

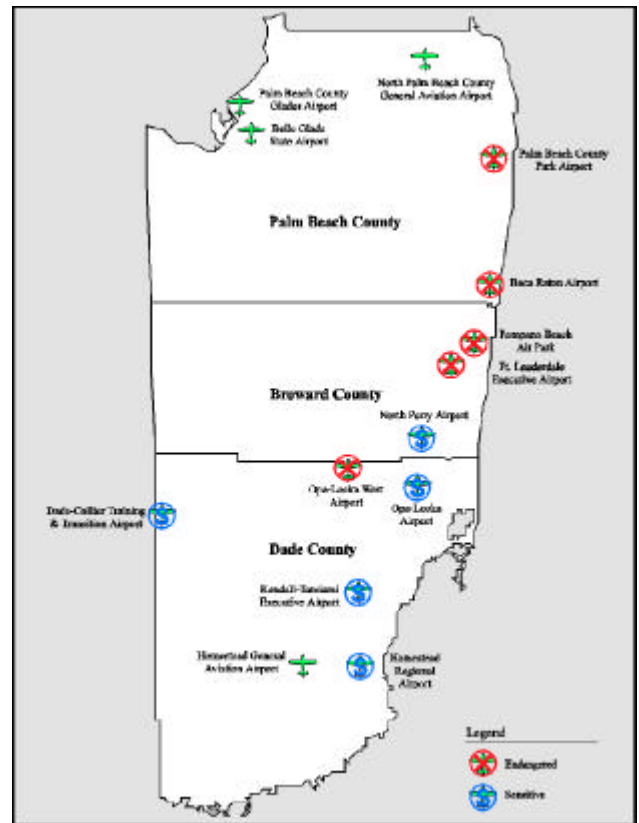
Section 5 System Evaluation

An evaluation was performed to determine the capability of the system to accommodate existing and future aviation training demand. *One of the most important findings of the evaluation is that five of the fourteen system airports face potential flight training restrictions.*

Endangered Airports

Airports in the South Florida General Aviation Training System that may be considered “endangered” with respect to accommodation of training activity include:

- # **Pompano Beach Air Park** - Restrictions were enacted in 1995 in response to community pressure and the perceived ineffectiveness of voluntary measures. *If activity increases, the potential for complete touch and go restrictions must be considered.*
- # **Fort Lauderdale Executive Airport** - Already capacity-constrained, Fort Lauderdale Executive absorbed a portion of overflow training traffic no longer accommodated at Pompano Beach. FXE will be unable to accommodate future training activity due to capacity limitations.
- # **Boca Raton Airport** - Because of its location to the immediate north, Boca Raton also absorbed a significant portion of training traffic from Pompano Beach. A single-runway airport, Boca Raton is experiencing delays in accommodating this extra training traffic along with continuing



**Endangered or Sensitive Airports
General Aviation Flight Training**

strong growth in itinerant operations. *Sufficient capacity does not exist to accommodate extra demand.*

- # **Palm Beach County Park (Lantana) Airport** - A capacity-constrained airport with significant community opposition to growth in aviation activity, *Lantana discourages touch and go activity beyond existing levels.*
- # **Opa-Locka West Airport** - Opa-Locka West has existing capacity and is remote from urban population centers. However, unconfirmed reports indicate the possibility that this facility could face future closure for a number of reasons.

Why Are Restrictions Occurring?

To answer this question, one must understand the explosive growth that has occurred over the past several decades. Airports that once were surrounded by farmland or uninhabited wetlands are now adjacent to major urban sprawl. Traffic patterns for student touch and gos now overfly residential areas. A strong economy has resulted in increased utilization of sophisticated high performance turbo prop and jet aircraft, and increased business use of general aviation facilities overall. Also, South Florida continues to be a major tourism center. While the social and economic benefits of this growth are immense, the result is that general aviation, and aviation as a whole, will most likely never return to the relatively unrestricted aeronautical environment previously enjoyed.

Restrictions are occurring and most likely will continue to occur as a result of the following:

Perceived Noise and Safety Concerns - Most communities simply do not want frequent aircraft overflights over their homes. The reason for this appears to be annoyance and fear. While, on the basis of federal guidelines, a training operation typically does not result in a noise event that is considered an impact - frequent overflights of aircraft are annoying to many. Likewise, an aircraft overflight may present no more of a safety concern (statistically) than living next to a busy street; however, the fear of aircraft “crashes” is a major concern to communities close-in to airports.



- # **Capacity Conflicts** - Most general aviation airports in the South Florida General Aviation Training System serve itinerant (transient) traffic in addition to aviation training. Itinerant traffic is simply traffic arriving or departing to other airports. This traffic is very important in that it includes business, tourism, and many other important users of general aviation facilities. These users contribute greatly to the economic benefit of the local airport as well as the community. Consequently, they are as vital to the viability of our aviation system as training activity.
- # **Delay** - *As airport activity reaches the higher portion of the capacity range, conflicts tend to occur between itinerant aircraft and aircraft performing touch and go training operations, particularly when the traffic pattern nears saturation.* Due to the frequency of touch and go landings, itinerant traffic must often wait to depart until adequate separation exists. This is particularly severe at airports with a single runway and no control tower. As this situation worsens to the point where itinerant traffic cannot efficiently operate and safety becomes a concern, the environment has been set for restrictions to occur.

- # **Poor Operating Procedures** - At some airports, *pilots simply are not aware of or do not practice noise abatement procedures*, which results in increased annoyance to close-in communities. Also, some pilots practice maneuvers on approach or at low altitudes that may cause concern to those on the ground. *Pilot education programs can often be implemented to resolve this type of problem.*

The Potential Impact - What Could Happen to Flight Training in South Florida

This section examines the effects of potential additional restrictions to general aviation training activity within the South Florida General Aviation Training System Plan. These effects include the potential closing or limiting of general aviation training activity at one or more airports. Several scenarios are considered in the likely event that training restrictions, such as those imposed at Pompano Beach Air Park, spread to other airports in the system. *It is important to note that the capacity to accommodate growth is reduced through the enactment of formal restrictions.* Airport activity is interlinked, and the effects of limiting activity at any one airport spreads throughout the system. These effects may include increases in training operations at commercial air carrier airports where training activity may interfere with air carrier operations.

With the implementation of the Pompano Ordinance, a process has begun that could lead to a capacity crisis in which demands for services cannot be met, resulting in a form of operational paralysis. This in turn potentially threatens provision of other general aviation services at system airports. Ultimately, the utility of the individual airports in the system is undermined; the system's fragile operational balance is upset and the regional economic foundation built by the aviation training industry is disrupted. Aviation businesses leave for friendlier business climates out of state, leaving the aviation infrastructure vulnerable to deterioration for lack of local interest and support.

The first triggering event has occurred. A predictable subsequent series of events *could* occur as follows:

- # 1995: Restrictions enacted at Pompano Beach Air Park; downgrading of air traffic control tower operational status to Level I
- # 1996: Closing of Pompano Beach Air Park air traffic control tower in accordance with federal phase-out of Level I air traffic control facilities
- # **Opa-Locka West** closes (currently under consideration)
- # Restrictions are enacted at Opa-Locka Airport to prevent the facility from becoming a "training reliever"
- # Capacity limits are reached at Fort Lauderdale Executive Airport
- # Capacity limits are reached at Boca Raton Airport
- # All training operations are prohibited at Pompano Beach Air Park
- # Opa-Locka prohibits touch and go traffic
- # **Capacity Crisis:** *Requirements for training demand exceed available demand in central portion of the study region; southern portion of region has capacity available, but it is not accessible to the northward shifting demand. Capacity is also available in northwest Palm Beach County, but is too remote.*

Scenario 1

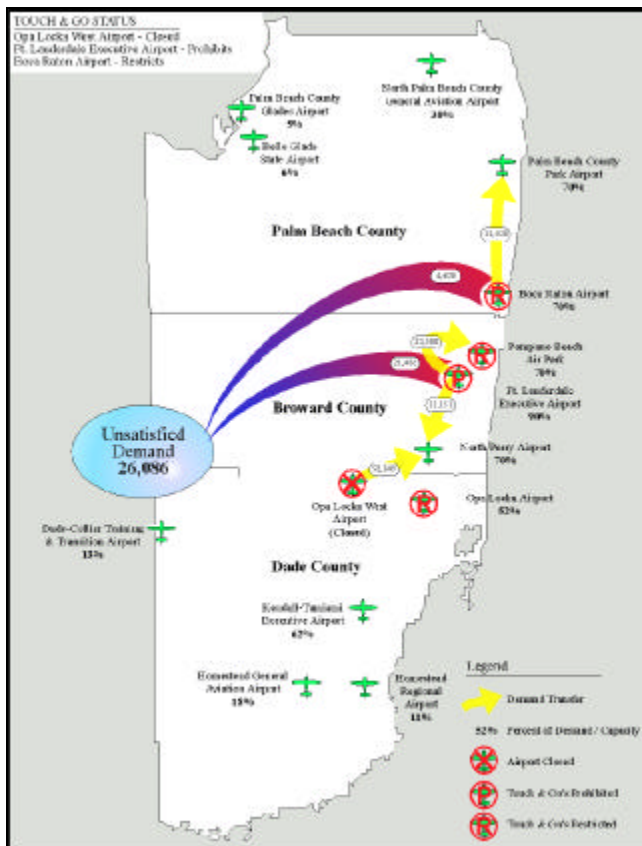
Opa-Locka West is closed
Touch and Gos restricted at Boca Raton and Opa-Locka Airports
Touch and Gos prohibited at Fort Lauderdale Executive Airport

This scenario essentially results in the system exceeding its maximum acceptable capacity and lost demand of approximately 26,000 operations.

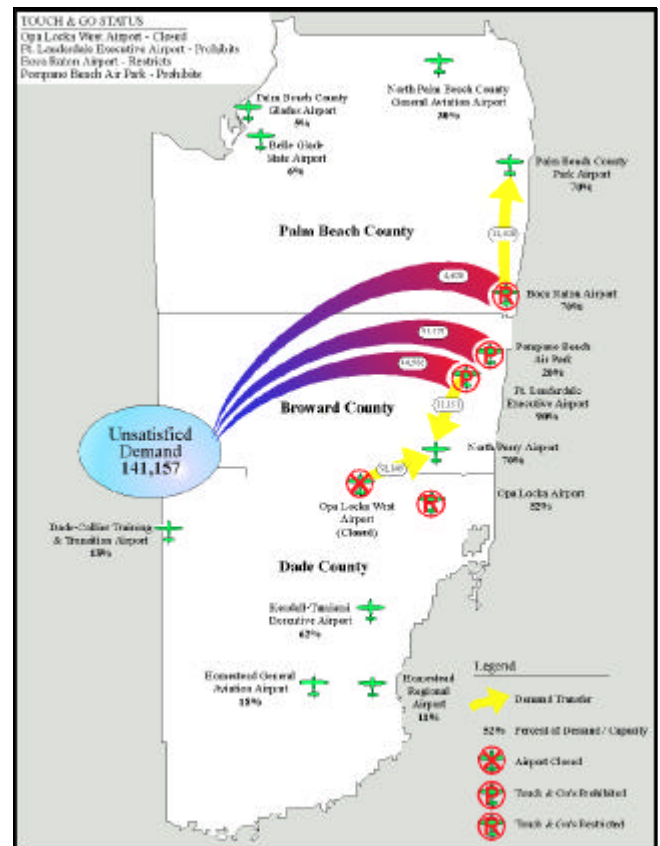
Scenario 2

Closure of Opa-Locka West
Restrictions at Boca Raton
Touch and Gos prohibited at Fort Lauderdale Executive
All Touch and Gos prohibited at Pompano

Scenario 2 results in capacity saturation at most accessible system airports and an unsatisfied demand level of approximately 141,000 operations.



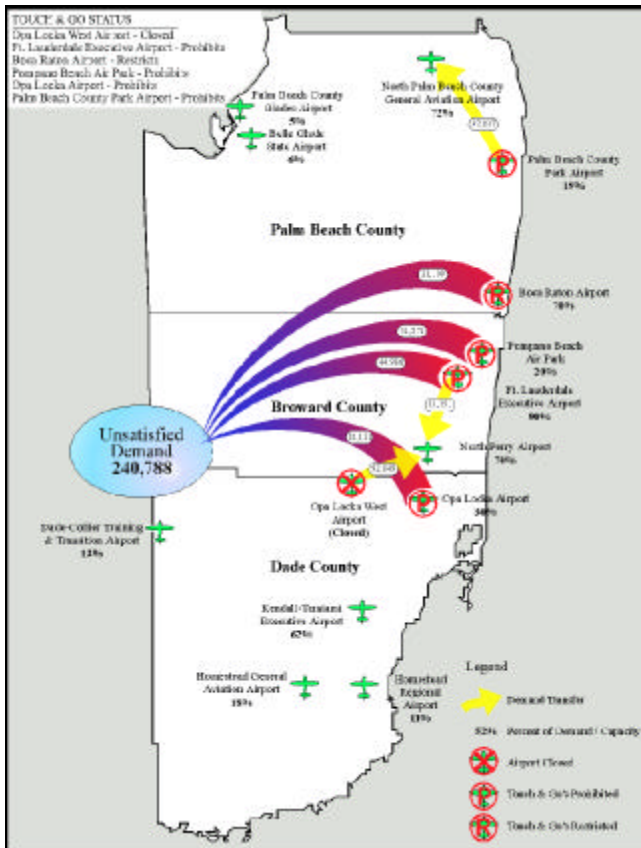
Scenario 1



Scenario 2

Scenario 3
Closure of Opa-Locka West
Restrictions at Boca Raton
Touch and Gos prohibited at Fort Lauderdale Executive, Pompano Beach Airport and Opa-Locka Airport

In Scenario 3, total unsatisfied demand would most likely exceed 240,000 annual operations. In addition to unsatisfied demand, the system would most likely also suffer high levels of delays, increased incentive to train at air carrier airports, and negative financial and economic impacts.



Scenario 3