GUIDELINES TO MAINSTREAM GENDER IN TRANSPORT PROJECTS

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Photo credits: Women’s working on the Road, Proviast Peru; Transport Firewood. Mika Kunieda; Transport Water. Cristina Alaman; Transport women to reach healthcare. Paul Starky; Women driver. Carlos Pardo.
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INTRODUCTION

The consideration of gender in transport is essential to ensure that transport is equitable, affordable and provides access to resources and opportunities required for development. To promote shared growth and accelerate the implementation of Millennium Development Goal 3 (Promoting gender equality and women’s empowerment), in 2006 the WB Board approved the Gender Action Plan (GAP) FY2007-10 with a budget of US$34 million. One of the actions of the GAP is to engender operations and technical assistance in economic sectors, especially infrastructure.

This note aims to guide transport TTLs on how to mainstream gender into transport projects by providing examples of entry points for mainstreaming gender in relation to the various transport modes of development operations at the World Bank and well-known good practices in this area.

The note is based on a number of key studies (such as the “Gender and Transport Resource Guide” from the WB and the “Gender and Urban Transport: Smart and Affordable” from GTZ) and projects from the World Bank and partner organizations like IADB, IAB, EU and UN. It highlights a number of constraints that women face in accessing transport infrastructure and services as well as examples of interventions that could circumvent these constraints. Also, it identifies employment and participatory opportunities where women could play a role in the planning and implementation of transport operations.

The information provided is not meant to be exhaustive but simply to draw attention to the most basic gender aspects in relation to transport.
1. URBAN TRANSPORT PROJECTS

The decisions that urban women take in terms of transport are different from that of men as they depend on different schedules, routs, behaviors and mobility constraints. Most transport operations are designed and implemented to cover the highest percentage of user’s needs; then, they end up addressing only working men needs, leaving behind other users’ needs, like women’s. To give an idea of said differences, the table below describes the different perceptions of men and women regarding transport systems.

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(+)</strong></td>
<td></td>
<td><strong>(+)</strong></td>
</tr>
<tr>
<td><strong>most important</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal security (theft, harassment) 1.</td>
<td></td>
<td>1. Speed (get to destination fast)</td>
</tr>
<tr>
<td>Road safety (accidents) 2.</td>
<td></td>
<td>2. Road safety (accidents)</td>
</tr>
<tr>
<td>Expenses 3.</td>
<td></td>
<td>3. Order (schedules, routes, stops)</td>
</tr>
<tr>
<td>Comfort 4.</td>
<td></td>
<td>4. Single fare</td>
</tr>
<tr>
<td>Courteous treatment 5.</td>
<td></td>
<td>5. Personal security (thefts)</td>
</tr>
<tr>
<td>Hygiene 6.</td>
<td></td>
<td>6. Courteous treatment</td>
</tr>
<tr>
<td>Order 7.</td>
<td></td>
<td>7. Hygiene</td>
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<td><strong>(-)</strong></td>
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</tbody>
</table>

Benefits.

Women’s needs and perceptions of urban transport are often not considered or studied, even though if that effort brings advantages to the project. Additionally, quantifiable economic return of the benefits of mainstreaming gender is difficult to measure in the short run, and “socio-reproductive” work is not considered as work since it is not economically measurable. On the other hand, one of the barriers that TTLs find whenever they negotiate with their projects is how to present and convince the client on including social topics, as gender, in urban transport projects. Displaying the benefits of paying attention to women’s needs and considering women as potential users is an easy tool to convince the technical staff that is usually found in local transport agencies during appraisal and negotiations.

Besides addressing specific women’s needs and achieve social justice, addressing gender in urban transportation projects has the following benefits:

1 Gender analysis of two components of the WB projects in Lima: Bike paths and Bus ways, Lara Gomez, 2000
2 Gender and Urban Transport: Smart and Affordable - Module 7a: Gender and Urban Transport, GTZ, Sept 2007
(i) Increases the economic rate of return on investment in infrastructure and the profitability of mass transport systems;
(ii) It meets demand for transportation services through a better understanding of the divergent needs, preferences and constraints of end users, both women and men;
(iii) It lowers transaction costs by optimizing the transport system for all users;
(iv) It increases access to employment, education, and services that ultimately raise productivity; and
(v) It enables women to better meet the needs of the household, for which they have primary responsibility and ultimately strengthens the base economic unit (the household).

Transport services

This section is focused first in massive transport systems, like buses, BRT or metro, and then it introduces taxis, IMTs, Employment issues and Urban Transport Environment.

Urban and periurban women are often not served by transport systems as they are not considered as potential users, and if so, they are not considered attractive economically. Moreover, women are far less mobile than men are, apart from shortest trips close in the neighborhood. They usually don’t own a private mean of transport like a car and need available, affordable, safe, and comfortable public transport:

(a) Affordability. Unlike working men who have a daily schedule and travel mostly at peak hours two ways to and from work locations, non-working women, most of them housewives, have diverse destinations and various schedules since their mobility needs don’t follow a pattern. They use public transportation to take children to schools, family members to hospitals and carry out administrative or out of house domestic tasks which force them to change location different times towards multiple destinations and to adjust their life to different schedules. Non-working women, who usually don’t have cash, are affected by higher fares which add up to their other mobility constraints.

(b) Availability. The majority of job positions available to women are as shift workers (nursing and community services), overtime-workers (production line and factories) and housekeepers (such as cleaners, launderers, baby-minders). Of the housekeepers, only a minority is employed full-time at one home, in which case they generally live-in. Most are employed at five or six different places during the week (“piece work”). A majority of “piece workers” are thus traversing a great area, on different routes and between different cities/towns/suburbs weekly.

Transport routing, timing and frequency of services, integrated fares, weekly passes, subsidies for low-income users or a good user survey to improve customer’s service are the tools to boost women’s mobility within urban and periurban areas.
(c) Safety and security. Working women use bad illuminated bus stops because they don’t have other choice, but are afraid to be attacked since they are easy and weak targets for theft or sexual harassment. Moreover, in some countries, they can be harassed and attacked, both verbally and physically, even inside of the buses. Courteous treatment is one of the demands of women when using massive transport systems.

Solutions to deal with these concerns are:

- The short-term solution to avoid sexual harassment inside the buses and to increase women’s security is to put into operation women-only buses. Many cities are adopting this solution. In Tegucigalpa, Honduras, which is a city hit by gang violence and has become dangerous in the past years, a pilot project has created a women-only corridor with two women police officers to guarantee security inside the two lines which depart from the North of Tegucigalpa to the National University. (Photo on the left: Mumbai women-only train wagon. Manfred Breithaupt, GTZ).

In order to avoid sexual-disaggregation in massive transport services, long-term solutions should be considered. Campaigns on social education to the users joint to training of the drivers can change the culture. Sometimes, drivers legitimize non courteous treatment towards women since they do nothing. Drivers need to receive awareness so that they can enforce adequate treatment to women and guarantee that the measures are respected. Fines, take away services passes, and other enforcement measures can strengthen drivers’ work and stop sexual harassment and non-courteous treatment towards women.

- Simple and cheap urban designs like lights in the bus stops enhance the perception of security in the areas of loading. A number of solutions are presented below in the paragraph about Urban Transport Environment.

(d) Spaces. Women’s use of transport services is also limited due to their mobility peculiarities, like women’s loads. When a woman mobilizes carries, for instance, a baby on her back or a stroller, a shopping bag with food, merchandise to sell in the market, etc, all this makes extremely difficult for them to take a transport service like a bus or train. (Photo on the left: A woman with stroller trying to enter a bus. Carlos F. Pardo)

Tools to make traveling more comfortable and attractive to women are: (i) In cultures of sexual segregation, separate entrances for women to eliminate women’s fear of boarding in buses crowded by men, the more convenient entrance would be close to the driver’s

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3 Mexico City – Following other countries measures to tackle sexual harassment, Mexico City has started a women-only bus service to protect female passengers from groping and verbal abuse common on the city's packed public transportation system.
Reserved entries and reserved spaces at the back of buses and metro for strollers and for loading merchandise without annoying the rest of the travelers; and, (iii) Reserved seats for pregnant women and women traveling with small children.

In any case, strong advertisement campaigns joint to enforcement to guarantee fulfillment of the previous tools are needed to foster the cultural change that will give long term sustainability to these initiatives: (i) Stickers and posters highlighting the priority given to women in seats and entrances; and (ii) gender-awareness training to drivers in order to control any abuse and to empower them to ensure they adopt the policies and will be committed to them.

However, reserving seats for women or spaces for strollers and merchandise can be a challenge for urban transportation in large cities of developing countries. No more that six persons per square meter should be allowed in massive transport, eight users per square metro is a lot. In developing countries, measures like reserving spaces for merchandise or strollers or reserving seats for women are impossible to implement since the number of users per square meter doesn’t allow any spare space.

(e) Cultures. Women’s attires in some countries (i.e burka) impede them getting easily on buses; whereas in other cultures, women are not allowed or welcomed in public transport services.

Installing simple mechanisms in the doors to facilitate boarding the bus or reserving entrances to women are potential solutions. The box below, Women on Afghan buses, shows a solution to facilitate women use of public services in cultures where traditionally women are not allowed to board a bus.

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**Box 1 Women on Afghan buses to get new deal under UN-backed program**

Under the Taliban regime ousted by the United States-led invasion in 2001, women suffered discrimination. Drivers in Afghanistan speed past stops if only women are waiting while men refuse to give up seats for women and barge past them to board. United Nations launched a program where 30 per cent of seats on all public buses in Afghanistan will be reserved for women. UNIFEM has produced stickers indicating where women should board and sit, as well as posters promoting a positive attitude among public transport staff and male passengers towards women passengers.

A hotline is to be set up to take complaints, and disciplinary action will be taken against a staff who failed to enforce the Deputy Minister of Transport. There are around 600 public buses in Afghanistan, including 350 in Kabul. The program is in line with the benchmarks spelt out in the Afghanistan Compact, an UN-backed blueprint for international engagement in the development of Afghanistan over the next five years, and with government commitments to promote gender equality.

*Source: UN news centre, March, 7 2006*
Taxi.

In South Africa. For women, safe and secure taxi services are especially critical as women rely on them when going to work, mainly as shift workers, and domestic jobs, usually traveling during off-peak schedules and towards multiple destinations. Taxi services, due to the violence and criminal elements provoked by conflicts, do not operate at dark. This has left a large void especially for women commuters filling these working opportunities.

Taxis are sometimes the only solution for urban women to be safe when traveling and to get to work. Services adapted to women, like women taxi drivers companies, encourage women to use taxis as they rely on other women driving at dark. Watched taxi stops can improve women’s perception of safety as well.

IMTs

Intermediate means of transport offers an alternative to women as schedules and fares differ from that of urban public services like buses or metro. IMTs are low-cost solutions for short distances that can transport small loads, ideal for many urban women. However, some issues like safety or cultural practices and beliefs should be taken into account when including a gender focus, since in some cultures IMTs might not be seen appropriate for the use of women.

Rickshaws are popular in Dhaka as they provide door-to-door transport, enabling women and girls as well as the disabled to travel to the workplace, schools, and other areas without being harassed or feeling uncomfortable in overcrowded buses and inadequate sidewalks. When the Dhaka, Bangladesh Urban Transport Project revealed women’s exclusion from public transport to be the result of overcrowded buses and inadequate sidewalks which hinder their access to the workplace, the project was redesigned to contain provisions to increase the number and the quality of sidewalks, as well as building in an intervention component with bus operators to address gender specific concerns. Premium service buses and women-only bus services were tested but many women found that premium services were unaffordable to women and women-only bus services had limited use as Bangladeshi women do not travel alone.

Bikes. Men’s control of household income and cultural constraints to the use of bikes are the main barriers to be overcome when we want to include components addressing women’s needs in projects involving the use of bikes. Bikes can be used by urban women to access massive transport stops and travel short distances. However, to ride a bike in a

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city, bike-paths need to be in place or at least, the urban infrastructure should allow bike riding.

Security measures, rules, driver’s behaviors and bike-riding training are components to be studied whenever an urban project envisions including a component to promote the use of bikes. Some projects offer women micro-credits to buy bikes or have a framework to provide women with free bikes. There are some risks in these policies and programs to take into account: (i) husbands might use the bikes for their selves; (ii) once the bike is broken women don’t know how to fix it; (iii) women usually haven’t money to buy spare parts; and (iv) spare parts are not available inside the country if the bikes have been imported by the project.

**Employment.** Besides providing a transport service adapted to women’s needs, urban transport systems can generate female employment. For instance, women can be hired as drivers of public transport services which also can have other benefits for women, like enhance female users’ perception of safety. Also, by hiring women to control traffic, the levels of corruption decrease as drivers don’t dare to bribe a woman officer and, transparency and respect of the driving norms increases as well. Women can also be employed in the construction or maintenance of urban infrastructure being a part of the construction teams or even in the maintenance of the gardens or pedestrian walkways. In Tegucigalpa, Honduras, female teams of gardeners and street cleaners can be seen daily working in the streets.

Risks associated with employment are mainly cultural, as stereotypes and lack of training and illiteracy impedes women employment in the sector, and when hired, sometimes they are paid at a lower rate. It is crucial that women are paid in the same range than men to ensure their work is respected. Other way to pay women is in kind, because unlike men, whenever payment is done in kind women are eager to participate, and men refuse.

**Women drivers and traffic controllers.** In the big cities of developing countries informal transport services operated by informal enterprises are common. Efforts to formalize these enterprises can also help address women’s needs. In Lima\(^7\), female students reported that when riding on public transportation they would carry nails and open safety pins in their backpacks to wield against unwelcome contact from male passengers. Buses are notoriously unsafe. Women reported frequent, open sexual harassment and even rape on buses despite the presence of other passengers. The situation is so extreme that even very poor parents report they must save money so their daughters may travel to university by taxi, and avoid the unsafe buses. In an effort to enhance security on public transport, some companies are now operating teams of male and female drivers and conductors.

In Transjakarta, BRT in Yagarta, women are hired to drive the buses (*Photo on the left. Credit: Carlos F. Pardo*)

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\(^7\) World Bank Operations, Peru
In Lima, Peru, enrollment of women in the traffic police has helped reducing the high rates of corruption in the sector among traffic officers and drivers and has created an ambiance of transparency and security. Day care facilities are provided in order to make easy women police officers’ daily work. *(Photo on the right: Woman traffic officer. Lima. Manfred Breithaupt, GTZ)*

**Urban Transport Environment**

**Infrastructure works.** Sometimes, urban projects cut on sidewalks to upgrade urban roads by widening the lines, and consequently, obstructing a secure path for pedestrians, who are displaced and end up invading the traffic lanes. A good design of pedestrian infrastructure helps women in their day-to-day activities which are usually performed walking. Examples of pedestrian-friendly infrastructure works are sidewalks accessible for strollers, guardrails, raised crosswalks, crossing and street signals, and bolards work to protect sidewalks from cars.

Many urban infrastructures designed under concepts for disability are useful for women as well: easy accessibility to buses, spaces reserved to pregnant women and women with strollers, pedestrian accessibility and adequate bus stops are simple features that adjust transport infrastructure for the disabled and that women can also benefit from.

Many working women won’t be able to accept a job in a location where public transport or/and children-care is not available. Then, urban designs should pay attention to the movement of workers, considering women as workers, and should think where working women are and how they move. Some studies, like in Chile, show how a gap between work places and day cares affect negatively to women’s involvement in the labor market. Day cares are not conceived to be located close or in industrial centers and therefore, women face a dilemma whenever they become mothers and want to continue working.

**Safety and Security.** Public transport becomes critical for women during the evening and night. This forces them to look for more expensive alternatives of transportation, like private taxis, which still might be dangerous at dark. Peripheral employment locations are harmful for women’s potential in the labor market. In some cities, women don’t dare to travel alone, no matter the time of the day, which confines them inside their houses. Girls are reluctant to attend school or families don’t want them to attend to avoid risks.

Women are more aware of danger and their perceptions in urban design and planning were used to enhance overall community safety in the Safer Cities Program of UN

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This report offers a **Women’s Safety Audit** in which several instruments related to urban designs can prevent accidents and crime. Neighborhood watch groups, lighting, signalization, escape routes, maintenance for greeneries and pavements, urban furniture (benches to encourage human presence in public spaces) are the solutions that came up under a pilot survey carried out in Warsaw.

<table>
<thead>
<tr>
<th>Box 2 Crime, Violence and Diminishing Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a number of major cities in Latin America, such as São Paulo, the number of trips undertaken per day has been declining in recent years, and it has been suggested that this is at least partly a consequence of declining security, particularly in the evening hours when trip rates have declined most. This interpretation is supported by evidence from a survey of poor households in Ecuador.</td>
</tr>
<tr>
<td>In a six-month period in 1992, one in five women in Cisne Dos was robbed on a bus, and one in two women had witnessed such an attack. There was a drop in the use of public transport at night, and an increase in the relatively safer small trucks operated by the informal sector. For those who could not afford the alternative, travel was curtailed. The lack of safe transport during off-peak hours has caused girls, generally from the poorest families, to drop out of night schools.</td>
</tr>
</tbody>
</table>

Involving the private sector: “Adopt a Light Limited”, is a private company which has erected over 185 street lights along the major highways and in slums in Nairobi, Kenya. The company invited businesses to adopt and rehabilitate a streetlight and in return, the business can place advertisements on the streetlight.

**Safety.** Road safety is one of the main concerns of women. The best way to increase road safety is slow traffic down. Low cost and self-enforcing design examples to pursue this objective in urban transportation are: traffic hums and bumps, raised crosswalks, reducing sight lines, medians and forced turns. Enforcement is crucial for respecting traffic signals. However, drivers training and road safety campaigns focusing on pedestrians and passengers can create a safe driving environment sustainable on the long run.

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9 Results from a Pilot in Warsaw, 2007-
2. RURAL TRANSPORT PROJECTS.

Rural women are hard workers who spent (or waste) energy and time in transport-related activities associated to rural life-styles; they usually devote more effort than rural men to these essential tasks. Oddly, women continue being invisible for transport planners and transport project managers. Small, appropriately focused rural infrastructure interventions can contribute to the well-being of women and, consequently, to their dependent families since an improved infrastructure can reduce the transport burden. Besides, integrating rural communities into road networks and into the socio-economic system will open new doors for the isolated rural women and will contribute to the reduction of opportunity costs of their time because: (i) distances will be reduced; (ii) comfort and travel services will improve, and (iii) the use of intermediate motorized means of transport adequate for women will become possible.

Rural women’s transport needs are related to their economic, social and community roles. Collecting fuel and water, shepherding, caring of the animals and family plots carrying merchandise to be sold or exchanged in the markets, taking children to school and elderly and ill to health centers, attending religious services, are some of the day-to-day activities of rural women. Through these activities women’s possibility to generate wealth for their families, communities and countries is limited and time to be economically productive is deficient. Moreover, rural women lack spare time for their selves, and are unable to attend school, specific training when available or just relax.

Rural women living in remote areas seldom embark in long journeys or trips to the city due to security reasons or cultural constrains. When a rural woman needs to mobilize, sometimes she needs to ask her husband for permission, look for escort and ask for money. Furthermore, if she is traveling to a city she won’t be able to understand how public transport works and she won’t understand maps or directions. In short, rural women get frustrated and discouraged when they try to move.

Rural transport projects offer diverse opportunities to mainstream gender or include gender activities and the World Bank, likewise most of its partners, holds successful experiences and has developed undeniable know-how to improve women well-being and empowerment in the rural areas.

Participation and planning

In contrast with urban and interurban transport, local consultation is more common in rural transport. Including deliberately the involvement of women has become a common practice in the World Bank projects and women organizations are usually invited to attend the consultations meetings. Despite female attendance has become normal, female
active participation continue lacking. A facilitator can help encouraging women to express their thoughts and needs and depending on the local culture, segregation of groups by sex will be needed. Permitting women attend with their children will also limit last minute drops.

Following, there are two examples, from Peru and Yemen, were women spoke up during the consultations in the pre-appraisal stage and their needs and ideas were further addressed in project’s design and implementation.

During the consultations carried out to prioritize the roads to be improved under the project’s design stage of the Peru Rural Roads, women were consulted, they spoke up and put in the picture that bridle paths and tracks should be rehabilitated because they (women) used them the most. The project listened and addressed this women’s need by rehabilitating said tracks, which are commonly ignored in upgrading projects. Same happened in the Yemen Rural Roads project, where during consultations, women were concerned about safety and the project listened to them and addressed their concerns by constructing speed bumps, retaining walls, access paths, and realigning roads.

**Construction, rehabilitation and maintenance**

Intensive labor is required in most of the civil works executed in the rural areas of developing countries. Construction, rehabilitation and maintenance of rural transport infrastructure provide an opportunity to insert women in this so called “hard sector” since tasks in these operations require little or null qualification, especially for rural maintenance works. Fortunately, the Bank counts with several successful experiences in generating female employment in rural transport projects.

**Construction and Rehabilitation.** In Lesotho\(^{12}\) the out-migration of men to work in South Africa has made road construction contractors more willing to employ women. A study completed in December 2000 found that large numbers of women have been employed on road construction projects and that the experience has generally been positive. The study provides concrete guidelines on how to plan road construction to effectively integrate women workers. Although most construction tasks require physical strength, table below shows the sharing of tasks between men and women in construction of roads:

<table>
<thead>
<tr>
<th>Women’s tasks</th>
<th>Men’s tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing water where there is need</td>
<td>Digging and excavating quarry</td>
</tr>
<tr>
<td>Watering the road</td>
<td>Loading quarry into the trucks</td>
</tr>
<tr>
<td>Levelling the road</td>
<td>Levelling the road also using rollers</td>
</tr>
<tr>
<td>Digging stones</td>
<td>Building where needed</td>
</tr>
<tr>
<td>Carting stone to the road using wheel</td>
<td>Remove grass</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>barrows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking care of the store (store woman)</td>
</tr>
<tr>
<td>Operate machines</td>
</tr>
<tr>
<td>Supervising</td>
</tr>
<tr>
<td>Discard soil</td>
</tr>
<tr>
<td>Reshaping</td>
</tr>
</tbody>
</table>

**Maintenance.** Micro-enterprises of Rural Road Maintenance are popular in Latin America and efforts for replication are found in other countries like Liberia and China. These micro-enterprises are a good, if not the only, source of employment for poor women in rural areas. In some cultures, however, women are not allowed to work together with men, or alone in the middle of a road. Then, depending on the country where the project will be implemented, the approach should differ from that described below and should be adapted to local idiosyncrasy. *(Box on the left: Peru: Can women be integrated in Transport Projects?, World Bank Oct 2007)*

In the Second Peru Rural Road Project, eligibility criteria to become a member of the micro-enterprises guarantee women are hired. Advertising of the employment opportunity is targeted to both men and women to attract women candidates, literacy and previous experience in the construction sector are not a requirement, household management is view as administrative experience, and socio-economic criteria are included to favor women head of households involvement, specially to include single and widow mothers. A 10% of female quota was needed to ensure these measures are taken into account. Maintaining rural roads requires low qualification and training and can be performed easily by women.

**Bidding Documents.** Construction clauses also might become a mechanism for women inclusion in fair (i.e. equal wages) and adapted conditions (i.e.: toilets/letrines for women, maternity leave, daycares…) in the transport sector. Decent work is the main policy agenda for the International Labor Organization. The ppt on “Construction Workers, Vulnerability and International Labor Standards” provides information on working life in construction, like for instance recruitment methods, working conditions, discrimination, and exploitative employment. It also explains how construction contracts might affect the

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13 If not clear, women won’t think that they also can become laborers in this sector. Efforts in targeting and convincing female candidates to apply are essential.
living conditions of the workers; then, bidding documents become a mechanism for taking forward labor standards and for demonstrating benefits that can be included in the clauses. It doesn’t mention gender but illustrates the working conditions of the construction workers, which might be useful to look at whenever the project wants to include women as workers.

**Access to essential services**

Transport patterns shapes rural women daily lives. In most of the developing regions and especially in Sub-Saharan Africa, women and their daughters travel every day to collect water and firewood; both domestic activities are time-consuming and burdensome and leave little time for women to engage in income-generating activities, paid work, education or recreation.

Access to essential services is not shaped by roads or by transport services alone, rural accesses are created by integrating infrastructure and mobility operations. Infrastructure interventions related to transport are, among others, any kind of accesses to tertiary, secondary, or primary road network, and connections among rural settlements, like tracks, foot paths, bridges, and jetties and wharfs in waterways; whereas mobility relates to availability and frequency of transport services like Intermediate Means of Transport, both private or commercial.

Good designs of transport operations can broaden women’s spectrum for personal development since improved transport conditions; (i) can free-up women’s time by shortening distances trough better roads or by including IMT; (ii) can provide access to markets, which leads to access to cash; (iii) can provide access to health services which improves women’s and families health and life expectancy; (iv) ensure access to services and social purposes access; and (v) foster women’s empowerment by providing access to resources and opportunities. Accesses in general, will open women new doors, like possibilities to participate in social, political and community activities, as well as choosing from a variety of income-generating activities and access to credit, for instance.

Transport interventions, either infrastructure or mobility ones, will meet local needs whenever local communities are consulted in advance and whenever the interventions match with the local culture. Projects fail when local needs, culture, and transport and gender patterns of the local communities in the area of implementation are not considered.

**Access to Health Services.** One of the multiple tasks that women are responsible for is to take children, elderly and sick ones to health centers or clinics. Rural women usually don’t own means of transport, so trips to health centers have to be done walking or if available by IMT or NMT. Health centers rarely have ambulances and if so, they need to be contacted usually if telecommunication systems are available, like telephones or radios. Household’s dispersion and distances to health centers are barriers that have been
overcome by small infrastructure interventions and by the introduction of Non-Motorized services in the rural areas.

**Mortality at Birth.** As one of the Millennium Development Goals, transport can play a role in reducing the mother and child mortality at birth in two ways: (i) by creating access to clinics; and (ii) fostering the use of adequate vehicles to transport mothers to healthcare facilities or health providers to women’s houses. Bicycles can be the link from remote rural locations to the motorized highways. Radio connections can be used to make sure a vehicle awaits the patient. Bicycle ambulances have been used in some maternal mortality reduction transport interventions under the ONG Transaid projects. (Photo: A bicycle ambulance in Malawi. Source: http://www.transaid.org)

Small scale interventions like road rehabilitation, culverts and bridges are being carried out in order to access emergency care in the Maternal Health and Fistula Project in Ethiopia.

A pregnant woman in Zambia (Foto Credit: CCP, 2001. Courtesy of Photoshare) rides in the back of a pick-up truck for an emergency visit to a clinic.15

**Education and Girls.** Another connection between Gender, Transport and the MDGs come from the Universal Primary Education and Gender Equality, MDG 2 and 3 respectively. Remote and not connected areas tend to be less served with institutions and transport infrastructure can play a role here by addressing not only connectivity but also lowering the transport costs, which also lead to higher enrollment rate and facilitate teachers’ attendance to remote schools. The study on Accessibility & Gender Differences in School Enrolment in Nepal explains how isolation impedes children attendance to school, especially girls’. On the other hand, the study shows that female teachers are discouraged to travel to remote and isolated areas and adequate toilets facilities are usually missing.

*(Photo: Cristina Alaman: Isolation of communities and regular work in domestic tasks limits girls’ access to school in Guatemala)*

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15 Obstetric fistula is a problem for pregnant women and develops when the blood supply to the vagina and bladder or rectum is cut off during labor. A hole forms through which urine/feces pass uncontrollably. Women with fistulas are often rejected by their husbands and their communities and forced to live an isolated existence. Maternal mortality: Africa's burden - Toolkit on Gender, transport and maternal mortality. Vs4 -04-2005- Margaret Grieco, Professor of Transport and Society, Transport Research Institute, and Jeff Turner. http://www.people.cornell.edu/pages/mg294/maternalmortality.html
Ethiopian girls need to walk along dangerous and isolated areas to get to school. In this route they are exposed to sexual harassment, rape or abduction\textsuperscript{16}. Crossing deserted, isolated, unpopulated and dark areas jeopardize girls’ school attendance since they become reluctant to travel across these dangerous paths. Rural transport interventions can make easier and safer girls’ way to school by improving the visibility of the paths where they walk to school with simple rural roads maintenance.

**Safety and Security**

In rural areas, most of the movements are done by foot or IMT like bikes, tricycles, cycle trailers, moto-taxis, motorbikes and animals. New or rehabilitated rural roads are used by pedestrians to travel (to the weekly market, to schools,….) or by shepherds to move their cattle of cows or flocks of sheeps (to the markets or to other pasture zones). In the designs of these roads, many times width of the shoulders is not considered and once the road is finished it is crowded by motorized transport like cars, buses and trucks, pedestrians and animals.

It is common to find women or groups of women transporting wood in their shoulders, carrying water in their heads and accompanying children in the middle of the rural roads. Women day to day life forces them to walk long distances crossing the woods. For security reasons, whenever a rural road is rehabilitated or constructed they prefer using it, even if their route becomes longer. Therefore, safety in rural areas might be guaranteed if alignments and designs of rural roads consider the rural reality and fit out shoulders along the roads to let rural peoples use the infrastructure without danger.

Safety, together with proximity of houses to road alignments, was among the most important concerns expressed by women in the consultation phase of the Yemen Rural Roads project. Speed reduction measures (speed bumps), retaining walls, access paths, and realignment, were taken into account in the project to address said concerns. *Photo left: Yemen, Jérôme Leyvigne, Transport&Gender Roundtable, June, 2007*

**Rural Transport Services**

Motorized transport services are more expensive in rural areas that in interurban and urban ones due to low and disperse demand, seasonal passability, high vehicle operating costs and lack of offer and competence. Competition and variety of transport services can

\textsuperscript{16} Girls are attacked and forcefully taken away. In most cases, she is raped by a man who will subsequently be her husband. Girl’s parents also generally accept that their daughter is now married to her abductor since having been raped, girls are no longer attractive wives for any other men. “A Study on Violence against Girls in Primary Schools and Its Impacts on Girls’ Education in Ethiopia”, May 2008 Save the Children Denmark & Ministry of Education, Ministry of Women’s Affairs
lower the costs but still, scattered rural settlements impede reliable and affordable rural transport services. Infrequent provisions and high costs limit women and girls use of rural transport services, whenever available. Usually, rural women need to walk to the nearest tertiary, secondary or primary road to board a bus and they can wait for hours alone in the middle of the road until the arrival of a bus. Rural transport services covering rural areas usually are mini-buses or taxis which usually the non-wage-earning rural women can’t afford.

**Domestic Transport and IMTs**

Rural women lifestyles are similar in most of the developing regions and revolve around agriculture and household activities. The relatively high workload coupled with mobility constraints limits women’s personal development and productive potential. Improving rural transport services can have several positive effects on women like lessening the heavy burden of head loading and freeing-up time for personal development and for engagement in productive activities.

IMT like bicycles can empower and change women lives. In Tamil Nadu\textsuperscript{17}, India, bikes were introduced as part of a literacy campaign for women. Women’s mobility increased and gender roles changed. When women are involved in planning and projects target information, credit and gender/oriented activities outcomes can be impressive. In Tanzania, a project aiming at introducing oxen and donkeys in the agriculture sector to improve transport and power conditions of the peoples, noticed the feminization of the sector. Women in the area lack power and representation on their society, and the project empowered women by forming groups, targeting specific project activities and credits to female farmers. Oxen were own by men since they are more difficult to operate as more physical strength is needed. Yet, donkeys were not attractive for men and they demonstrated being more appropriate for women, who finally benefited from them as they could carry people, crops, water, woods, and goods.

On the other hand, projects mainstreaming gender via IMT often fail because innovative gender-sensitive designs collide with local idiosyncrasy. Idealist designs with stunning expected results can be included in the appraisal phase of a project, and feasibility studies covering fundamental questions on the impact of the projected mean of transport are not seriously considered.

Detachable cycle trailers were introduced in the Transport Rehabilitation Project of Ghana in 1987. The cycle trailer design s and production technology initially sought to suit local conditions of use and manufacture in the country. The project\textsuperscript{18} expected significant benefits in the provision of cost-effective substitute for head-loading of women and children. Two NGOs supplied cycle trailers to women via subsidies and credits. The trailers did not work well in the rural paths, were not popular among women since the trailers were heavy to pull when loaded (loading capacity of 200kg) and were

\textsuperscript{17} Improving Rural Mobility. Options for Developing Motorized and Non-Motorized Transport in Rural Areas. Paul Starkey, Simon Ellis, John Hine, Anna Ternel. The World Bank 2002

expensive. Normal bikes worked better, but unlike some Ghana men, Ghana women were not used and did not own bikes.

Promotion of Intermediate Means of Transport targeting only men, can benefit also women, as men or boys, start to taking over women’s traditional tasks (i.e. collecting daily water). In any case, feasibility studies needs to be carried out before implementation of any mean of transport. These studies need to consider: (i) Access, affordability and reliability of maintenance and repair services as well as veterinary support in the area. Sometimes, vehicles are imported or their design impedes local mechanics from repairing them, spare parts are not available, veterinarians and professionals or artisans are found only in the city areas, etc, even if the demand is high.

(ii) The potential income generated from the use of IMT need to be compared to its purchase and maintenance costs, specially when the project include financial aid to encourage uptake and foster the demand of the IMT. Besides, owners willingness to pay for maintenance and repairs will depend on the income that they are generating from the IMT.

(iii) Environmental conditions. An IMT can work very well in one area and be useless in other. Climatic, topographic and environmental conditions will suit a particular IMT and no others. Terrains are crucial for IMTs, cycle trailers can be a solution for traveling within dirt roads in flat terrains and worthless for mountains areas.

(iv) Cultural and environmental conditions. Some cultures have a tradition in animal traction and mechanic vehicles won’t be adopted by the peoples since they neither have cash for repairs and maintenance nor any knowledge on mechanics. IMT success is higher in Asia than in Africa, per capita income or density of population can be the reason for this difference; however, replication of successful projects needs a sound assessment before implementation.

(v) The previous considerations can be applied for any project mainstreaming gender or not. In the case of projects addressing gender issues via the promotion of IMT among women, specific considerations should be taken into account: culture, women roles, women behaviors, women physical conditions, women groups in the area, women level of empowerment, etc. A single project won’t change a tradition but could adapt it.

Monitoring during the implementation will help adapting the activities on time when problems arise. For instance, in a project which has included donkeys to carry marketable goods, and suddenly donkeys start dying of thirst during a drought, the project can build small reservoirs and teach women to maintain them and take donkeys there for drinking.
3. INTERURBAN CORRIDORS AND TERMINAL PROJECTS

Service Stations and Terminals

Roads connecting with cities usually have stop points in between to let passengers and drivers rest, refresh and get food along the long journeys. In developing countries, despite most of these stops are sometimes informal and invade the right of the way, international technical standards and clauses encourage the construction of facilities ad hoc to concentrate restaurants, gas stations, hotels, etc. Available, well maintained, proper and hygienic toilets continue being missing not only in these stops but also inside the long distance buses. These facilities are important for women, who need more privacy than men when they need a toilet, especially if they carry babies or small children.

Human Trafficking. Transport terminals are focal points for human trafficking. Victims, usually women and children, are transported across borders to be exploited as workers, like domestic servers or sexual workers. In Kathmandu, Nepal, a booth from CWIN\(^\text{19}\) is operated at the Central Bus Terminal to carry out awareness on human trafficking to bus staff and passengers on a massive scale. Passengers and drivers are encouraged to notify any kind of suspicious behavior (from children or women) that they see during the journeys or at the terminal and also to bring children at risk to the CWIN Contact Centre.

In Addis Abeba, police officers and counselors station at the Central Bus Terminal. In 2004, they rescued 210 child trafficking victims from rural areas and 27 women trafficked from Yemen.

Terminals and service stations are focal points along national and international corridors where human trafficking can be identified. Advertising campaigns, officers trained and special offices located it the terminals are instruments which can tackle down women trafficking.

Employment

Heavy machinery drivers. Despite being a hard challenge as most local cultures will react against women driving, specially machinery or heavy/light trucks, not only women

\(^{19}\) Child Workers in Nepal Concerned Centre / Child Workers in Asia: http://64.233.169.104/search?q=cache:WWHoSPit1eMJ:www.cwa.tinet.co.th/Network/cwa-network_nepal.html+%22bus+terminal%22+in+%22kathmandu%22+nepal+trafficking&hl=en&ct=clnk&cd=1&gl=us
can be as skilled as men in driving but they are more reliable since they usually don’t
drink alcohol or take drugs. In China women are preferred as crane drivers on the
construction sites as they are considered more skilled than men\textsuperscript{20}.
In construction sites, accidents at work are common and many of these accidents are
caused by drunk drivers operating heavy/light vehicles and machinery with limited skills.
Projects could train women in operating bulldozers, scrappers, graders, finishers, asphalt
plants, crushing plants, etc. Women operators might reduce the number of accidents in
construction sites and at the same time, balance the ratio men/women in construction
camps.

Women are honest \textit{toll-collectors}. In Zambia\textsuperscript{21}, many donor agencies now specify quotas
for the hiring of female workers on the road construction projects they finance. The
feedback from contractors has generally been positive, and women have been promoted
to administrative and management positions. Women have proved particularly successful
as road toll collectors, where they tend to be more efficient and honest than men. It has
been found easier to contract women in food-for-work programs. When payment is in
cash, men are more likely to take the jobs for themselves.

\textbf{Construction and/or Rehabilitation works.}
Interurban transport provides less opportunities for employment generation that rural or
urban transport. Indeed, interurban construction projects require less labor and more
intense capital. Asphalt plants, crushing plants, heavy vehicles, machinery operation, etc,
entail professional and specific training, so constructors and subcontractors bring their
own qualified human resources to the projects and little employment is generated in the
areas of civil works.

\textbf{Subcontractors}. In some countries in Africa, training in the construction industry is
delivered to women who are willing to become subcontractors in transport projects. In
Honduras women subcontractors are in the construction and rehabilitations of roads
market for years.

\textbf{Landscaping}. Besides the basic tasks related to construction, transport projects contain
different components were women can play a role. The Rural Roads and Market Project
in Bangladesh had a component in tree plantation along the roads where 100\% of laborers
planted the trees alongside the roads rehabilitated were women. Despite this Bangladesh
experience took place in a rural project, landscaping is more common in interurban roads
projects, and also in urban projects.

\textsuperscript{20} Progress Report on the Dissemination of Gender and Transport Good Practices. ETWTR Mari Clarke,
Oct 2007
\textsuperscript{21} Source: World Bank Gender and Transport Web site (see section on Grants and Pilot projects):
**HIV/AIDS**

HIV/AIDS is closely related to women and transport, why?: (i) the increment of long distance transport activity due to the rehabilitation/construction of roads may facilitate the spread of HIV infection via the interaction of truck drivers and sexual workers in hot spots along these corridors; (ii) most labor-intensive construction projects imply the mobilization of many construction male workers who attract sexual workers and then, become vulnerable to HIV/AIDS infection; (iii) intrusion phenomenon due to the presence of isolated groups of men in camps causes the spread of the disease among local girls and women and also among workers’ wives.

The standard bidding documents\(^{22}\) of the World Bank include a series of clauses to be compelled by the contractors in those construction works financed by the bank. All transport projects exceeding $ USD10MM should include these clauses requiring HIV/AIDS control activities.

Given the danger caused by civil works, an HIV/AIDS Action Plan needs to be a part of the project. This plan might contain: (i) a detail of the target population; (ii) the hotspots and the area of action; (iii) the health facilities where the activities will be organized; and (iv) the professionals and skilled people who will be in charge of the implementation, securing the participation of local health partners. The intervention plan will also include a monitoring and evaluation system with a number of indicators selected not only to assess the results but to correct, tailor and adapt the activities over the implementation phase. The plan should target the following population: (i) non-skilled and skilled workers of the construction sites; (ii) mobile population related to the works, like chauffeurs, truck drivers and heavy transport drivers; (iii) communities adjacent to the roads rehabilitated by the projects; (iv) communities close to construction camps; and (v) sexual workers in the area.

**Waterways.**

In many South East Asian countries, very simple toilets are fitted on cantilever at the boat’s poop desk, hanging over the water. The amount of money involved is insignificant. Planks are mostly used to provide passengers access from the riverbank onto the boat. Mothers with small children, elderly women and pregnant women find it very difficult to use them for embarkation and disembarkation. The lack of toilets in most landing places adds to the inconvenience.

Passengers and especially women are dissatisfied with services provided by country boats in Bangladesh\(^{23}\). In addition to the lack of landing facilities, which forces to embark and disembark in the water, boats are often overcrowded which is unsafe and a discomfort for

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\(^{22}\) 2007 SBDS, Procurement of Works

women. Women also complain about the lack of toilets, which is a major impediment on long journeys.
4. IN THE PROJECT CYCLE

Women can be targeted at the project level in several ways:

1. Through women-specific activities, in areas where women are particularly disadvantaged, underrepresented or special efforts are needed to address their needs and concerns. For instance, in participatory planning or decision-making, segregation of sexes during consultations might be opportune. This was the case of the Rural Roads and Market Project in Bangladesh, were two main activities were implemented: (i) female employment generation via tree plantation; and (ii) the creation of a place for women to sell their projects in the markets, the “Lady’s corner”.

2. Via a women’s component approach, in large projects or programs where differentiated activities are more appropriate, for instance when women need special arrangements and attention.

3. By mainstreaming gender into general activities. The Mexico Guerrero Transport and Territorial Development Project, intend mainstream gender in all the components and activities in order to guarantee same benefits to women and to men, same opportunities to participate in the project and equal impact for both women and men.

Gender Analysis. At the very beginning of the project a gender analysis of the area of action of the project will be helpful, however, requires a careful assessment of such issues as the division of labor, access to and control over resources and benefits, women social representation and level of empowerment within the community, and basic strategic gender needs of the targeted beneficiaries. Whichever approach is selected, an expert peer reviewer will be needed to guarantee the consistency of the gender agenda in the project with the reality in the country and to prevent gaps or inadequate activities like activities causing cultural conflicts between men and women that potentially might arise during project implementation. To avoid conflicts, men involvement is important and they need to be sensitized in gender issues as well. Gender Country Profiles and Gender assessments are available in the WB intranet.

Participation during consultations. Several examples in the WB projects evidence that consultations to women stakeholders lead to an effective design of projects and provide successful ways of tackling poverty. Women’s consultations will help covering women’s expectations of the project and women’s peculiar needs. Moreover, women tend to be more practical and have more long term and broad views than men when expressing their needs. Women participation was emphasized from the very beginning of the Rural Roads and Market Project in Bangladesh, encouraging women representatives to attend. Their voices were heard and women’s concerns which came out of the consultations were addressed: (i) 100% of laborers of the tree plantation component were women; and (ii) a legitimate space named “the Lady’s Corner” was constructed, which provided women’s vendors a

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24 Under preparation, YF08.
place to sell their products in the markets as well as toilets facilities adequate for women.

Mainstreaming Gender in the local Agencies. Fostering gender awareness within the transport agency which we are working with will contribute to the sustainability of the gender agenda in the sector within the country. Therefore, the efforts won’t remain only in a particular project but will be consistent along the times in the new projects, programs and policies of the transport agencies.

Provias Descentralizado, the Rural Transport Agency in Peru has adopted an active role in women inclusion in its projects and policies. Staff at its various levels, centralized and decentralized staff, has received gender awareness training; even the web page contains gender in the main page. Regional gender focal points collected and transmitted data in a regular basis and with an agreed format to a gender focal point at the Headquarters of the implementing agency in the Peru Rural Roads Project. In Uganda, under a program with DANIDA, gender was mainstreamed in the Ministry of Works and Transport focusing in strengthening stake holder’s capacity, development of a communication’s strategy via a Gender Management plan which established a Management Monitoring System to monitor gender data.

Collection of sex-disaggregate data is crucial to keep track of inputs and outputs and measure outcomes. The baseline data should contain sex-disaggregate data in order to be able to measure the impact in women. At project’s completion, the ICR needs to mention said impact on women’s welfare. Therefore, a proactive effort at the beginning of the project will ensure that impact on women’s is highlighted and measured.

Impact Evaluation. Monitoring and evaluation of the gender efforts carried out along the life of the project is crucial to adapt or correct the agenda of activities during implementation and to assess the results achieved at mid-term and at the end. Indicators should come in the PAD and deviations will be monitored during project implementation to a final assessment at the cluture. The table below contains in detail indicators to be used for transport projects in order to assess and capture the impact of the gender mainstreaming efforts and gender-oriented activities.

Monitoring Indicators

<table>
<thead>
<tr>
<th>Employment</th>
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<tbody>
<tr>
<td>- Removal of eligibility criteria that prevent women from being selected in working in the project</td>
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<tr>
<td>- Adaptation of the eligibility criteria to become a laborer in the project</td>
</tr>
<tr>
<td>- ❌❌❌ Number of person days spent on working operations, by gender</td>
</tr>
<tr>
<td>- Road women workers employed by activity</td>
</tr>
</tbody>
</table>

25 Before, women were not entitled to sell inside the markets facilities and they installed their posts in the outskirts of the markets and were forced to sell their products at lower prices.

26 Some from the Poverty Reduction Strategy.Chapter 22 – Transport
- Percentage of women working in the project
- Gender disparities taken into account in the generation of female employment

**Institutional Strengthening**
- Agency using inclusive language and collecting sex-disaggregated data
- Gender included in the Strategy and actions of the agency
- Women transport needs collected and reflected in the project implementation
- Quotas for female employment within the transport agency policies
- Number of Gender Champions identified and motivated within the agency
- Inclusive language used in the reports, public papers, policies and projects, etc
- Number of staff addressing gender policies and monitoring projects
- Drafting a Gender Action Plan for the agency’s future policies
  -- Pro-gender and active transport services policy
- Gender awareness arisen on the local transport agency
- Institutional understanding of gender disparities in transport policies and projects
- % budget on rising awareness within the Transport Agency
- % budget to address women-specific activities

**Participation**
- # of women joining participatory planning sessions
- % Participation in Social Activity, by gender
- # of women speaking up during the participatory sessions
- # of women associations invited
- # Women needs collected

**Health and Education**
- Primary school enrollment and attendance, by gender
- Percentage of pregnant women receiving prenatal care
- Immunization coverage
- Availability and costs of transport services for women (i.e: ambulances)

**Degree of integration in urban transport**
- passenger-mile by sex and age
- per-trip by sex and age
- transport related expenses by sex and age
- travel time by sex and age
- existence and mechanisms of special discounts by sex and age

**BRT**
- % travel time and cost of Public Transportation
- Use and destination of BRT by gender
- % of Household heads using the BRT by gender
- % of Household heads with children under 12 using BRT by gender
- % of Poor households (using the SISBEN 1 and 2 strata) using BRT (with Head of HH, by gender)
- % of Occupation between Users and non-Users (buffer areas of influence)
- Income and Consumption Levels of Users and Non-Users
- Inter-temporal Labor demand for users and non-users by gender

**Various**
- Increased use of transport services by women
- More regular, affordable, and safe transport services linking remote areas with service centers, mainly used by women

- Percentage of roads in maintainable condition that receive regular maintenance and are used by women

- Expenditure on tracks used by women, per km
- Percentage of road work that is labor-based, by gender (percentage of wage bill in total costs)

- Remove distortion in fiscal regime to NMT purchase
- Measures and expenditure to increase personal security on public transport, NMT, and walking

- Number of trips per woman/man
- Woman/man per miles
- Cost per woman/man
- Average trip speeds per woman/man.
- Cost of time, money and comfort
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