
Principal Investigator:

Anastasia Loukaitou-Sideris
Department of Urban Planning
UCLA School of Public Affairs
Box 951656
Los Angeles, CA 90095
Tel. 310-206-9679
Fax 310-206-5566
Email Sideris@ucla.edu
Overview of the Research and Tasks

Fear and anxiety about personal security are important detractors from using public transit. Empirical research in different cities of the Western world has confirmed that fear about crime affects transit ridership. Surveys of the perceptions of transit passengers have revealed a number of issues related to their anxiety about personal security. For one, fear of transit is more pronounced in certain social groups than others. Gender emerges as the most significant factor related to anxiety and fear about victimization in transit environments. Almost every fear of crime survey reports that women are much more fearful of victimization than men. This fear has some significant consequences for women and leads them to utilize precautionary measures and strategies that affect their travel patterns. These range from the adoption of certain behavioral mechanisms when in public, to choosing specific routes, modal choices, and transit environments over others, to completely avoiding particular transit environments, bus stops and railway platforms, or activities (e.g., walking, bicycling) deemed as unsafe.

Women’s fear of crime in public spaces has been adequately documented. Research of transit passengers’ perceptions of transit safety has also intensified in response to the recognition that anxieties about crime are impeding travel choices and affect transit ridership and revenue, and guidelines for safer cities and transit environments have been drafted. Some studies incorporate an analysis of gender differences in perceptions of safety on transit; however, the focus is not specifically on women and safety. In contrast, a small subset of studies has focused on women’s concerns and fears about personal safety in transit environments. Criminologists complain, however, that our increased knowledge about the causes of fear has not necessarily translated into nuanced policy responses tailored to the particularities of different groups and physical settings. Additionally, there remains a general lack of knowledge regarding specific
female requirements for urban and transit environments. Researchers have argued that this is partly due to the imperceptibility of women and the assumption that women and men are in the same situation and have the same needs.

This study focuses on the safety concerns and needs of women riders. The research tasks undertaken included: 1) A review of the literature on women’s fear in public settings; 2) a compilation of survey findings (mostly from Canada and the United Kingdom) presenting the concerns of women passengers on issues of transit safety; 3) a compilation of an inventory of strategies followed in these countries that target women’s safety; and 4) a web-based survey of U.S. transit operators to document the programs and activities they have implemented to make their systems safer for women riders as well as their assessments of the efficacy of these programs. The survey targeted all 249 transit agencies in the United States that operate at least 50 vehicles in peak period service

**Key Findings**

Few researchers, transit agencies or policy makers have directly asked women passengers about their safety needs or sought to identify women’s proposals and preferences regarding safe and secure travel. The limited information we have on this topic comes primarily from surveys of women in the United Kingdom and Canada, as well as safety audits undertaken by women in these two countries. From such surveys and audits we know that women passengers generally prefer staffing to technological solutions and are very skeptical of the tendency of transit agencies to replace staff from trains or buses with automated machines.

The tendency of many transportation agencies to retrofit their station platforms and bus stops with CCTV cameras seems to offer little comfort to women, who do not feel more secure
in the knowledge that someone is supposed to be watching them. Certain design measures, notably good lighting, seem to have a positive effect in reducing women’s fear. Finally, women seem to have mixed reactions to segregated transport schemes, which establish women’s-only services or women’s-only cars on commuter trains and subways. Policies that receive high marks from women passengers include request-stop programs, allowing women to disembark from the bus at locations closer to their final destination during late evening hours, and public awareness campaigns denouncing groping.

Are these preferences satisfied by US transit operators? Do transit agencies have in place distinct strategies to address the safety concerns of female passengers? What types of policies and design measures, if any, are taken by transit agencies and transportation authorities to make travel less threatening to women? We explored these issues by gathering and analyzing information from a survey of transit agencies in the US.

In all, respondents from 132 transit agencies completed our survey (53% response rate). The survey showed that since 9-11, passenger security has been elevated as an all-important concern of transit operators. The number of transit security strategies followed is overwhelmingly larger now than in the past. This pattern of boosting security measures in recent years is true for the different components of the transportation system (buses, bus stops, trains, station platforms, station entrances and exits, park-and-ride lots).

Although we can clearly witness an increase in the application of all four basic security strategies (policing, technology, education/outreach, and design), the most notable increase seems to be in the application of security technologies. Thus, now 74% of agencies use CCTV and surveillance cameras in their stations, compared to 23% in the past, and 56% use them in their parking areas, compared to 9.5% in the past.
Agencies use a different mix of strategies to protect the various components of their transportation systems, privileging certain types of strategies over others. Security technologies (CCTV, surveillance cameras, emergency phones, public address systems, panic/alarm buttons, and silent alarm for drivers) are the top strategy of choice by agencies for most of the components of the transportation system, with the exception of bus stops where they seem to privilege policing and public education and outreach more than other security strategies. However, the number of agencies employing policing strategies at bus stops is small. Only 18 agencies utilized uniformed officers and 16 utilized non-uniformed officers to patrol their bus stops.

The level of security provided to the different components of the transportation system is quite unequal. Train stations and trains, and to a certain extent buses, seem to enjoy the highest level of security and attention from transit agencies. In contrast, the use of various safety and security strategies is very low at bus stops, even though most passengers (and especially women) report greater levels of anxiety and fear waiting for the bus than riding on a transit vehicle. Most survey respondents indicated that they do not employ particular security strategies at their bus stops. Only fifteen percent of the agencies reported using uniformed officers and about 13% use non-uniformed officers, public education/user outreach, and environmental design, even though most women passengers prefer human than technological security measures. About half the agencies reported the use of security measures for the protection of station parking areas, despite the fact that studies have shown that a significant percentage of crime incidents occur at station parking lots. The relative lack of attention to the security of the more open and public areas of the transportation system is arguably due to the greater difficulty and cost of securing open areas
and the perception by transit agencies that they are not solely responsible for the protection of such areas, which are viewed as belonging to the city’s larger public realm.

Our respondents also ranked security strategies in terms of their perceived effectiveness. For buses, the three strategies perceived as most effective included other security hardware,\(^1\) uniformed officers, and CCTV. While most agencies do not employ officers at bus stops, almost three-fourths perceived them to be “very effective” as a security strategy. The three strategies perceived to be the most effective on trains were uniformed officers, non-uniformed officers, and CCTV. In regards to train stations, respondents rated all the safety and security strategies as quite effective. The overall assessment of the effectiveness of the various strategies used for parking lots did not span a considerable range. Sixty-one percent of respondents considered uniformed officers to be “very effective,” while less than half of the agencies considered other strategies to be “very effective” for securing parking lots.

A specific interest of the survey was to assess the transit operators’ perspectives about strategies for the safety and security of female passengers. While two-thirds of the respondents indicated that female passengers have distinct safety and security needs, only about a third believed that transit agencies should put into place specific programs to address them. Those who claimed that women do have specific safety and security needs argued that women are more vulnerable than men for a number of reasons. In contrast, those who stated that female passengers do not have different needs argued the concern for safety and security is common among all passengers regardless of gender.

\(^{1}\) Respondents listed a range of different security hardware strategies, including global positioning system (GPS) vehicle locators, two-way radios, wireless live surveillance, silent alarms for drivers, and electronic fareboxes. Of these additional hardware strategies, respondents mentioned GPS devices most often.
Despite the fact that two thirds of the respondents believed that women have distinct transit security needs, only five agencies reported having in place specific programs for women passengers. Since our survey covered more than half of all the large and medium-sized transit operators in the US, we have to sadly conclude that the US is way behind other countries on the issue of transit safety for women. Canada, the UK, Australia, Germany, and Japan, among other countries, have initiated and practiced a variety of measures to ease the fear of women passengers and provide them with more safe and secure public transportation.

Only one-third of respondents thought that agencies should put into place specific safety and security programs for their female passengers. Many who did not see the need for specific programs stated that agencies should develop safety programs that would help all and not solely the female passengers. Among those who believed that transit agencies should have women-focused safety and security programs, some argued that such an effort would provide benefits to all passengers. Others emphasized that public education efforts were key to empowering women and improving their overall safety. While several respondents did think these programs should be implemented, they were unsure about what types of programs would be most useful.

Only one respondent cited limited financial resources as a barrier in pursuing target programs. This was the only mention by an agency about resource limitations in implementing specific programs. Operations funding is a challenge for many transit agencies as safety and security funding is often very limited. As such, the fact that this was not discussed as a factor in the development of safety and security strategies and programs is quite surprising.

Only two agencies reported knowing of safety and security programs specifically for female passengers. One program is a night stop service that allows passengers after dark to alight the vehicle at locations other than bus stops. A second program is a collaborative effort
between a transit agency and a local domestic violence prevention agency. If a victim boards a 
bus and requests help from the driver, the agency has in place an established protocol to transfer 
the person to the domestic violence facility. Local police are called if the situation is one that 
cannot be handled safely by transit agency personnel. A third agency reported that part of their 
safety and security training involves teaching drivers to encourage female passengers to sit at the 
front of the bus and to notify operators if someone is causing them to feel uncomfortable.

In conclusion, the study found that special attention to women travelers is all but missing 
from the practices of US transit agencies, despite the fact that empirical studies show women 
typically more fearful of transportation settings than men. While women, like all passengers, are 
extpected to benefit from the increased attention given to the security of transportation systems 
post 9-11, no special effort is made by most transit agencies to tailor specific strategies and 
programs to their needs.

**Papers to Date:**


Anastasia Loukaitou-Sideris and Camille Fink “Addressing Women’s Fear in Transportation 

**Conferences Attended:**