
Against Security

HOW WE GO WRONG AT AIRPORTS, SUBWAYS,
AND OTHER SITES OF AMBIGUOUS DANGER

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with a new preface by the author

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CHAPTER 3

Below the Subway: Taking Care Day In and Day Out

with Noah McClain

The New York subways are obvious sites of security concern; many measures get taken as a result. Such concern is not folly and nor is the disposition to try and address it. Attacks on the trains in London, Tokyo, Moscow, and Madrid have unleashed, each in their own time, death and destruction. New York has 468 subway stations, each with multiple entries. Depending on time of day, some crowd together hundreds, if not thousands of people in compact spaces. It surely dawns on most who are ever there that these are rich targets.

One way into understanding how security actually works in the subway is to talk with the people who are there a whole lot—the subway workers. They are employees of the Metropolitan Transit Authority (MTA) and most spend many years at the job. Noah McClain and I studied just what workers see and what they do as part of the routines of their jobs. We aimed our interviews to learn, in particular, how they responded to a range of troubles, from minor ones to those at the level of disaster. There is a connection, we came to think, between what goes on during routine work and what happens—or will likely happen—when genuine emergency strikes. Disaster studies, oddly enough, seldom attend to the way in which people work through more ordinary troubles. But doing so, it seemed to McClain and myself, was a good way to understand what individuals might do should a bigger threat develop. Given what we learned in our research, we concluded that workers' encounters with ordinary troubles shape response to difficulties of whatever sort and scale.

Our interviews, conducted mostly by McClain although occasionally with me trailing along, involved a total of eighty workers—station agents (the people inside the glass-enclosed booths), station cleaners,

train conductors, and train operators (formerly known as “motormen”). We also spent much time in the subways observing, taking photographs, and doing other kinds of field research. In some cases, those we interviewed, usually in their homes or some neutral place like a coffee shop, invited us to their work location, where they could point out to us exactly how they operated their equipment, called for aid from police or fire, or managed to innovate on their own. From these various maneuvers we were able to see how their “eyes and ears”—what they see and hear—link up with concrete actions. To learn from those with a more overall responsibility for the system, we had extensive and numerous interview conversations with union—Transport Workers Union (Local 100)—and MTA officials, including present and past heads of security.¹

Reacting to the terror attacks, officials in charge of the system experienced the obvious need to “do something.” Like the security planners in Boston observed by Kerry Foshier (see chapter 1), they responded to Department of Homeland (DHS) color alerts—a system that several of our informants indicated began within the MTA itself, or at least within New York jurisdictions. As alert levels rose, more plainclothes police were put on platforms and in train cars. There was also a beefing up of uniformed Transit Police placed on duty. Whatever the source of heightened concern, armed troops are sometimes put on patrol in heavily used spaces, like Penn Station and stations serving Times Square. Police also conduct random inspections; they have the right to check bags and belongings of passengers, a program begun in 2005 following the London Underground bombings. Out of concern for civil liberties and to lessen likelihood of profiling, anyone singled out for inspection has the right to decline by exiting the train station. But those who resist may, of course, face disconcerting follow-up once they get above ground. A Brooklyn hospital manager of Kashmiri descent, whose case was taken up by American Civil Liberties Union, complained that he had been stopped twenty-one times in the subways—most New Yorkers have never been stopped at all.² So another cost of doing something is indeed profiling, and the costs and resentments to which that leads.

A not-incidental additional cost occurs in the ridicule these measures stir up among workers who take note of the more absurd aspects

of the programs. One is the concentration of troops and equipment in the densest stations, like the one at Times Square, which no doubt rank high in official risk assessment analyses. But the heavy security squads at central Manhattan stations make sense, some workers reason, only under the presumption that bomb makers would drive with their bombs into the densest part of the city and park, and then descend to the subway station, where their suspicious behavior would be detected and lead to their arrest. These measures don't just provide mirth among workers, they also shape how workers interpret other policies announced as security related.

Part of the MTA "do something" involves deployment of new technologies that would replace or at least supplement human guards and inspectors. The federal government, augmented by state and local financial support, makes security dollars available for advanced technologies and equipment (but not, for example, routine training and maintenance). At a city council hearing I attended with McClain in early 2005, council members took turns lambasting MTA officials for failure to spend the money "to make our city safe." Almost \$600 million in federal and state security funds had been left untouched for years after 9/11. Partly in response to these confrontations, the agency made its first funds commitment to Lockheed Martin in August 2005 for \$212 million, a contractual commitment that eventually hit \$453 million—with still more millions to follow in future contracts—for the subway's surveillance system.

These were not to be ordinary surveillance cameras. They would detect a human separating from a suitcase or package, something that *then* would trip off an alarm that *then* could trigger emergency response. At minimum, the system would generate "intelligent video" that would integrate moving images from across the system to certain centralized locations. It was clear to us, based on our interviews with MTA security officials, that the agency had not been "foot-dragging" in avoiding commitment, but instead were discouraged by genuine concerns that, even within its own terms, the pattern-recognition aspect would not work (there had been no demonstration of the promised technical capacity). Indeed, New York subway stations are particularly inhospitable to even ordinary surveillance photography, given the un-

evenness of lighting, plethora of nooks and crannies, and vulnerability to vandalism. But authorities were under great pressure to spend, and the new cameras provided a means to do it. Some MTA officials were particularly skeptical, both of contractors' motives as well as capacities. As the head of transit security told us at about this time (in June 2005), "Everybody wants to sell you what they say is the best security technology in the world. And then you find out they're trying to sell you closed-circuit TV cameras. We don't want a *picture* of the event."

The contracts went forward with the sad outcome of, in the words of a state comptroller's office press release, the program falling into "disarray."³ Lockheed sued to withdraw from the project after the city complained of performance failures. The MTA countersued Lockheed arguing "that Lockheed had provided faulty technology that did not pass basic operational tests."⁴ As a transit official testified to the City Council about the legal and financial morass, "The technology does *not* work in our subway system." She continued, "We piloted the technology in a subway tunnel-like environment. It's dark, there are too many columns, there are too many people and there were too many false alarms."⁵ It had been, it seems at least in retrospect, a sci-fi pipe dream, a Reaganesque Star Wars for the subway.

But what if the surveillance equipment had worked? Worked at what? We still would have faced the same problem: we don't know what kind of terrorist is going to strike what kind of target and use what kind of method. A suicide bomber, as we know, never separates from his or her bomb. We still would have been stuck with a stupid "working" thing tripping off all sorts of false alarms as folks forgot their backpacks or teenagers tossed belongings to one another. Or a New York fly got on a lens. Without the right kind of attack under just the right anticipated conditions, the system would have done little but screw up the routines of workers' and passengers' lives.

Other subway initiatives are designed to further the vigilance of passengers themselves as surveillance instruments. Most famously, people are instructed, "If You See Something Say Something." Under contract with the MTA, the ad agency Korey Kay & Partners designed signs and posters, starting in 2003, that the agency placed throughout the transit system—in subway cars, on buses, in stations, and on the agency web-

site. It comes in different languages (*¡Si Ves Algo, di Algo!*) and its use has spread to authorities around the world.⁶ There are also TV spots. "Since the phrase was introduced by the MTA in 2003," the MTA website indicates, "dozens of municipalities in this country and around the world have asked permission to use it in their own anti-terrorism campaigns." The slogan has been officially licensed by the MTA to the DHS for a national campaign. The loudspeaker systems within subway cars and at station platforms recite the same admonition. Given the poor quality of the public address apparatus, the messages add still another garbled set of noises to the din of screeching trains, yelling kids, and buskers asking for money, selling candy, and performing musical numbers. Striking a higher-tech note, New Jersey Transit invited passengers to use their cell phones to text authorities ("text against terror") as the media reported it.⁷

Another front of the MTA drive to enlist public support was a campaign to assure people that their calls did indeed matter, and that they are not alone in making them. So, as part of a three-million-dollar program, posters on buses and subways, as well as ads on TV, proclaimed, "Last year, 1,944 New Yorkers saw something and said something." The ads include a hotline number to call: 1-888-NYC-SAFE. According to a *New York Times* article by William Neuman on the subject, neither police nor transit officials could say where the number 1,944 came from.⁸ Indeed, in our own interviews with transit officials (conducted both before and after the *Times* story), including the heads of public information and security, McClain and I similarly could come up with no method or sources that could confirm this number. Our informants did not claim confidentiality, they just did not know. Putting up the number, the precise number, enables the MTA to show that it is indeed competently dealing with the problem, "doing something" in fact, and that many New Yorkers, through their active participation, believe it as well.

In all, according to the *New York Times*, the hotline received 8,999 calls in 2006, including calls that were transferred from 911 and the city's official nonemergency help line (311). The next year, the total shot up to 13,473, explained perhaps, according to the police department spokesman, by the ad campaign touting the readiness of New

Yorkers to participate. No calls, however, involved terror or terrorist threats against the subway or any other target, although there were false reports and phony allegations. Some people used the hotline to turn in people against whom they evidently held a grudge. A total of eighteen arrests over the two-year period (2006–2007) could be traced to the calls, but for offenses like making up a phony ID or possessing an unregistered handgun. Several calls led to deportations. Eleven reported on individuals said to look like Muslims, who were taking photos of train tracks or "counting people." Muslims use hand-held counters to tally their prayers as they make them, the way Catholics use rosary beads to keep track of the number of Hail Marys they say.

A total of 816 of the calls in 2006 led to follow-up investigation by the police intelligence division or its joint terrorism task force with the FBI. Of the calls about suspicious packages, most were about backpacks, briefcases, or other items accidentally left behind by their owners (who were grateful, one suspects, for their return through security). None had bombs. Neither newspaper reports (we have searched all data bases) nor our workers' accounts provide any cases where "Saying Something" revealed a bona fide attempt to inflict terror in the subways.

In response to the *Times* reporter's query, the police spokesman explained, in reference to the "See Something" campaign, "It's just one small part of the initiative the Police Department has to capture any information that might prevent another 9/11 or another catastrophic attack on the city. One call one day may be the one that stops an attempt to destroy the Brooklyn Bridge." The Director of MTA Security commented that officials in Madrid said that several passengers interviewed after the bombings remembered seeing the unattended knapsacks that turned out to contain the bombs, but for whatever reason decided not to alert anyone. The head of the MTA (Katherine Lapp at the time) indicated that this is something that needed to be avoided at all costs, even if it meant dealing with a deluge of false alarms.⁹

There have indeed been plots against New York since 9/11, most recently a failed effort to detonate a car bomb at Times Square in May 2010. The device did not explode; smoke detected by those on the streets alerted authorities, who closed down Times Square and gathered

clues from the intact vehicle. It was an amateurish Rube Goldberg assemblage of home-made ingredients, according to police officials—by a miscreant who had “more desire than ability.”¹⁰ Faisal Shahzad, a U.S. citizen born in Pakistan, was readily caught and pleaded guilty.

The most serious plot against the subways, *per se*, was a 2009 scheme by an Afghan American, Najibullah Zazi, to set off simultaneous bombs (with two accomplices) at the Grand Central and Pennsylvania Railroad subway stations. The plan, or at least an early version of it, was evidently first detected by British intelligence, which intercepted communications between Zazi and his purported al-Qaeda handlers in Pakistan.¹¹ U.S. authorities trailed his activities as he bought bomb-making materials in Colorado, where he was working as an airport shuttle bus driver (the airport–downtown Denver route), and then as he made his way to New York to commit his crime. Before he could act, but with plenty of evidence accumulated against him, he pleaded guilty. His accomplices were also charged and face severe sentences. As per pattern, detection came not from the “See Something” campaign, from on-site inspections, or from any of the security operations set up by the subway system. It was external intelligence that found the threat.

The other big attempt to commit subway mayhem, a plot ended by arrests in 2004, was frustrated through a different scenario. It was a conspiracy to set off an explosion at the 34th Street–Herald Square station (the busy station that serves Macy’s—the “world’s largest store”). The plotters never reached the point of purchasing any materials for making a bomb, or going beyond amateurish drawings and speculations about what it would take to do destruction. The charge of conspiracy was also complicated by one of the plotters repeatedly saying, as captured by police recordings, that it was important to him that people not be hurt.

The NYPD’s paid informant in the case had a central role, as made evident by the tapes played at the trial of one of the plotters. The informant was double the age of the two young men charged with the crime, James Elshafay (nineteen at the time) and the only somewhat older Shahawar Siraj. The young men regarded the police informant, Osama Eldawoody, as a father figure, and he called Elshafay “son.”¹² The younger two seemed anxiously deferential toward his wishes, expertise, and what he convinced them were his impressive connec-

tions with Islamic scholars in the Middle East. Eldawoody had in fact been trained as a nuclear engineer, although he made his work in the United States by driving a taxi and performing other miscellaneous occupations. The three of them were all in frequent and lengthy conversations over many months. The interactions of the informant with Siraj are recapitulated in an impressive book on “snitching” by the journalist Ethan Brown, who presents the informant as clearly leading the young men toward schemes they do not seem capable of hatching (alas, Brown does not consistently provide sources for his paraphrases of the conversations).¹³

A defense lawyer for Elshafay argued in court there was little evidence that his client—young, uneducated and clinically schizophrenic—“had any ability whatsoever to carry out any kind of plan.”¹⁴ The informant received about \$100,000 from the NYPD over a little more than a two-year period, with his weekly stipend rising as his reports became more forceful (he was to complain later of underpayment). The case resembles another highly sensational plot (not involving the subway, but also out of New York) where it turned out that some of the defendant’s incriminating statements were made while both he and his NYPD informant were smoking pot. The alleged plotter, Jose Pimentel, later emerged as “unstable,” having twice attempted to circumcise himself, among other unusual acts. And, again, we have an informant whose aid was crucial given the incapacity, evident from still other details of his biography, of the man charged.¹⁵ In this instance, the issues of entrapment were sufficiently strong for the FBI to refuse to be part of the prosecution effort, considering the case unwinnable in court. Taking a very different stance, Mayor Michael Bloomberg, Police Chief Raymond Kelly, and Manhattan District Attorney Cyrus Vance all appeared together to eagerly announce the plot when it was first “revealed.”

Finally, I turn to the example of one of the very few bombs ever to go off in the subway system and the only one to do so in the post-9/11 period. It was a pipe bomb explosion at the Times Square station just before the start of the Republican National Convention in 2004. It was reported by New York subway police officer Joseph Rodriguez, who himself was injured in the explosion. The event caused a lot of tension

in the city in the immediate aftermath and led to an intensified police presence in the subway. Police brass and the media lauded Rodriguez for finding the bag and taking the hit when it went off. But the next day police changed their account and filed charges against Rodriguez for planting the bomb himself. Police found incriminating evidence on his person and in his personal computer, including instructions on bomb making. He had not called 911 when the bomb went off (he was not seriously hurt), a basic part of police protocol, and had other incriminating materials in his Manhattan apartment. Further, there was a history of psychological disturbance; Rodriguez was about to be retired from the force at age 27 on a psychological disability pension.¹⁶ There was no hint of motive, other than what has been called a “hero complex,” in which individuals yearn for acknowledgment for having saved the day.¹⁷ Perhaps wars on terror create not only heroes, but also hero wannabes who create their own kind of disturbance.

Looking back at these various attempts at grand violence, patterns emerge. They have been amazingly few in number. None has been successful. All are amateurish, performed by people lacking the relevant skills, not always having even the healthy psychological disposition that anyone needs to be effective at any task (as in the Rodriguez pipe-bomb case). The security apparatus of the subway system did not foil their plan—although intelligence from communication interception was crucial in the Zazi case. The city was spared destruction from miscellaneous things going wrong, such as mishaps of machinery (as in the Shahzad car bomb), and from an apparent lack of seriousness or capability on the part of the plotters (as in the Elshafay “plot”). All such elements imply relevant lessons for thinking about the nature of threat and how possibly to deal with it.

ARSENAL IN PLACE

Against the background drama of bombing conspiracy, injury and death do take place in New York and in its subways. Despite the city’s substantial decline in crime (murder rates are now one-third of what they were in the early 1990s), crime still occurs, and this is true of the

subway as well as the streets. There is the occasional murder (only one in the subways in 2006), but quite a few robberies—819 in 2006. There are reasons to think this an undercount because of sharp and inexplicable shifts in numbers from various years and because of ambiguity in determining whether to attribute a crime as occurring at a particular subway station or at the corresponding aboveground location.¹⁸

Whatever the actual numbers, one feature of crime victimization is people’s fear of it. Criminologists devote a great deal of research to understanding “fear of crime,” partly because of the direct costs it exacts from citizens. There is also, however, a causal relationship between fear and victimization that criminologists focus on: if people fear crime they will be less likely to go out, and that, in turn, increases vulnerability for the increasingly few who do. Subway workers protect passengers from this kind of fear first by simply being there in uniforms, which likely reassures the public, especially with all the signs that advise customers to “alert” a train operator or station agent if they see something. But workers do other, more concrete, things, to make passengers feel they are safe, and—no small matter—that makes them safer in fact. Combined with actions by passengers and others on the scene, they enact day-to-day solutions that hold routine mayhem at bay. In essence, many people are already deeply involved in making things secure, albeit in ways not evident from looking at posters or newspaper reports on security. They involve garden-variety mechanisms in some nonobvious ways.

First among these mechanisms are the passengers’ own tendencies to solve problems. Despite the so-called bystander effect, in which people supposedly do little to intervene to save others from assailants, individuals actually do help one another out—a whole lot (as is consistent with the bystander effect follow-up literature).¹⁹ We encountered sixty-two different instances in our interviews, and a few more as reported in the press, in which passengers (not counting off-duty police or subway workers) intervened, usually spontaneously and not infrequently at some risk to themselves. Their actions included jumping down into the tracks to rescue people who had fallen in by accident or on purpose, as in an attempt to commit suicide. These rescues sometimes meant close calls for the passengers in the face of oncoming trains.

In other instances passengers subdued a violent wrongdoer. A twenty-six-year-old named Jonathan Cohen, after seeing a disturbed man (who later turned out to have been psychotic) push a woman to her death in front of an oncoming train, pursued the assailant up escalators and through corridors, eventually to hold him in what the police called a “bear hug” until they could arrive to take over.²⁰ In another case, a passenger was stabbed as he tried to break up a fight among people he did not know. Still another good samaritan waylaid a man after his attempt to molest a child, physically holding him until police eventually came. Following a passenger’s apparent diabetic seizure, and after a conductor announced it to others who might not otherwise have seen that the passenger needed medical assistance, seven people (doctors and nurses) made their way to his car to help.

There are other examples where passengers stayed behind to staunch others’ wounds, in one instance, alas, where a woman nevertheless bled to death. Evidence of spontaneous helping runs consistent with what researchers have documented over and over again.²¹ Instead of succumbing to passivity and inaction, survivors quickly move to do what can be done. We sometimes see it in TV news footage, whether the responders be Israelis or Palestinians; Hindus, Sikhs, or Muslims; or tornado survivors in the American Midwest. Most often, however, it seems from a close inspection of media coverage that official responders are the ones depicted as the helpers. Even though this is most certainly not the prevalent pattern on the ground, media coverage does often depend on official responders arranging journalistic access. Or maybe it is the pattern because journalists favor the uniforms and rescue equipment that make for good theatrical narrative.²²

Presumably there are times when people do not come to the rescue and when indeed some are content to let the “hero” take care of the problem; they are passive. But we could find few instances from the subway where somebody who was in a position to do something failed to initiate aid when there was imminent bodily threat to another (some of our workers do report, however, that police have walked off, leaving it to good samaritans, for example, to deal alone with fracasés involving teenagers). An exception of workers coming to others’ aid seems to be when violence occurs among people who are in some sense out-

laws in common, as when two young men who were engaged in the illegal fare-beating system known as “selling swipes” (see later in this chapter) got into a knife fight over access to customers. Under such circumstance, people will call for the police, but do seem—sometimes appropriately—unwilling to physically step in. There was a case where private contractors working in the station did not physically stop a crazed assailant attacking an innocent man with two sabre saws (one in each hand) that he grabbed from a worksite.²³ It also seems, as more of a matter of routine, that passengers do not intervene in minor rule breaking, as when people hold open train doors or, as one woman conductor complained during our interview with her, when men exhibit themselves.

Subway workers indeed *presume* customers will help out, at least by calling police or, at times, taking a more active role. One example became clear to us through McClain’s participation in MTA’s fire safety and evacuation training, with real-time simulations of train and tunnel darkness. As explained by the MTA veteran who was directing the training, only with the assistance of passengers could there be effective movement of people out of cars when stopped in poorly lit or smoky conditions. People would be needed to assist at every turn to prompt customers to move right or left or to go up steps or across thresholds—for example out of trains and on to catwalks. McClain estimated that a minimum of four helpers would be needed for a simple evacuation. Without the assumption that passengers lend a hand, the whole training protocol would make no sense. Our interviews similarly revealed assumptions among workers that passengers help out when needed—like doctors and nurses who come to the aid of the injured, or those who spontaneously arise to deal with a miscreant.

While customer help is strictly voluntary, subway workers are charged in various ways to maintain order, including guarding against passenger injury. Injury can derive from direct assault or, for example, from a fire (perhaps inadvertently started by a pile of free newspapers catching a spark). Passengers can become ensnared in equipment. Or there can be flooding, which, although not necessarily a danger to life and limb, does threaten the smooth operation of system equipment and trains. In warding off any such threats, workers know and, to a substan-

tial degree, do attend to the formal organizational rules, while at the same time enlisting ad hoc work-arounds as situationally warranted—a central theme of McClain's own research conclusions.²⁴

One of a subway worker's intense worries is passenger suicide. Being part of a suicide or some other fatality becomes a trauma. Workers know about coworkers' experiences with such incidents and other types of danger through news reports but more vividly through shared word of mouth. The union, through its own safety initiatives, also provides information regarding such incidents, and how to avoid them—and how to recuperate once they occur. Subway workers find themselves dealing with what they sometimes refer to as “knuckleheads,” “crazy people,” or, also in their argot, “EDPs” (emotionally disturbed persons). Many worker interviewees report having themselves been victimized. In the most extreme case, a woman worker was subject to one attempted and one actual rape.

Workers' routines, including observance of official regulations, expose them to danger as a matter of course. Very specific work protocol requires conductors to put their heads at risk. They must stick their heads out of their cab windows in ways that do not allow them to see an assailant intent on hitting them on the head, perhaps with an object. Located in a middle car (the train has eight or ten cars), conductors open train doors by depressing two buttons simultaneously, each opening half of the train's doors on to the platform. But they close them in two separate operations. Conductors look first to the right (head out the window) to make sure it is safe in that direction. All doors to the right are then closed with the push of a single button—head remaining out the window and looking right. Then they repeat the same maneuvers but to the left, pressing a different button. Their heads must remain out the window during both maneuvers, sometimes repeatedly at a single stop, often for long moments and looking in only one direction at a time, focused on the car doors. As the train exits the station, their heads remain out the window until it has moved a prescribed seventy-five feet forward.²⁵ Taking advantage of these conditions, according to our informants, miscreants have punched conductors' heads, slashed them with blades, thrown glass bottles at them, hit them with various objects, and spit at them or doused them with other liquids.²⁶ But in the mean-



Figure 5. Signs and notices block views at station agent booth. Photo by Noah McClain.

time, conductors' assiduous looking (and risk taking) means that few if any customers are caught in the doors and hence dragged through the tunnels. This maneuver also ensures that children are not separated from a care giver—a high priority for conductors, as they brought up repeatedly in our interviews.

Station agents are almost always alone in their booths and, depending on location and hour of the day, also alone in the station (a minority of stations also have commercial news kiosks, which are open for at least some of the hours of train operations). Station agents answer travelers' questions, an activity that itself is sometimes helpful for learning about problems in the system (how come the right exit is blocked?) as well as providing answers that enhance passenger safety. The glass-enclosed walls behind which they sit make it possible for them to visually survey their surroundings. They have access to an intercom button to call for outside help. Their views of space surrounding the booths

are often blocked by signs that the MTA puts up over the glass, some of it ironically warning passengers to be on alert for unattended packages, that their stuff might be searched, and, of course, that if they see something they should say something (figure 5).

One worry that station agents have is that miscreants could spill or spray a flammable liquid or gas through the opening at the base of their booth's window, followed by a match to set the booth afire. A number of station agents were killed or maimed in the 1980s through the mid-1990s in such attacks, accompanied by robbery attempts. Ironically, prior efforts to increase booth security contributed to the problem. To deal with station agents' vulnerability to shootings, authorities made the booths bullet-resistant. But specifics of the design had the effect of decreasing ventilation, which made explosion (rather than fire) more likely. More recent add-on remedies, particularly a fire-retardant system, have had an apparently corrective effect.²⁷ But since 1995, there have been seven additional attacks reported in the press, which indeed support the stories that workers have told us and which they continue to discuss with one another. In four of the seven accounts, attackers used an unidentified liquid; in the other instances, one used anti-freeze, one gasoline, and one lighter fluid. Besides dangerous items hurled through the opening, a man inserted his erect penis to shock a female agent—another account that made the rounds. If they sense trouble in time, workers can quickly shut the aperture to their window (ouch!).

Some of the station agents' safety routines are not for self-defense but for defense of others. As school lets out each day, hundreds of pre-adolescents or teens may descend into a station. They jump on and about one another as they approach the turnstiles, risking human crush. Some station agents have told us that at these times, they disengage the turnstiles allowing anyone to go through with a simple push. The agents fear that someone attempting to go through the turnstile will discover they have no card, that their card will malfunction, or that they will just fumble and take too long. Rather than risk a pileup, station agents disengage the system—something not permitted for workers to do under MTA rules, but done anyway.

Similarly, station agents are not to leave their enclosures to service the needs of customers, but if a child is in dire trouble, for example, they

simply do it. If there is a difficult person at a station, the station agent can give him or her a free admit through the turnstile to enter a train, albeit then perhaps to become a problem at a different station. Workers on the trains also have options, not in the rulebooks, to deal with safety concerns. One strategy is to lock wrongdoers out of trains or, depending on circumstance, lock them in. Conductors have the capacity to key lock car doors individually, both the doors that lead off to platforms as well as doors between the cars themselves. A worker reported to us that on one of his runs he realized kids in a car were shattering bottles against windows, ripping seats from the train floor, and trying to throw them through the glass. Among other hazards, their actions could have resulted in objects on tracks with potential for derailment or sparking a fire. He also saw they had knives. The conductor—who happened still to be in his apprenticeship—took the impromptu strategy of turning the last car, where the disruptive kids happened to be, into a holding cell. He closed all train doors. He then made his way back to the penultimate car and got the remaining innocent people out of the car still containing the troublemakers. As he explained in our interview,

So I went to the ninth car. I motioned to the people [who could see me through the glass window], "come this way come to me," but I didn't want to give it away because they [the miscreants] would have probably attacked me. Locked what they call a storm door, which is at the end of the car.

This trapped the offenders where they could be held while police were called.

When the police did come, they were on the wrong side of the platform. Some crossed over the tracks (contrary to policy because of the danger of electrocution and exposure to moving trains), while others took the stairs up, crossed over on the street above, and then came down again (several flights each way). By securely penning the offenders, the conductor saved the day regardless of the wait-time for the police. While the capacity to key lock individual cars stems from the need to protect them while in storage or in yards while awaiting repair, the feature comes in handy when workers need to make an ad hoc security application.

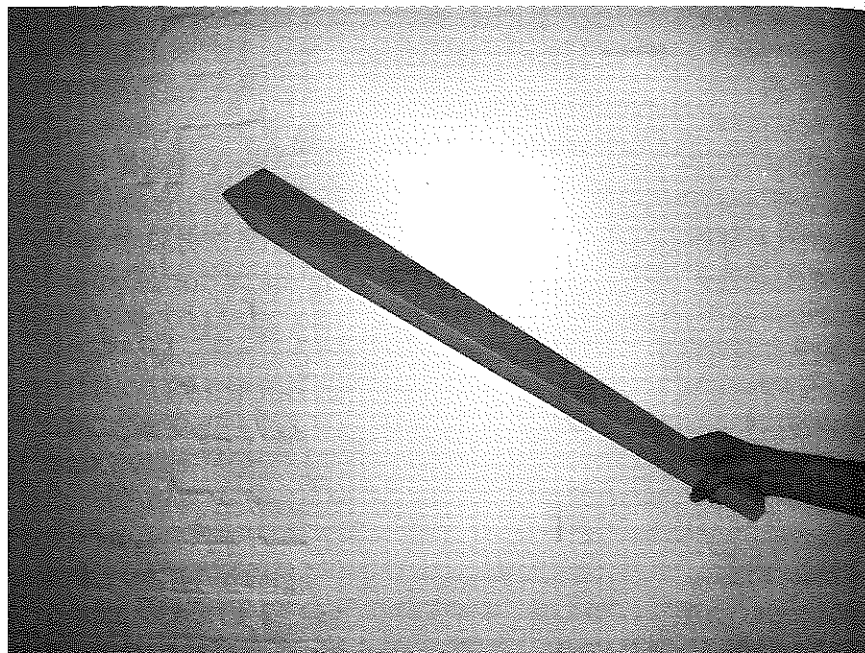


Figure 6. “Shoe slipper” used by conductors to disconnect a train from its power source. Photo by Noah McClain.

Similarly the public address system on a train can be oriented toward safety, albeit in an unauthorized way. A cleaner working inside a train reported,

I’ll go to the intercom system where the conductor gives his announcements, and I’ll go, “All right, people, be aware. There’s a pickpocket on the train.” And I’ll make an announcement over the, uh, you know, the PA system.

Now if my supervisor caught wind of me doin’ that I’d be in trouble . . . [asked why by the interviewer] because I’m not supposed to be in the conductor’s cab makin’ announcements cause I’m not a conductor.

Another instrument at hand that train workers can put to unauthorized safety use is the hardwood “shoe slipper” or “shoe paddle” as it is also sometimes called, which is yellow in color (figure 6). According to official procedures, train workers may use it to disconnect the train

from its power source, by inserting the shoe slipper between the shoe and the third rail. They may need to do so when, for example, someone is under a train and could be electrocuted by train components in live contact with the third rail.

Here is a conductor interviewee showing us the shoe slipper’s common use as a security instrument:

We’re not supposed to carry that for any other reason but to do that function [disengage the train]. But, when I go out there in the middle of the night, I don’t go out there without something [to protect myself].

One conductor describes how he was able to divert a ranting drunk away from passengers. He employed the shoe device to prop open the door to his compartment (which otherwise closes on its own) to divert the angry man’s attention away from passengers and toward himself:

It was a homeless person. He was getting up in peoples’ faces while they were sitting down. He was screaming at them, cursing at them. Daring them to get up and fight him. He was really really out there. And I was telling him, “Sit down and shut up already. Stop bothering these people.” And he’d come and scream at me, and I said, “Sit down. You want to sit here?” I propped my door open with a shoe paddle.²⁸ I said, “Go ahead. You can scream at me all you want ‘til the cops get here and take you off!”

While rules do not permit MTA employees even to touch a passenger, workers use the shoe slipper to wake up sleeping passengers sprawled across the seat or to nudge them along from one location to another. Other instruments as well have served as defensive weapons, according to reports—for example, a detachable train break handle. In a very uncommon report, a worker used his brake handle to hit a violent person.

Train operators also have horns they sound to herald their coming to anyone who may be in the way of the train around the next bend, including impatient passengers on platforms leaning forward to see if a train is coming. The horns are very loud, and hence operators sound them only as short bursts and only prior to entering passenger platform areas. They can go to full volume, which is literally deafening,²⁹ to warn of danger, as in cases where workers or others are on the tracks.

In many instances, such as an assault or robbery on board, train operators are instructed to “blow for police en route.” Blowing the horn in a particular pattern (long-short-long-short) sends a signal to police who might be within earshot, even several stations away. But horn blasting can also deal directly with perpetrators. A train operator once used his horn when he noticed a mugging attempt as he came into a station. He blew his horn loud and long as he came on the scene and kept it blaring. As he explains,

So the woman was getting mugged on the platform. Avenue H I think it was. So I blew the horn. Try to get him to leave her alone. I was slowing down in case these guys think about pushing her in front of the train. . . . And I started chasing them with the train but I couldn't go any further cause I came to the end of the platform.

The operator had hoped the sound of his horn, indicating an approaching train with an employee on board who could see what was going on, would dissuade the mugger. Or that the continuous blast, by sheer aural force, would disrupt the activity. As it happens, it did neither; the perpetrator got the woman's purse and made a successful escape. But the operator's reaction shows how the horn, and indeed the moving train itself, can be operated in an extemporaneous way to address a problem.

Besides locking in perpetrators, workers can use the individual car key feature to protect passengers from a repulsive and bloody mess, and hence the fears and anxieties that such visible residue of violence might induce. During one of McClain's sessions observing train crews, a teenage male was assaulted in one of the rear cars of a train. After police and ambulance responded to the call for help, the car had blood on the seats and floor, and rush hour was fast approaching. Lacking equipment or personnel to safely clean the train car, the MTA worker “keyed off” all the doors in that car—ensuring its doors would not open at station stops. The train was thus able to remain in service without further alarming passengers.

Admonitions to report all problems to supervisors pervade the *Rules and Regulations* book (MTA, 2003) and all deviations from strict procedures require permission from supervisors. Workers do strictly ad-

here to some rules, like the instruction for conductors never to close train doors without simultaneously having their head out the window, as explained earlier. But in many other cases, the rules (as with the equipment) are treated in a more ad hoc manner.

Unlike many other kinds of workers, such as members of a construction crew or clerks in a government office, subway workers do not typically have the resource of calling on adjacent workers for tips and real-time help.³⁰ When they do communicate with supervisors—known colloquially as “Control”—it is via radio or phone. Such communication is an example of what has been called “interaction in isolation.”³¹ Subway workers are not allowed to call police and firefighters directly. Although not all such contacts between a station agent and Control is for a major emergency, the contacts are voluminous—on the order of over 150,000 calls each year.³²

Summoning help always carries some risk of being misunderstood by the call-center operators or generating delays in action being taken. Examinations by social scientists (conversation analysts, as they are known in this case) of “calls for help” to 911 in the United States, clarify how, quite beyond the subway context, systematic difficulties can arise from phoned-in requests for aid.³³ In the 911 case, emergency dispatchers require specific information to fill in data fields before sending assistance, sometimes insisting that their questions be answered in a required order. This can lead to misunderstandings, delays, and disastrous consequences, including—in one instance yielded in the research by Don Zimmerman and his colleagues—death.³⁴ (A woman died as her frantic adult son was unable to follow the proper information sequence demanded at the other end of the line.) In responding to forest fire reports in Southern California, dispatchers cause response delays with questions aimed at determining who or what started the fire.³⁵ Emergency aid dispatchers, as in fire or crime reports, have two goals: gaining clues to who may be an arsonist or criminal and also attending to the need for aid. It can be a tricky balancing act trying to decide how much time and effort should go toward one goal versus the other, given the urgent need for fast action.

In the subway, workers must satisfy the information needs of Control (for example, “Are the people fighting on your train male or female?”).

They may be prevented from following what for them, at the moment, might seem a more common-sense narrative that would mobilize police or fire immediately. By the time help is on the way (and sometimes promised help just never arrives, according to our informants), the damage may be done, a culprit gone from the scene, or the problem already solved by workers and/or passengers. Control may not agree with workers' evaluation in any event, or the type of response may not correspond to what the worker thought necessary (for example, fire fighters arrive when it was police who were needed). For all sorts of reasons, then, workers may "take care of it" on the spot, as best they can. The arrival of help can also disrupt train service, and the request for this help, if not considered the proper response to a bona fide problem, can reflect poorly on the employee.

Especially when situations are highly ambiguous (they are always ambiguous to some degree), it comes in handy for those at the top of organizational hierarchies to decentralize responsibility for emergency aid "as far down the organizational line as possible."³⁶ If things go wrong, those below can take the blame. As Robert Jackall explains, "When blame is allocated, it is those who are . . . politically vulnerable or expendable, who become 'patsies', who get 'set up' or 'hung up to dry' and become blamable."³⁷ As much as possible, blame is set up to go downward.³⁸

Perhaps the most instructive instance of a subway worker under high stakes and organizational uncertainty comes from the World Trade Center site itself on the date of 9/11. One of those McClain interviewed was the operator of a train headed right into the World Trade Center–Cortlandt Street subway station as the building was about to collapse (the only such train reported to be doing so at that time and place). The train driver defied his orders to *not* stop. As he said during the interview,

They said continue in service, but bypass Cortlandt Street–World Trade Center. So I made the station stop at Whitehall and right around then is when they said, "All trains, northbound southbound, bypass Cortlandt Street." What happens is Command Center has to go by what they're hearing. They're in the office somewhere in Brooklyn: Jay Street. They

can't see what's actually happening, so they just run their playbook. They were running it as a "smoke condition." And as a rule of smoke conditions we bypass the station. You don't want to put customers onto a platform with smoke. You don't want to take smoke into the train.

But the train driver saw a waiting crowd, about four persons deep. The station was indeed in a smoke situation. As he entered the station, the train driver locked eyes with a woman anxiously waiting to board. He recalled,

And I had never seen that kind of fear in my life. I couldn't see her facial expression. All I could see were her eyes, and it was fear.

This cue of "her eyes" apparently convinced him to stop the train and take on the new passengers. As he told McClain,

Cause, um, I was disobeying orders. My order was to bypass the station. I made a judgment call. I made a judgment call based on experience, basically.

The train driver was intensely concerned about the immediate circumstance, but also how he was going to report the fact that he stopped the train against standing procedures as well as the specific instruction on this occasion:

Well, in my mind I'm thinking, "I know I'm going to have to hear about this one." So I was trying to figure out how I was going to write the . . . we call it a G2, and it's in the report. I was trying to [figure] out how to word it. Where, um, I minimize myself and my conductor getting into trouble.

As it turned out, the train operator made the right call; he surely saved many lives.

But he was right to have concern. Workers are wary of calling attention to themselves in general. It may force them to stay beyond a shift to make written reports or meet with agency officials. This may disrupt personal schedules, like complicating child-care or causing a worker to miss a ride home or commuter train. In these after-shift sessions, supervisors might scrutinize workers' accounts (or workers fear this will

happen), as they look for rule violations, including actions not even related to the reported incident. Perhaps the workers were standing in the wrong place at the time of the occurrence or they were wearing an unauthorized type of clothing or insignia.

By far the most prevalent reason for workers to resist rules, especially security dicta, is the risk of stopping the whole system. Not everything can be reported and corners must be massively cut in this regard. Given the range of things that go on in the subways, there is huge potential for false positives. Someone may tell an MTA employee that a suspicious bag has been left on a station platform. A worker tells us she “just kicks” bags to see what might be in them. Calling it in to Control risks a station closure, just like a conductor calling in a box left on a seat means that the train goes out of service. Major delays then occur and a worker who does not use common sense is, in Harold Garfinkel’s apt term, a “judgmental dope.”³⁹ That could mean discipline, including being “targeted,” as the workers say, for some other potential infraction.

Some instructions aimed against terrorist acts are seen as not capable of being of any use in an actual emergency. For example, the MTA issues masks, known as “escape hoods” to protect against chemical or biological attack to conductors, train operators, and track workers. The masks hang from belts at hip level in a plastic pouch. Station agents have a single mask in their booths. The MTA issues no masks at all to cleaners (who are on the lowest-paid rung of the job scale). Some workers think the masks add security to their work yet note they are meant for only fifteen minutes’ protection, maybe enough time to get themselves out of tunnels but not to aid others in doing so. Evacuations, they say, require great patience and the power of speech (which is muffled by the mask). The actual evacuation that McClain encountered in fieldwork in September 2004 (as opposed to the simulated one in the training reported earlier) occurred at midday on a lightly populated subway. A conductor and train operator collaborated to move all passengers into the rear car, which was very near a station platform. Passengers stepped from the train directly onto a two-foot-wide catwalk and proceeded fifteen feet to the platform. This calm and uncomplicated evacuation (as no one had to walk through tunnels or

climb emergency ladders) took about thirty minutes. In the experience of other evacuations, between 2003 and 2006, it took an average of one hundred minutes from incident to “open sky.”⁴⁰

The transit union has publicly complained that the emergency training offered to workers is merely perfunctory—the MTA distributes pamphlets to workers and offers a brief course that is especially inadequate in terms of showing how to assist the public. Workers are basically told, as one of our interviewees complained, to “cut and run”—something we know they don’t in fact do, judging from the examples already described. But given the paucity of equipment and other practical exigencies, cut and run may at times be the only realistic course. And beyond a mask shortage, or the proliferation of masks that hinder communication, there are deep problems of infrastructure, like inadequate lighting and signage, indecipherable audio messages, and emergency platforms that are only marginally accessible—they are often too narrow for a significant group of people to make their way out.

The details of turnstiles, otherwise so routine, become critical during evacuations. Early New York subway turnstiles provided relatively little obstruction for those needing to exit in a hurry, as evidenced in a 1943 photo (figure 7). But that meant they also did little to obstruct people from entering without paying their fare. Whether young or old, frail or obese, people could climb over or crawl under and get a free ride. Out of concern to “protect the fare,” the modern turnstile emerged with sloped entry panels, bars placed just above head level, and angled flanges on the turnstile itself (figure 8). Although claimed by its creators to have been “designed with reference to the human body,” it was based, as made clear in the patent application for the equipment, on the bodies of U.S. military servicemen. Even within that constricted population, only the bodies of the middle 90 percent of the sample were taken into account. The design method traveled from the military to the subway turnstile without adjustment for sizes and physical capacity of the civilian population. Some people have crutches, guide dogs, babies, strollers, large packages, or luggage. Bulky coats, worn in a New York winter, add further girth.⁴¹

The most ambitious turnstiles for warding off fare beaters are the so-called high-entry (HEET) models, which are harder to cheat, at



Figure 7. Subway turnstile, 1943. Image courtesy of New York Transit Museum.

least by using the usual techniques. Observing with McClain and me, sociologist Christine Nippert-Eng, while spending a few days with us as a consulting field researcher, named it “the garlic press” (see figure 9). It prevents people from jumping over or crawling under (although not from coupling up and squeezing through on a two-for-one entry). Whatever has been gained or lost in paid fares, there is a potential security cost. Entry or exit takes more time. Especially when a crowd is trying to exit, people can routinely be seen in line waiting their turn, many dozens of them sometimes. When the MTA originally installed the modern garlic press, they were in noncompliance with the state fire code, which requires greater capacity for exit. Any evacuation will take longer than in the past when the very vulnerabilities of the machinery for fare beating provided a kind of emergency safety valve.



Figure 8. Contemporary turnstile with sloped side panels and other features to ward off fare beating. Photo by Noah McClain.

In one vivid example of security backfire, police were delayed in responding to a platform shooting because they lacked MetroCards. They had to borrow fare cards from others to enter.⁴² A man bled to death in the interim. Getting medical equipment in is made more difficult as is getting an ailing person out (imagine a gurney trying to pass through the turnstiles). In partial compensation, the MTA announced it would provide police (and fire officials) with MetroCards, and I’ve seen them use them.

Responding to the evident problem of the HEET turnstiles, the MTA installed additional emergency exits at platforms (see figure 10), untested in terms of evacuation numbers but certainly an improvement (although in some exit corridors the HEET models remain the only way out). The emergency exit doors have now been thoroughly tested in terms of unauthorized use. People hold open the exit doors (one kid pays to go in and holds the door open for his friends). Or



Figure 9. HEET turnstile, a.k.a. "garlic press." Photo by Noah McClain.

people happening on the scene take advantage of someone making his or her way out and grab the door to go in. Either way, non-payers gain free entry, making the whole system more permeable. As people push open the emergency doors, an alarm sounds for about thirty seconds. These alarms, contrary to early specifications, are connected to nothing. During busy times in busy stations, the opening of these doors creates a continuous piercing noise, adding an unwelcome sound to an already noisy environment—but also rendering incomprehensible, or potentially drowning out all together, any instructions made over loudspeakers or by emergency personnel.

System redesign may not end cheating or add to security, but it does alter the ways to cheat and the kind of people who do it. It turns out that a spent MetroCard can be bent in such way that fools the machine. People with the right skills stand at the turnstiles and sell swipes, usually well below the price of a normal ticket (one dollar instead of two).



Figure 10. Emergency exit. Photo by Noah McClain.

They can also guarantee themselves plenty of business by jamming up nearby MetroCard vending machines with chewing gum in the money and credit card slots, making their swipe business the only alternative for some customers. Subway cheaters have been pivotal in the city's anticrime quality of life campaigns; arresting them is thought an important part of the "broken windows" strategy to head off big crimes by stopping small ones. Perhaps because of the nature of the culprits (poor and black or Hispanic young men), authorities have increased penalties of fare evasion. By explicitly alleging that they were hurting efforts to fight terror,⁴³ the state legislature increased the penalty from simple violation to a misdemeanor to a crime with penalties of up to three months in jail for those selling swipes. In 2005 prosecutors began interpreting the crime as felony forgery, with a potential of seven years imprisonment. In the first six-month period, sixty-one individuals had such charges leveled against them.⁴⁴

In any event, the cheating problem remains unsolved despite the legal and mechanical interventions. At one recent point in time, the authority estimated as many as 10 percent of passengers to be free riders. For the year 2008, the MTA had estimated lost revenue of \$7 million; a recalibration led to a reestimate of losses at \$27 million.⁴⁵ Unlike when phony tokens deposited in fare boxes could be counted up and proper estimates made of that mode of cheating, newer technologies eliminate such precision. Card-bending leaves no trail. As McClain elegantly summarizes, "Through these progressive iterations against fare evasion, the MTA in effect chased the problem out of accountability."⁴⁶ And this also means, as does happen with increasingly complex technical apparatuses, the organizers are hoisted on the petard of their own technical sophistication.

WHAT TO DO?

Our master guiding remediation principle for this chapter on the subways is the need to acknowledge everyday work practices and their instrumentation as guiding emergency response, in the past and for the future. The key ingredient is people's ordinary sense making that, in Karl Weick's term, must not be pressed into "collapse."⁴⁷ That means there needs to be integration of security precautions with the actual jobs that workers do and the manifold tasks they undertake. And, yes, this may mean accepting some fare beating and other inconvenient outcomes. Some of the specifics follow on.

- *Attend to workers' practices.*

Authorities should know and respect workers' repertoires for dealing with ordinary problems, including those based on their experiences with outside agents. If workers think their supervisors have bad information, they will not treat instructions given to them as bona fide. If they think their supervisors do not take into account job exigencies at hand, they will discount their directives. If they think bosses' initiatives are silly, they will deride rather than follow them. Remedies for dealing

with such disjuncture are either to change the routines of the work situation (easing, for example, the vulnerabilities to human and mechanical challenges) or to make sure instructions take those contexts into account. Understanding the mundane is the best route for addressing the spectacular.

This orientation aligns well with that of the master security analyst and distinguished psychologist Elliot Aronson. From his studies of how people respond to campaigns to use condoms or conserve water, he concludes that they will ignore advice they do not consider trustworthy.⁴⁸ Besides their own routine experience with how the system operates, our subway workers know that the "See Something" campaign is preposterous and the signs that tell how many New Yorkers "Said Something" are no less ridiculous. Unless advice, following again Aronson, is concrete, doable, and credible, it will yield nothing—something judged to have been the case with the DHS color code warnings and the much-derided advice to have a "safe room" sealed off with duct tape.⁴⁹ An alternative to all of it is to abandon these earmarked and official security measures and concentrate on the daring alternative of just making things better—creating conditions that have the effect, quite counter-intuitively, of indeed adding to security. I list some of them for the subway system.

- *Improve ventilation.*

If there is a chemical attack or just a pile of newspapers set on fire, better ventilation will save people from smoke inhalation or visibility problems. In terms of workers' long-term health, less steel dust from wheels on tracks will reach their lungs. And, until an attack happens, everyone will breathe easier; perhaps also, if the MTA plays the infrastructure right, stations will be less stultifying in summer and cold in winter.

- *Fix communication.*

In an emergency, people need to be in touch, two (or more) ways if possible. During the World Trade Center disaster, almost all systems collapsed: radio, television, and even cell phones. The notoriously

primitive loudspeaker systems of the New York subways (a routine joke among passengers), as well as the so-called emergency communications system for workers, leave much room for improvement. Indeed, the workers have only the most primitive means of communicating with one another and with their supervisors. Think of the poor subway conductor approaching Ground Zero, trying to get accurate information.

Passengers need to know if they are being advised to go to a particular exit, to remain in train cars or to vacate, to walk to the right or the left in the tunnel, away from the third rail. Like those in the factory pulling at the locked doors, they will, without being able to understand what is being said, perish. But again, good sound brings a bonus for the everyday. People will be less tense because they know which stop is theirs and which train has been rerouted to what track. New York's subways, at this writing, still do not have cell phone service in most places, in part out of authorities' fear that cell phones could be used to trigger a bomb. With cell phones, of course, individuals could also warn one another as well as authorities of real-time danger. Another way to improve communication would be to decrease noise levels. The antiquated cars and tracks screech and squeal; that creates a communication problem as well as aural discomfort. Modernizing them would be another everyday amenity that would also enhance safety.

- *Improve signage.*

Even on a good day, passengers have trouble figuring out which way to the street and, where there are multiple exits, to a particular street. If passengers are to learn that a particular exit is closed, they need clear markings so they can know, without hesitation, the best alternate route. And they need it, in a polyglot city, in a way that does not require knowledge of English. "Way finding," and there is something of a science of it, is another aspect of emergency infrastructure, and if it is good, it is good 24/7. It's as simple as this: people are safer when they know where they are. And the learning occurs in the routines of everyday use as individuals notice out of the corner of their eye the markings for exits and routings they ordinarily have no reason to use.

- *Make better stairways, corridors, ledges, and platforms.*

Because of their origin as separate competing private companies and also years of deferred maintenance, the subways are mazes of make-do add-ons. Anything that clarifies and simplifies helps with safety—and again makes things more pleasant day in and day out. Stairways should not be limited by their "behind the scenes" functionality like toilet stalls left in architectural silence. They should be made visible from floor areas to enhance safety as well as to let in light to enhance pleasantness. Vertical columns now press bodies close to the platform edge, complicate evacuation, and obscure vision. They need realignment or elimination.

Also making matters worse for quick exits, escalators break down and are blocked off routinely—not just put into disuse, but left with empty voids where landings need to be. So in a power failure they can not even be physically climbed. Lack of an escalator does not just create inconvenience and pain for the aged, injured, and those with luggage, it yields hazard by pressing passengers into a narrow stairway. Routine maintenance and fast repair thus not only make life better, but also make things more secure. In some instances, escalators are blocked off for years because the developers who pledged to maintain them as a condition for their high-rise building permits fail to do so. Unlike friends and neighbors, these developers are less likely to spontaneously jump in to help; they need to be forced into compliance.

- *Lose the HEET.*

Designed to protect against those who would cheat, turnstiles evolved to become increasingly difficult for all users, and the HEET models must go. They reflect a continuous narrowing of the range of human beings who can pass with comfort and safety. They embody the opposite of "universal design"—the idea that in serving the needs of everyone, including the disabled, a good device enhances benefits for all. One of the most famous lines of universal design products are Oxo Good Grips kitchen tools, first developed to aid people with limited

hand capacity but then found to be better for everyone. And they now dominate in their industry.

An even more universal alternative is to get rid of all turnstiles completely. An honor system, as practiced in various parts of the world, sometimes involves random checks with penalties for nonpayment. In other cases, I have been told Norway is one such place; people there consider transportation enough of a government responsibility that authorities are not too exercised about some cheating. In the United States, much of central Portland, Oregon, is a free ride zone as are ski resort areas. It is life enhancing to just walk in and walk out, spared the ordeal of finding the card, making sure it has enough money on it, and assuming the swiping pose (while balancing packages, babies, and suitcases). Some business models have a built-in degree of theft ("shrinkage"), sparing employees from scrutinizing every customer. Not just luxury stores but also low-end chains and web-based merchants allow returns "no questions asked." Some museums have only "voluntary" contributions, but a great majority of patrons do choose to pay the "suggested" fee with the result that admission income is no less than 75 percent of what would result if everyone paid full price.⁵⁰ Meanwhile the museum can let up on fare policing, while expanding its audience and serving those with financial difficulty, which is useful for private fund-raising as well as public relations. At Apple stores, as with Singer sewing machine centers generations ago, people get free advice regardless of whether or not they buy. But buy they do; Apple's midtown NYC branch had the highest per-square-foot gross of any retail space on Fifth Avenue.⁵¹ Starbucks lets pedestrians come in off the street to use the toilet and provides sofas and electricity for laptop users. Many if not most private employers let workers use paper, copy machines, and other goods and equipment for "unauthorized" private purposes. It is all part of the slack.

For subway workers, doing away with the turnstile would also mean a nicer day. They would have less exposure to customers' anger about cards that don't work, machines that malfunction, and rides that were paid for but not taken. Staff could devote more of their time to other aspects of the job, including watching out for real trouble. Homeless people, who ride the rails all day, could more easily exit and reenter the

stations, which in turn would allow them to come up and relieve themselves in a more appropriate place rather than urinating or defecating in the subway system.

- *Light better.*

Enhanced lighting and durability, particularly at exits, would pay off in a moment of crisis, as well as improving conditions at most all other times as well. Will there be disorienting glare or will lighting be crisp? What objects are lit, not just on the platforms but also in the system's innards that people may have to negotiate? And what is the system redundancy, not just to handle catastrophe but routine troubles of power failure? Improve on all fronts.

- *Clean it up.*

Ordinary construction crews know that an unkempt workplace causes accidents. In the subway, dirt and grime obscure signage and may cause people to slip and fall. Helter-skelter environments facilitate chaos in times of emergency. After exhaustive investigation, officials judged track debris the culprit for the 2001 Baltimore freight-train-tunnel derailment and fire that lasted five days and virtually shut down central Baltimore. In the chemical conflagration 2,554 gallons of hydrochloric acid were released from one of the tank cars, with additional toxic chemicals spilled from others.⁵² The solution for Baltimore, as for subways in general, is to implement regular inspections and a higher standard of order and cleanliness.

Greater cleanliness brings a much-used public facility into conformity with how people routinely live in their private spaces. Societies differ in the standards of comfort and pleasantness between the public and private. In the United States the discrepancy seems extreme, with the standard for public facilities, especially the subway environment, falling far below the level of cleanliness that residents achieve in maintaining their own living space. This means that people notice the low standard of the public facility and might well support a higher one, and pick up some nonobvious security benefit in the bargain.

• *Keep humans.*

Finally, what about the MTA employees? We learned that real security is provided by context-sensitive inventiveness by people not charged with doing security—without benefit of special budgets and without armaments or much coercive authority over others. In the language of security organizational analysts, they have “high mission valence”⁵³—they are committed to keeping people safe. And they do countless things for others along the way, including giving advice to tourists, uniting families with lost children, and compensating for decrepit and faulty artifacts. They are security bulwarks. Humans alone scan, know, and remedy. Somewhere and somehow their presence and goodwill seem key.

Whether in respecting the role of the workers or upgrading the passenger experience, the best way to enact security is by doing things that do not look like security at all. Improving subways to make them more efficient and pleasant can make them more resilient and safe. Such improvements are not *alternatives* to investing in security, but the most important aspects of it. Officials can lessen danger by implementing measures that are inconspicuous, passive vis-à-vis both customers and workers. It is akin to what has been called “crime prevention through environmental design,”⁵⁴ but more generous in spirit, delivering benefits that can stand even if there are no attacks, which is the overwhelming likelihood for any given context. Improvement in everyday infrastructure bodes well for resilience, and at relatively low cost. A gentler subway provides for people and enables them toward solutions of their own safety and survival.

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Wrong-Way Flights: Pushing Humans Away

Airports have turned out badly. It takes about the same amount of time to travel through air today as it did dozens of years ago, but a lot longer time to get off the ground. Security procedures change not just the timing, but exact huge costs in money, mood, and resentments with consequences far and wide.

When I was young, my family was not the only one that, however bad the food, would go to the airport to have a meal. Just being *around* air travel was a treat. The idea of travel has long been an excitement. We find it in prose, poetry, and song—particularly since safe and fast mechanisms, especially planes, have appealed to a wide audience. Air travel feeds on the basic human desire to “get out”—up, up, and away. The Italian song, “Volare” (“to fly”) won two Grammys and was the Billboard top single of 1958. “Come fly with me,” echoed Frank Sinatra in his huge hit album of that name in the same year. Some of the frisson may have been fed by a sense of some danger; flying was indeed less safe in those days. To help assuage and assure while at the same time performing little miracles of hot meals even on short flights, air carriers larded on cocktails, shrimp appetizers, and attractive young stewardesses. And people could visit the gates to see one another off and meet those coming in, sometimes with large (and animated) groups of well-wishers and greeters.

Before 1973, when a number of hijackings prompted the U.S. government to take restrictive action, people entered airports as casually as they now go into department stores. Indeed, air travel’s festival nature invited joining the “jet set.” Security was so informal that people could actually give their tickets away or exchange them with one another (as long as genders more or less aligned with the names on the tickets). This could provide quick and easy solutions to life problems that might arise—for example, “I can’t go to the wedding, so you go.” A “fly-away” Michigan fraternity party, held at the Detroit airport,