scheduled or be disrupted by violence protest or riot [29]. This is said against the backdrop that most of the public transports in South Africa are privately owned and are unionized. Being transport trade unions, they impose arbitrary rules and transport fares and sometimes, for reasons best known to them, they might declare work free day and this will have effect on commuters. Hence accessibility would be restricted. However, with common shared transportation provided by the employer, once he or she is a staff member and a registered commuter in the company, access is unrestricted.

With regard to the common shared transportation fare, in most cases, it is more or less a benefit to be enjoyed by the employees. Even where fares are going to be charged, it will not be market related therefore the fare will be affordable. In most cases, the fares are deducted at source from the employees' wages in case the employer decides to charge any transportation fares for the services.

More importantly, the common shared transport is more reliable because it is owned by the employer and as such, it is expected that the vehicle will be constantly maintained in order not to break down thereby limiting commuting.

Safety is usually guaranteed because commuters work in the same workplace. They know one another as they are colleagues and co-workers. Fear of suspicion, attacks, misbehavior is therefore minimized during commuting. As a matter of fact, any misconduct during the course of commuting will likely attract disciplinary hearing against any erring employee-commuter. There is always therefore some degree of monitoring and control.

Also interestingly, workers "developed positive attitudes to their commuting; mostly, they use the long trip for a mental shift, contemplation and relaxation" [30]. Even though workers "were well aware of the burden of their commuting, but they also acknowledged that their long journey affords them a 'pause' otherwise denied them in their daily routine." These workers have the mental ability to shape their commuting into a positive experience which is rooted experientially, in sounds and rural landscape, and reflect the influence of territorial socialisation as part of local culture" [30].

# Strengthening Access to Sustainable Transportation Services for Working Poor

Continuous campaign and awareness creation that focus on common shared transportation should be intensified and encourage. However, it is pertinent to point out that not all employers would have the means or wherewithal to provide such welfare transportation systems for their workers and

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employees. As such, there is need for effective and efficient public transport that is comfortable, affordable and reliable. More importantly, settlement for low income earners is suggested to be limited to 40km to major work destinations in order for workers to be able to afford the transport fare. This is said against the backdrop that distance is a major factor hindering commuting by the working poor. Therefore, in order to assist poor workers, it is suggested that settlements should be, as much as possible, located as close as possible to places of work and other urban activities so as to facilitate trips by other means of commuting such as bicycle or on foot.

It is also pertinent to point out and inform that peak hours especially in the early morning when workers would be going to resume at work and closing times usually attract huge human traffic and as such, increase demand for transportation. It is against the backdrop of these challenges that government should, as much as possible, plan settlements to be located close enough to work destinations to enable public transport vehicles to make two or more trips from the settlements to the work places in the peak-hour periods. Therefore, settlements, particularly future settlement plans should have circulation systems or movement layouts which make all dwellings accessible to public transportation systems. It is pertinent to point out that planning should make transportation accessible to commuters. So, when planning, walking distances from settlements to public-transportation or any transportation facilities where commuters will board should be less than 15 minutes at most.

There seems to be lack of information or proper survey on ensuring that when a settlement is being planned, non-motorized transportation should be considered and factored in a way that the settlement is planned as a place with a variety of activities, containing workplaces, schools, shops, recreational and community facilities, and dwellings. They should also have movement networks which permit direct pedestrian access to activities and public transport facilities. This is because; sustainable transportation system entails "attributes of system effectiveness and impacts on economic development, integrity, and social quality of life. This is why at the transportation planning stage, there should be a sustainability assessment which is "incorporated at the planning level in order to influence decision making, and support policies that affect regional sustainability.

#### Conclusion

Widespread campaign, awareness creation and ample information are the impetus to drive poverty alleviation transportation for the working poor in South Africa. It is against this backdrop that this article has demonstrated that interventions to assist low income earners to access sustainable transportation to work is critical in view of the fact that they are vulnerable, live far away from the workplace, do not have means to buy their own vehicle and at the same time are confronted with huge socio economic challenges. Therefore, it is important to accentuate the provision of a common shared transportation of maximum comfortable ride as an intervention being provided to employees to commute

at reasonable transport fare and at the same time is able to be punctual at work on a daily basis. Despite all these intricate opportunities presented by this intervention, the article demonstrates that the intervention is not devoid of some problems. As part of the solutions to address the problem, the article postulates strong management, oversight, monitoring, maintenance and right human behaviors as panacea to effectively make the model continue to function sustainably and in perpetuity.

#### References

- Carruthers R, Dick M, Saurkar A (2005) Affordability of public transport in developing countries. Transport Papers series; no. TP-3. World Bank, Washington, DC. USA.
- Grant U (2010) Spatial inequality and urban poverty traps.
  Overseas Development Institute. London, UK.
- Maharaj M (1996) The White Paper on National Transport Policy, Department of Transport, Pretoria, South Africa.
- Turok I (2012) Urbanisation and development in South Africa: Economic imperatives, spatial distortions and strategic responses, Human Settlements Group. International Institute for Environment and Development, London, UK.
- Edid M, Levitte YM (2009) Let's Ride the Bus: Reverse-Commute Challenges Facing Low-Income Inner City Residents of Onondaga County. Research Studies and Reports.
- de Madariaga IS (2016) Mobility of Care: introducing new concepts in urban transport. Taylor & Francis Group, New York, USA.
- Bowen HR (2013) Social responsibilities of the businessman. University of Iowa Press, Iowa City, USA.
- 8. Tight MR, Delle Site P, Meyer-Rühle O (2004) Decoupling transport from economic growth: towards transport sustainability in Europe. European Journal of Transport and Infrastructure Research 4: 381-404.
- Jeon CM, Amekudzi AA, Guensler RL (2013) Sustainability assessment at the transportation planning level: Performance measures and indexes. Transport Policy 25: 10-21.
- Blumenberg E (2004) En-gendering Effective Planning: Spatial Mismatch, Low-Income Women, and Transportation Policy. Journal of the American Planning Association 70: 269-281.
- 11. Finn B (2012) Towards large-scale flexible transport services: A practical perspective from the domain of paratransit. Research in transportation business & management 3: 39-49.
- 12. Martens K, Golub A, Robinson G (2012) A justice-theoretic approach to the distribution of transportation benefits: Implications for transportation planning practice in the United States. Transportation Research Part A: Policy and Practice 46: 684-695
- 13. Ong PM, Houston D (2002) Transit, Employment and Women on Welfare. Urban Geography 23: 344-364.
- 14. Kodransky M, Lewenstein G (2014) Connecting Low-Income People to Opportunity with Shared Mobility. Insritute for Transportation & Development Policy.
- Cass N, Shove E, Urry J (2005) Social exclusion, mobility and access. Wiley Online Library.

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- Sanchez TW (2007) The Connection Between Public Transit and Employment. The Cases of Portland and Atlanta. Journal of the American Planning Association 65: 284-296.
- 17. Sanchez TW (2008) Poverty, policy, and public transportation. Transportation Research Part A: Policy and Practice 42: 833-841.
- Sandstrom M (2010) Assessing the need for subsidized personal mobility options for low--income families in San Mateo County, California.
- Herzberg F (2017) The Mineta Transportation Institute at San Jose State University. Transaction Publishers, London, UK.
- Lehmann U, Dieleman M (2008) Staffing remote rural areas in middle-and low-income countries: a literature review of attraction and retention. BioMed Central Ltd.
- Boschmann EE (2011) Job access, location decision, and the working poor: A qualitative study in the Columbus, Ohio metropolitan area. Geoforum 42: 671-682.
- 22. Cheng L, Chen X, Lam WHK, Yang S, Lei D (2017) Public Transit Market Research of Low-Income Commuters Using Attitude-Based Market Segmentation Approach Case Study of Fushun, China. Transportation Research Record: Journal of the Transportation Research Board 2671: 10-19.
- 23. Lyons G, Chatterjee K (2008) A human perspective on the daily commute: costs, benefits and trade-offs. Transport Reviews 28: 181-198.

- 24. Newman KS (2009) No shame in my game: The working poor in the inner city. Russel Sage Foundation.
- Halpern-Meekin S, Edin K, Tach L, & Sykes J (2015) It's not like I'm poor: How working families make ends meet in a postwelfare world. University of California Press.
- Clifton KJ (2004) Mobility Strategies and Food Shopping for Low-Income Families.
- Yan J (2013) Rousing the sleeping giant: Administrative enforcement of title VI and new routes to equity in transit planning. California Law Review 101: 1131-1141.
- Limtana N, Martin K, Tim D (2006) The influence of socioeconomic characteristics, land use and travel time considerations on mode choice for medium- and longer-distance trips. Journal of Transport Geography 14: 327-341.
- 29. Willoughby C (2013) How much can public private partnership really do for urban transport in developing countries? Research in Transportation Economics 40: 34-55.
- Blumen O (2000) Dissonance in women's commuting? The experience of exurban employed mothers in Israel. Sage Publication.