

IMPORTANCE OF AIRPORT LANDSIDE CAPACITY

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The problem of improving landside capacity of airports is an elusive one. At present, we do not even have a standard against which to measure existing levels of airport service or by which to outline desirable levels of service. Such a standard will be hard to come by because of the widely varying circumstances at different airports and because evaluations of the landside problems are largely subjective. Yet the large hub airports and many of the medium ones do share one trait: terminals and roadway and parking systems that have reached or are rapidly approaching the critical stages of congestion. What do we need to do to alleviate that situation?

1. We need to quantify airport landside capacity, at least to the point of defining reasonable levels of service.

2. We need to produce some analytical tools that will prove helpful in overcoming airport landside congestion through better planning.

3. We need to identify areas in which engineering and research and development efforts can be applied to cope with the congestion problem.

4. We need legislation that is now in Congress to extend and broaden the Airport Development Aid Program (ADAP), which will make federal funds available for construction or improvement of terminal facilities, including passenger flow and baggage processing.

Our common objective, and the goal of our collective efforts, should be the achievement of a balance between airside and landside capacity, consistent with the demand for service. One function

should not constrain the other. How to attain that ideal is, of course, the crux of the challenge before us. Let us consider what we are up against and what we have to work with.

SIZE OF THE PROBLEM

Our findings indicate that landside congestion is a serious concern at 15 of the country's top 20 airports; 5 of the most active hub airports are experiencing near-critical landside congestion, and 6 leading airports—including New York (Kennedy), Chicago (O'Hare), and Los Angeles—may reach a landside limit within the next 10 years. This situation could be eased somewhat if traffic growth continues to fall short of previously predicted levels, as is currently the case, but even modest increases during the next decade may be disastrous for some airports.

Putting a price tag on the airport developments needed through 1985 is difficult. If we narrow the focus to the next 5 years, the period covered by our ADAP-extension proposal, we believe a federal commitment of \$350 million a year, supplemented by a potential \$400 million from head taxes and the additional millions generated by local-state-airline investments, will fund airfield developments adequately, though not extravagantly.

Our National Airport System Plan pegs airfield development needs at about \$6.4 billion through 1980. That is below the \$10.66 billion projected in the recent survey by the Airport Operators Council International (AOCI) and the American Association of Airport Executives (AAAE). Although the survey is a comprehensive one, we feel it is also something of a shopping list containing a number of items that will not in fact produce requests for funds. Therefore, we do not consider the federal contribution as proposed to be undersized in relation to the need.

We do agree with the AOCI-AAAE report in 2 important respects: (a) The present law, under which neither landside nor landbanking needs are eligible for federal grants, should be changed; and (b) the bulk of the needs at large hub airports falls in the landside rather than the airside category of capital development projects.

In the ADAP bill before the Congress, we are recommending a higher level of funding for air carrier airports in order to help meet those needs and to stimulate commerce. We also propose to give local authorities more say in how federal funds are used. In other words, we are expanding the way funds can be used to include terminal areas, and we are delegating more decision-making responsibility to airport operators in putting the money to work. The sponsor's share of development costs, which now ranges from 18 to 50 percent, will be stabilized at 25 percent.

SHAPE OF THE PROBLEM

Why is airport landside capacity overloaded? Not many years ago our major concern centered on airway capacity and the feared saturation of the airspace over our largest cities. Through increased automation, better traffic control procedures, added runway capacity, and the influx of wide-body jets into the air carrier fleet, the problems of airside operational capacities have been largely overcome. As the airside problems have been sifted out of the system, the landside needs—which were there all the time—have come to the surface. Consideration of these needs can no longer be put aside and the inefficiencies that have built up can no longer be tolerated.

For one thing, the commercial aviation industry badly needs to find new ways to improve productivity. As airline industry people frequently remind us, air fares were held down for many years because of the tremendous productivity gains stemming initially from the changeover to jets and their lower maintenance costs and then from the introduction of progressively larger aircraft types with their lower seat-mile costs. But in the last 16 months, there has been approximately a 20 percent increase in domestic air fares. This increase in part reflects the higher fuel prices and the effects they have had on airline operating costs, but it also signals an abrupt drop if not an actual halt in productivity improvements.

During the near term, prospects for any further economic gains to the airlines from changes in aircraft technologies and sizes or in average trip lengths are microscopic. That is why we see the airlines engaged today in aggressive and extremely competitive marketing efforts, including a return to discount fare options. Their goal, of course, is to make more intensive use of the system. That primarily means raising the load factor, but it could also mean getting greater productivity from sales, ticketing, baggage-handling, and maintenance operations.

One possibility is the joint use of ticketing and baggage operations by two or even several carriers. At some locations—at Washington, D.C. (National), for example—airlines share terminal and gate facilities. Carrying that concept one step further is not unreasonable and would be promising from the productivity viewpoint. A study or pilot project dealing with the possibilities in this area might be instructive to airport planners, operators, and airlines alike.

The landside problem is shaped, too, by the role of the motor vehicle as virtually the only means of getting people to and from the airport. Except for Boston and Cleveland, where rail transit facilities are available, and the few cities with passenger helicopter service, people drive or are driven to the airport by private automobile, taxi, bus, or limousine. The roadway problem is both external and internal. Most major airports have only one real access point, and once within the airport area there are problems of cars double parking and of drivers circulating, waiting either to park or to pick up passengers.

Until now, the priority on airside development has caused solutions to the airport traffic problem, like the traffic itself, to back up or "orbit" until new resources open up. In examining ways to increase landside capacity, we should not overlook the possibilities for augmenting airport access or facilitating passenger movement within the airport through the use of transit technologies and facilities.

Although the transit development funding provisions contained in our proposed legislation probably will not bring overwhelming or even immediate relief to vehicle traffic problems at airports, the legislation does permit the use of money from the Highway Trust Fund within the airport boundaries for facilities that connect with transit systems to the airport. This at least presents an opportunity to facilitate the flow of passengers through the airport with as little interruption as possible in their transition from ground-to-air or air-to-ground transportation. This also fits with our overall need to conserve energy and our national commitment to environmental interests. A wider use of public transportation systems, both on the airport itself and in getting passengers and employees to and from the airport, would reduce landside congestion and would save fuel as well.

DIRECTIONS FOR CORRECTIVE EFFORTS

First, we must cultivate a more effective interface among the multijurisdictional agencies that influence the airport-urban relation.

When airports consisted of a dirt strip, sheet metal hangars, and a wind sock located at the outskirts of the city, the urban interface was simple. All that was needed was a connecting road with a sign: TO THE AIRPORT. Today, when modern airports are cities within themselves and magnets for commerce, the urban interface must be comprehensive and intermodal, and federal resources for urban and intercity transportation must be used compatibly.

At this point, new sources of federal financial assistance are probably less important than an awareness of, and a willingness to use, the resources at hand. We need to grasp the opportunities for applying existing resources and planning mechanisms more effectively.

For example, although parking facilities and terminals are excluded from capital construction funding under present ADAP law, land acquisition costs for such facilities are allowable. Similarly, federal-aid highway funds are available for road projects within an airport's boundaries if the road is part of a federal highway system. Other airport facilities—fringe and corridor parking areas, links connecting parking with

modal or intermodal terminals, bus shelters or terminals, and exclusive truck lanes—are also eligible for Federal Highway Administration funding assistance. And, under the Urban Mass Transportation Administration's capital grant program, grants are available for the construction of bus, rapid rail, and new system terminals and for the links connecting parking or other intermodal facilities with transit accommodations.

Airport authorities concerned about landside developments and the problems of financing them should be made fully aware of the federal help already available. The Intermodal Planning Groups in each of our 10 regions provide an effective mechanism for drawing airport and other urban interests together to consider intermodal needs and the options available for meeting those needs.

Second, if we are to solve the airport landside problem, we must conceive of better ways to divert or absorb automobile traffic.

Traditionally, the response to this problem has been to build more and better highways to the airport and to expand road and parking facilities at the airport. For the most part, these tactics have not kept ahead of the growing demand, and the rapidly diminishing supply of real estate on and adjacent to airport properties suggests that new strategies will have to be developed. In fact, all the available land at the busiest airports will be consumed by improvements that have already been planned for the next 10 years. Unless new approaches to airport access-egress problems are adopted (or most of the short-haul air traffic diverted to reliever airports), the only recourse may be the development of costly new regional airports.

The experts will have to determine what new approaches are most practical or economically feasible. There is no shortage of possibilities—rail transit facilities, buses with exclusive or preferential right-of-way, satellite airports or terminals, people-movers, demand-responsive transportation service—all are candidates. And we must find ways not only to get passengers to and from the airport more effectively but also to reduce the congestion caused by employees and greeters-visitors—each of which accounts for about a third of airport trips.

Third, we must look more closely at airport activity forecasts in our efforts to achieve an effective balance between airside and landside capacity.

We must reexamine not only the level but also the type of activity forecast. The St. Louis studies, for example, tell us that a new airport is not needed within the time frame originally projected. Airport traffic projections are now down from the 10 to 15 percent annual growth levels prevalent a few years ago to rates more in line with the GNP. The increased use of wide-body aircraft results in fewer flight operations but often requires airports to cope with greater influxes of passengers at peak hours.

CONCLUSION

With these and other changes, we may soon find landside needs competing almost equally with airside needs for public attention and funding. At the large hub airports, such is now the case.

I have tried to indicate some of the tools we need. We believe the ADAP bill now before the Congress reflects the administration's awareness of landside developments and their increasing importance to the vitality as well as the utility of America's airports. For energy conservation and environmental reasons, for the stimulation of commerce, and for the convenience of those who travel, the landside components of our nation's airports merit intelligent, timely, and innovative planning and development.