# ACRP Report 40 Airport Curbside and Terminal Area Roadway Operations

## Appendix E

#### SUMMARY OF FOCUS GROUPS

This appendix presents the results of focus groups conducted with (1) airline passengers, (2) airport ground transportation staff, and (3) commercial ground transportation vehicle drivers and owners. These focus groups were conducted to obtain opinions regarding the airport curbside levels of service and the operations and physical factors that define those levels of service.

At the beginning of each focus group, the moderator welcomed the participants, explained that the results of the focus group were to be used to support a federally funded research project concerning airport roadways and curbside operations nationwide, not the operations at a single airport. The moderator assured the focus group participants, particularly the commercial vehicle drivers, that their comments would be presented only in summary form and would not be attributed to specific individuals.

A moderator's guide prepared specifically for these focus groups, which included suggested questions, was used during all of the focus group sessions. Jacobs Consultancy slightly modified the guide after conducting the focus group sessions during the AAAE workshop to reduce the number of questions to be asked during the focus group sessions conducted at the AGTA meeting. The list of questions was also provided to JD Franz Research, Inc., and incorporated into the moderator's guide used to conduct airline passenger focus group sessions.

Unfortunately, the photographs of curbside levels of service that were used successfully during the airline passenger focus group sessions were not incorporated into the focus group sessions of airport ground transportation staff or commercial vehicle drivers. The airport ground transportation staff focus groups were scheduled for 90 minutes, with some lasting longer. The commercial vehicle driver focus groups were scheduled for about 60 minutes, with a few lasting about 75 minutes.

## **FOCUS GROUPS OF AIRLINE PASSENGERS**

The research findings presented below were derived from four focus groups that were commissioned by Jacobs Consultancy on behalf of Airport Cooperative Research Program (ACRP) Project 7-02 and conducted by JD Franz Research, Inc. The focus group sessions were held on July 11 and 12, 2007, in California and on July 24, 25, and 26, 2007, in the Washington, D.C, metropolitan area.

#### Overview

The first focus group session, held the evening of July 11, 2007, in Sunnyvale, California, was attended by 11 people. The second and third sessions, held the evening of July 12, 2007, in Fremont, California, were attended by 7 and 10 people, respectively. The fourth, fifth, and sixth focus group sessions, which were held the evenings of July 24, 25, and 26, 2007, in Bethesda, Maryland, were each attended by 10 people.

All six groups consisted of airline passengers who travel at least four times per year. In recruiting potential group members, every effort was made to obtain a cross-section of passengers in terms of gender, numbers of trips, familiarity with area airports, types of travel, and age. Specific screening criteria were as follows:

- A mix of males and females
- A mix of numbers of annual trips in the ranges of 4 to 6, 7 to 9, and 10 or more
- Familiarity with at least two area airports (Oakland, San Francisco, and Mineta San Jose international airports in California and Baltimore/Washington International Thurgood Marshall, Washington Dulles International, and Reagan Washington National airports in the Washington, D.C. area)
- Users of curbsides and curbside facilities
- A mix of national and international travelers
- A mix of business and leisure travelers
- A mix of ages in the following ranges: 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55-64, and 65 and older, with the understanding that the youngest and oldest age groups would be less likely to be eligible for participation in the focus groups

Those working in the marketing profession; those employed in the travel industry, by airport operators, or by airlines; recent focus group participants, and those expressing extreme or uncaring views were screened out.

The primary purposes of the focus groups were to determine what airline passengers want regarding airport curbsides as well as what they like and dislike about existing facilities. Specific areas of inquiry included the following:

- Introduction of participants and study
- How people usually get to the airport
- The extent to which they use curbside facilities (screening and introductions)

- Impressions of the curbside facilities at various area airports
- Likes and dislikes about existing curbside facilities in the area
- Particularly good facilities at other airports
- What the ideal curbside would look like
- Impressions of various curbside service levels

### As needed, further inquiries focused on:

- Attitudes about double and triple parking
- Attitudes toward multiple curbsides
- Opinions about reserved spaces for public transportation
- Feelings about lighting levels
- Issues regarding air quality
- Attitudes toward law enforcement personnel
- Opinions about cell phone lots and free short-term parking

Because this research was qualitative rather than quantitative, it is not possible to generalize the results to the population from which the participants were selected. Thus, although this appendix does contain conclusions and recommendations, they should be viewed as tentative rather than definitive and subject to confirmation via quantitative research.

## Summary

From the results of these focus groups, it would appear that airline passengers are remarkably consistent with respect to their desires and expectations regarding airport curbsides. Neither geography nor travel characteristics seem to play a role; the findings are essentially the same regardless of group location and type of passenger. Following are the research team's conclusions regarding how airline travelers view the curbside of the future.

### 1. Curbside Sidewalk Layout

Curbs should be wide and spacious for four reasons: to provide a reasonably pleasant atmosphere, to prevent crowding that impedes mobility, to facilitate pedestrians' ability to walk both between and into terminals, and to ensure that passengers are not at risk of being pushed into traffic. Curbs should be covered at a minimum, and ideally climate-controlled. Signage should be clear and prominent,

including directions to parts of the curbside, areas within the terminal, and various types of ground transportation. Lighting should be adequate to ensure safety.

A curbside layout should be available on the Internet where travelers buy tickets. Such a diagram should also be available other places for those who do not have Internet access.

#### 2. Curbside Roadway Traffic Flow

Although passengers understand that airport traffic will be dense, they expect it to be organized rather than chaotic. Ideally, two law enforcement officers would be present at the curbside: one to direct traffic and one to guide vehicles in to the curbside spaces.

Law enforcement should be strict but not unreasonable. In addition, law enforcement officers should be polite and not arbitrary.

To improve traffic flow further, passenger drop-off and pickup should be organized. Those individuals picking up airline passengers would appreciate the following: cell phone lots, free or reduced-rate short-term parking, and dedicated passenger pickup lots. Doorways or pylons at which passengers can be picked up should be near exits and baggage claim and should be clearly marked with numbers, letters, or colors.

Arrivals and departures should be on separate levels; there might even be a third level for public transportation vehicles. If there are only two levels, there should be a separate island for buses, shuttles, taxicabs, and the like.

Multiple traffic lanes would ensure that drivers who want to pull over can do so and that drivers who need to pass can do so as well. If double parking is permitted, it should be controlled by traffic officers; triple parking should not be allowed.

#### 3. Pedestrian Access

Although there was almost universal agreement among the focus group participants that a separate curb should be provided for the broad array of public transportation vehicles—from buses to hotel courtesy shuttles to taxicabs—there was also widespread concern about pedestrians crossing multiple lanes of traffic. Signals and traffic officers were viewed as providing a modicum of safety, but at the same time, impeding traffic flows; overpasses and underpasses were viewed as being particularly safe, but also potentially difficult to navigate.

As a result, no consensus emerged on this topic. Perhaps the most intriguing idea, which is similar to the design of some railroad stations, was for stairwells and escalators to be connected to moving underground walkways that would deliver people to the correct island.

One other request was that all rental car companies be in the same facility, ideally across the street from the airport. Although the latter seems particularly suited to smaller airports, it was requested at larger ones as well.

Finally, participants suggested that rental car shuttle buses be targeted to airlines rather than being specific to rental car companies so that multiple stops could be avoided. The practicality of this suggestion may merit further consideration.

#### 4. Handicapped Access

At present, the number of designated spaces for private vehicles transporting the handicapped is inadequate. There are also too few curb cuts for wheelchairs. Finally, it is not always clear from curbside signage where wheelchairs are available. The ideal curbside would be substantially more accessible to the handicapped.

## 5. Baggage Check-in

Curbside baggage check-in facilities should be adequately staffed with competent and knowledgeable personnel. Lines should not be too long, and there should be neither a charge nor the expectation of a tip. Electronic check-in kiosks should be installed outdoors as well as indoors. Finally, one somewhat futuristic participant suggested that bags should simply be chipped so they could be dropped off and forgotten.

#### 6. Amenities

Helpers should be available at curbside to provide assistance with baggage, the elderly, and children for departing passengers and to provide transportation information and guidance for arrivals. Curbside personnel should also be available to make sure that access to public transportation vehicles is organized.

Baggage carts for those preparing to depart should be available at the curb, and they should be free. Besides being an amenity, it would improve the flow of passengers.

Pay telephones should be available for those whose cell phones have died and who need to call drivers or public transportation providers. There should also be adequate seating for those who are waiting to be picked up. Activities for children or playgrounds should be available. Finally, several people suggested a free nicety, such as water or coffee (or in a few cases, wine or liquor).

#### 7. Electronic Signage

A number of suggestions were made for electronic signs on approaches to the curb and at curbside. These included departure gate listings, flight status reports, level of traffic congestion advisories, and wait times for check-in. Any or all of these may have sufficient merit to warrant further study.

## 8. Exemplary Airports

Airports that were viewed by multiple groups as having exemplary curbside operations included Denver International, Las Vegas McCarran International, John Wayne (Orange County), and Phoenix Sky Harbor International airports. Reasons for these selections were as follows:

## **Denver International Airport**

- Spacious
- Not congested
- Flows well
- Designed for growth
- Good signage
- Multiple islands for mass transit
- Two lanes between islands, one for drivers to pull over and one for drivers to maneuver around those who are pulled over
- Cell phone lot that is easy to get to
- Doors for pickups clearly designated

## Las Vegas McCarran International Airport

- Simple design
- Flows well
- Connectors make it easy to get around
- Two levels
- Good signage
- Staff present to give directions
- Good curbside check-in with no lines
- Different exit doors for different transportation modes
- Dedicated passenger pick-up lot
- Reasonably priced metered parking
- Short-term parking garage
- All rental car companies are in the same area

### John Wayne Airport

- Two levels
- Drivers can dwell at the curb to pick passengers up

## Phoenix Sky Harbor International Airport

- Large and well-designed
- Wide roadways
- Each airline has its own facility
- Good shuttle pick-up
- All rental car companies in a single place

Those considering the curbside design of the future may wish to tour these airports in order to determine in more detail why these features are so appealing to passengers.

#### FOCUS GROUPS OF AIRPORT GROUND TRANSPORTATION STAFF

To maximize the number of participants in these focus groups, they were conducted during two conferences that regularly attract many airport ground transportation staff. These conferences were the:

- American Association of Airport Executives (AAAE) Ground Transportation and Landside Management Workshop held in Phoenix, Arizona, on November 6-7, 2006
- Airport Ground Transportation Association (AGTA) Spring Meeting held in Fort Lauderdale, Florida, on March 21, 2007.

At each conference, the conference sponsor introduced a representative of the research team who explained the purpose of the Airport Cooperative Research Program in general and ACRP Project 7-02 in particular, and then invited the conference attendees to participate in the focus groups. Over 90% of airport ground transportation staff attending each conference agreed to participate in the focus groups.

More than 25 airport ground transportation staff participated in the focus groups held during the AAAE workshop. These staff included representatives from the airports serving Atlanta, Calgary, Charleston, Dallas-Fort Worth, Denver, Detroit, Greensboro, Houston, Las Vegas, Little Rock, Los Angeles, Memphis, Orange County, Phoenix, San Antonio, San Francisco, and Seattle, with several airports represented by more than one staff member. These individuals were assigned to one of three concurrent focus groups by airport size—large, medium, or small hub. Each group was moderated by a Jacobs Consultancy staff member who led the participants through a series of open-ended questions and tape recorded the discussions.

More than 30 airport ground transportation staff participated in the focus groups held during the AGTA meeting. These staff included representatives from the airports serving Asheville, Atlanta, Birmingham, Charleston, Chattanooga, Chicago, Dallas (Love Field), Dallas-Fort Worth, Denver, Detroit, Fort Myers (Southwest Florida), Halifax, Little Rock, Miami, Minneapolis-St. Paul, New Orleans, San Francisco, Tampa, Toronto, and Winnipeg, with several airports represented by more than one staff member. These individuals were assigned to one of three concurrent focus groups, generally, but not rigorously, by airport size (e.g., large, medium, or small hub). Each group was moderated by two Jacobs Consultancy staff members who led the participants through a series of open-ended questions and tape recorded their responses. Two of the participants in the focus groups at the AGTA meeting had attended the focus groups at the prior AAAE workshop and these individuals were asked to assist the focus group session moderators rather than participate in the focus groups.

The findings and conclusions from the airport ground transportation staff focus groups are provided in combination with the findings and conclusions from the ground transportation vehicle drivers and owners focus groups presented in the next section.

## FOCUS GROUPS OF COMMERCIAL GROUND TRANSPORTATION VEHICLE DRIVERS AND OWNERS

A focus group of the owners and senior managers of airport ground transportation service providers was conducted during the AGTA meeting in Fort Lauderdale on March 21, 2007. This focus group consisted of 10 participants (two from one company) whose companies operate at the airports serving Chicago, Dallas, Fort Myers (Southwest Florida), Los Angeles, Milwaukee, New York (Kennedy and LaGuardia), Norfolk, and Washington, D.C. This focus group was moderated by four Jacobs Consultancy staff with support from an airport operator.

Focus groups of the drivers of taxicabs, parking shuttle buses, and on-demand shared-ride vans (SuperShuttle) and traffic control officers were conducted at Washington Dulles International Airport on July 23 and 24, 2007. Focus groups of the drivers of taxicabs, on-demand shared-ride vans, and courtesy vehicles serving hotels/motels and off-airport parking lots were conducted at Oakland International Airport on August 30, 2007.

Five separate focus groups were conducted at Washington Dulles International Airport with the participants organized by type of ground transportation service. One focus group was held with airport parking shuttle bus drivers (seven participants; not all participants were able to remain for the entire session), two groups consisted of SuperShuttle drivers (one group with eight participants and a second group with six participants), and two groups consisted of taxicab drivers (each group had eight to ten participants). Informal meetings were also held with three traffic control officers. Each commercial vehicle driver focus group at Washington Dulles International Airport was moderated by a Jacobs Consultancy staff member who tape recorded the results and comments.

Four separate focus groups were conducted at Oakland International Airport. Again, the participants were organized according to the type of ground transportation service they operated. The first group consisted of five hotel/motel courtesy vehicle drivers, the second group consisted of five off-airport parking lot courtesy vehicle drivers, the third group consisted of nine on-demand shared ride van drivers, and the fourth group consisted of six taxicab drivers. Each of these focus groups was moderated by two Jacobs Consultancy staff members who led the participants through a series of open-ended questions and tape recorded their responses.

## FINDINGS AND CONCLUSIONS OF AIRPORT GROUND TRANSPORTATION STAFF AND COMMERCIAL VEHICLE DRIVERS AND OWNERS FOCUS GROUPS

## 1. What is the purpose of an airport terminal curbside?

Most airport ground transportation staff indicated that the primary purpose of an airport terminal curbside is to serve as the transition point between surface access modes and the airport terminal, namely the point where customers enter or exit a ground transportation vehicle. Others indicated that the curbside should (a) facilitate the movement of passengers and visitors into and out of the terminal area (including

the movement of pedestrians, private vehicles, and commercial ground transportation vehicles), and (b) welcome visitors and returning residents to the community and accommodate private vehicles and commercial vehicle operations.

Airport ground transportation staff also stated that the purpose of a curbside was to serve as a "point of sale" where commercial vehicle drivers and other company representatives greet arriving customers and help them select a travel mode. Thus, visibility and proximity to the exit doors were mentioned as key considerations by drivers and owners.

## 2. What does the traveling public expect when they approach a departures (drop-off) curbside? An arrivals (pickup) curbside?

Airport ground transportation staff indicated that travelers expect efficiency, courtesy, timeliness (relative to on-time performance by scheduled ground transportation providers and minimal waiting times for on-demand transportation providers), accessibility, security, and friendly service. Some airport staff felt that travelers expect increasing levels of congestion at busy airports such as LaGuardia.

Other airport staff felt that travelers expect to (a) readily find the desired ground transportation service (good signage and visibility), (b) encounter short walking distances, and (c) have weather protection. On the departures level, it was stated that travelers expect to find skycap service and "open" curb space that is not reserved for specific vehicles or transportation services. On the arrivals level, travelers expect to find space near their baggage claim area and to be able to quickly get in and out of the curbside area.

Commercial vehicle drivers and owners also felt that travelers expect to find the desired service easily and quickly enter (or exit) the airport terminal area roadways. Many comments were made about the need for good signage. It was also recommended that there should be clearly designated spaces for buses (and other large vehicles).

## 3. What do commercial vehicle drivers expect when they approach a departures or arrivals curbside?

Airport ground transportation staff felt that commercial vehicle drivers expect fairness (i.e., a level playing field), clear guidelines (rules and regulations) describing how they are allowed to operate, curb space reserved for their use (particularly for passenger pickup), and accurate flight information displays. Some airport staff indicated that commercial vehicle drivers/owners expect the airport operator to make their business "successful."

Commercial vehicle drivers and owners also described a need for reserved curb space locations, sufficient operational space for large vehicles, safe areas (no pedestrian crossings in front of commercial vehicle zones), covered boarding areas, easy (congestion free) access and egress, and clear signage. Some drivers requested

that the airport operator inform them of the rules and regulations and enforce these rules and regulations fairly.

## 4. What do [you think] airport operators expect (or need) from a properly functioning curbside?

Airport ground transportation staff expect traffic to move efficiently, few queues of vehicles or pedestrians, and no drivers out of their vehicles (no unattended vehicles). At least one participant felt that airport management places a higher priority on parking and considers ground transportation operations and curbsides to be a lower priority.

Few airport ground transportation staff addressed this comment. It was not included in the moderator guidelines for the focus groups held during the AAAE workshop.

Commercial vehicle drivers and owners indicated that airport operators need to provide more curb space and to provide a separate but consolidated area for commercial vehicle passenger pickup where vehicles can enter and exit easily.

## 5. What are the characteristics or metrics that indicate that a drop-off or pickup curbside is operating satisfactorily?

Airport ground transportation staff had difficulty identifying the characteristics that indicate that a curbside is operating satisfactorily. They were unable to reach consensus on the amount of delay or length of queues they considered acceptable (or unacceptable) as both vary by customer and type of ground transportation service. Several staff indicated that the key indication of satisfactory operation was not receiving any (or few) complaints from senior airport management or others. Other staff indicated that they relied on comment cards, looking out the window, or the number of people waiting at the curb to determine satisfaction.

Commercial vehicle drivers addressed topics such as clear signage for customers, allowing shared-ride and taxicab starters to be positioned in a location to greet potential customers, and not requiring commercial vehicle passengers to cross a roadway.

Taxicab drivers discussed control of line-jumping by taxicab drivers, placing the taxicab hold lot closer to the terminal (to improve response time), and allowing drivers to leave their vehicles unattended while they assist elderly or disabled passengers. They also suggested posting signs showing fares to major regional destinations.

# 6. What are the characteristics or metrics that indicate that a drop-off or pickup curbside is not operating satisfactorily?

Similar to the response to Question 5, airport ground transportation staff did not identify specific characteristics or metrics that indicate when a curbside is not operating satisfactorily. Some airport ground transportation staff indicated that

they relied on the number of complaints they received to determine dissatisfaction. Others suggested that long vehicle queues that prevent or severely delay motorists from getting to their drop-off (or pickup) point are a good indication that a curbside is not operating satisfactorily. There was no consensus as to the amount of delay that is unacceptable, as it varies from airport to airport, by type of ground transportation service, and from departures to arrivals curbsides.

One airport ground transportation staff member indicated that loading of passengers in the third lane is an indication of unsatisfactory curbside operations. Another indicated unsatisfactory conditions occur when police prevent motorists from stopping at the curbside and require them to recirculate or enter a parking facility.

Another staff member confirmed that the *Highway Capacity Manual* does not apply to curbside areas and suggested that a combination of length of queue, delay, and dwell time could be used as a metric. However, this staff member also stated that few passengers complain about curbside congestion and expect to wait (particularly at large airports).

Commercial vehicle drivers discussed their preference to separate private and commercial vehicles on the pickup curbsides and a dislike for narrow sidewalks. They also discussed the problem with illegal solicitation or "hustling" of passengers. They indicated a preference for passenger waiting areas that provide shelter from the weather and wind protection.

## 7. Which airports have the best curbsides?

Among the airports that were considered to have the best curbsides were those that (a) physically separate private vehicles from commercial vehicles through the use of multiple levels or separate zones or courtyards, (b) provide good signage, and (c) provide a sense of openness. Those that were frequently cited as being the best were Denver International Airport (frequently mentioned) and the airports serving Atlanta, Orlando, Pittsburgh, and Toronto, which are among the newest airport terminals in North America. The Denver airport was mentioned as having good signage. Los Angeles and Fort Lauderdale-Hollywood international airports were mentioned as having good operations, and being clearly laid out, particularly considering the volumes of passengers served at Los Angeles International Airport.

Other airports mentioned more than once included those serving Charleston, Terminal D at Dallas/Fort Worth International Airport (compared with the other four terminals at this airport), Las Vegas (particularly the taxicab queues), Ottawa, Sacramento, and Barcelona.

Commercial vehicle owners cited the City Bus Center at Chicago O'Hare International Airport as an example of a good commercial vehicle curbside. Taxicab drivers in the focus group at Dulles preferred Baltimore/Washington International Thurgood Marshall and Reagan Washington National airports because the hold areas are closer to the terminal buildings and the passenger boarding areas are covered.

Courtesy vehicle drivers in the focus group at Oakland International Airport cited Lambert-St. Louis and Hartsfield-Jackson Atlanta international airports as examples of airports with good curbsides because hotel/motel and off-airport parking courtesy vehicle operators can lease curbside space and these airports have designated spaces listing the names of their services. The Oakland International Airport taxicab drivers focus group also mentioned Portland International Airport (Oregon) because of the availability of numerous customer service agents employed by the airport operator. Taxicab drivers also referred to Las Vegas McCarran International Airport as a good example of a taxicab passenger boarding area and queue.

## 8. Which airports have the worst curbsides?

Among the airports that were mentioned as having the worst curbsides were those that were perceived as being cramped or dingy (e.g., Miami International Airport), having poor or confusing signage, mixing private and commercial vehicles, and having poor pedestrian circulation. The airports mentioned included Washington Dulles International Airport (because of the limited number of exit doorways leading to the arrivals/pickup curbside, narrow sidewalks, and crosswalks leading across the commercial vehicle lanes), Chicago O'Hare International Airport, Edmonton International Airport, Bush Intercontinental Airport/Houston, and Seattle-Tacoma International Airport. Las Vegas McCarran and Pittsburgh international airports were mentioned as being among those with the worst curbsides, as well as among those with the best curbsides.

Commercial vehicle owners referred to Seattle-Tacoma International Airport (because the pickup area is in the garage and requires multiple level changes) and Dallas/Fort Worth International Airport (because of the number of terminals and confusion). Both the commercial vehicle owners and drivers cited Bob Hope Airport in Burbank, California, as an example of poorly configured and undersized curb space.

## 9. What is your perspective of [the following topics]:

Many of the focus groups were unable to address all of the following topics because of time constraints.

## a. Double or triple parking along the curbside?

Airport ground transportation staff responded that: (1) motorists will double or triple park when they are delayed finding a curbside space, and (2) commercial vehicle owners dislike double and triple parking because it prevents them from accessing designated passenger boarding areas.

#### b. The public's preference for the inner versus outer curbside?

Airport ground transportation staff responded that having inner and outer curbsides is expensive because it requires more real estate (and wider structures at airports having upper and lower level roadways). Commercial vehicle owners and drivers would prefer to be able to pick up customers near the terminal entrance and allow their customers to avoid having to cross roadways.

Taxicab drivers in the Oakland International Airport focus group felt that providing a convenient walk between the terminal and taxicab boarding area was more important than if the boarding area is at the first, second, third, or fourth curbside. (Oakland International Airport has five parallel curbsides.)

## c. Reserving space for high occupancy vehicles or public transit vehicles?

Some airport ground transportation staff felt it was okay if all commercial ground transportation vehicles are treated fairly. Another commented that curb space for public transit vehicles should be located in areas that no other commercial vehicle is using. Only one focus group participant stated that preserving space close to the terminal doors was important, but this individual also felt that this space should be at the end of the curb rather than in the center.

Instead of just discussing reserving space for high occupancy vehicles or public transit vehicles, two focus groups discussed factors they considered when allocating curb space. These factors included consideration of revenue generated to the airport, vehicle size, volume of passengers transported, who complains the most, response to requests from local transit agencies, amount of pollution/emissions generated by the vehicles, and first in/first out provisions.

#### d. Pedestrians crossing curbside roadways

Many airport ground transportation staff described pedestrians crossing curbside roadways as a problem. Use of traffic control officers was a concern because of labor costs. Some stated that pedestrians prefer not to use underground tunnels unless they are forced to do so. Pedestrians do not always obey signals and frequently jaywalk.

Pedestrians walking across the roadway near the taxicab stands is a significant issue at Washington Dulles International Airport because of the number of exit doorways and the contractor responsible for traffic control at the time the focus group sessions were held. (This contractor has since been replaced.) The commercial vehicle drivers discussed their concerns with safety and with pedestrians not obeying signals or traffic control officers.

#### e. Use of traffic control officers versus signals to control pedestrians?

Airport ground transportation staff indicated that it is hard to find the right balance between being nice (lax enforcement) versus improving traffic operations (stricter enforcement). Communicating with passengers, appearance/uniforms, and the appropriate level of customer service were other issues mentioned.

Commercial vehicle drivers discussed their concerns with the lack of enforcement of hustlers and the need for vehicle inspections (to ensure that limousine drivers have manifests). At Dulles, the comments offered by the commercial vehicle drivers reflected the poor performance of the then-current traffic control officers (or flaggers).