

## AIRPORT FINANCE HOMEWORK SOLUTIONS

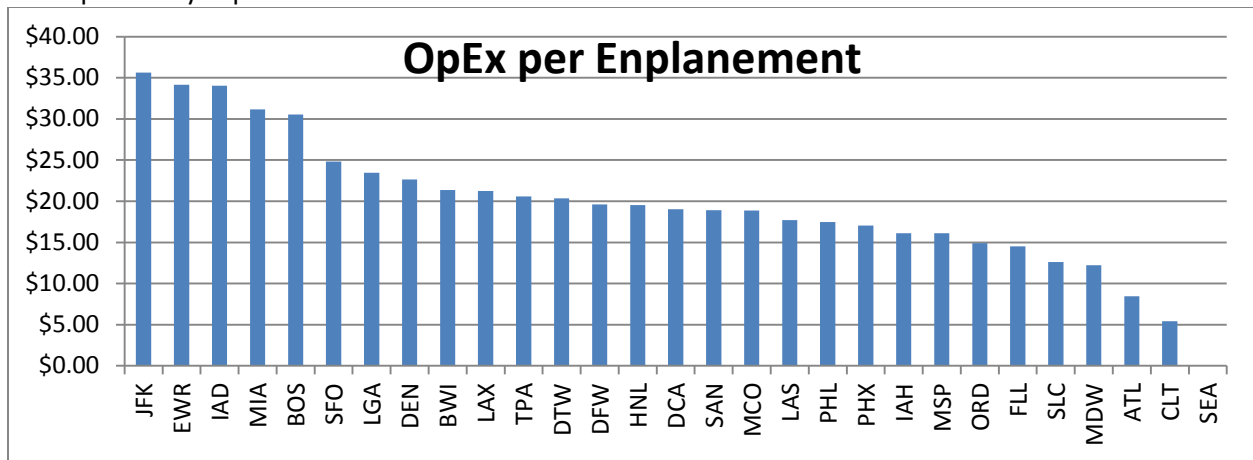
1. Calculate the total operating expense per enplanement (i.e. passenger) for each OEP-35 airport and make a chart showing the results

	Operating expense per enplanement
JFK	\$35.63
EWR	\$34.14
IAD	\$34.03
MIA	\$31.16
BOS	\$30.54
SFO	\$24.83
LGA	\$23.45
DEN	\$22.63
BWI	\$21.35
LAX	\$21.24
TPA	\$20.58
DTW	\$20.36
DFW	\$19.60
HNL	\$19.55
DCA	\$19.03
SAN	\$18.89
MCO	\$18.85
LAS	\$17.71
PHL	\$17.47
PHX	\$17.04
IAH	\$16.11
MSP	\$16.10
ORD	\$14.90
FLL	\$14.52
SLC	\$12.61
MDW	\$12.23
ATL	\$8.47
CLT	\$5.41
SEA	

The airports with the highest OpEx per enplanement are JFK, EWR, IAD, MIA, BOS, SFO, and LGA

The one thing these airports have in common is that they are in high-cost major metropolitan areas, where we might expect that labor rates are significantly higher than those in other areas like ATL or CLT

As a further consequence, we can expect that any services purchased in these areas for cleaning, maintenance, etc., will similarly be comparatively expensive.

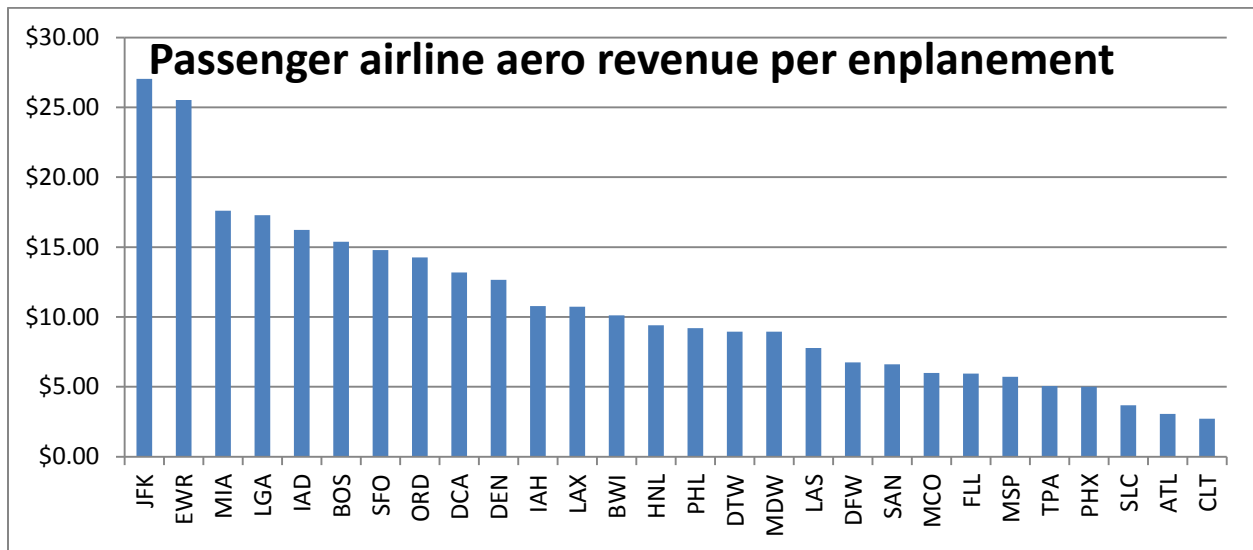


**2. Calculate the passenger airline aeronautical revenues per enplanement for each OEP-35 airport and make a chart showing the results**

Pax airline aero revenue per enplanement

JFK	\$27.04
EWR	\$25.52
MIA	\$17.61
LGA	\$17.29
IAD	\$16.22
BOS	\$15.38
SFO	\$14.77
ORD	\$14.25
DCA	\$13.18
DEN	\$12.64
IAH	\$10.78
LAX	\$10.74
BWI	\$10.12
HNL	\$9.41
PHL	\$9.19
DTW	\$8.95
MDW	\$8.93
LAS	\$7.78
DFW	\$6.75
SAN	\$6.60

MCO	\$5.98
FLL	\$5.95
MSP	\$5.71
TPA	\$5.04
PHX	\$4.99
SLC	\$3.67
ATL	\$3.05
CLT	\$2.72
SEA	



The highest revenues come from JFK, EWR, MIA, LGA, IAD, BOS, and SFO. The lowest come from PHX, SLC, ATL, and CLT.

There is a generally very strong match against the airports with the highest cost, suggesting that the airports that have the highest costs also have to charge most of those costs back to the airlines (not surprisingly)

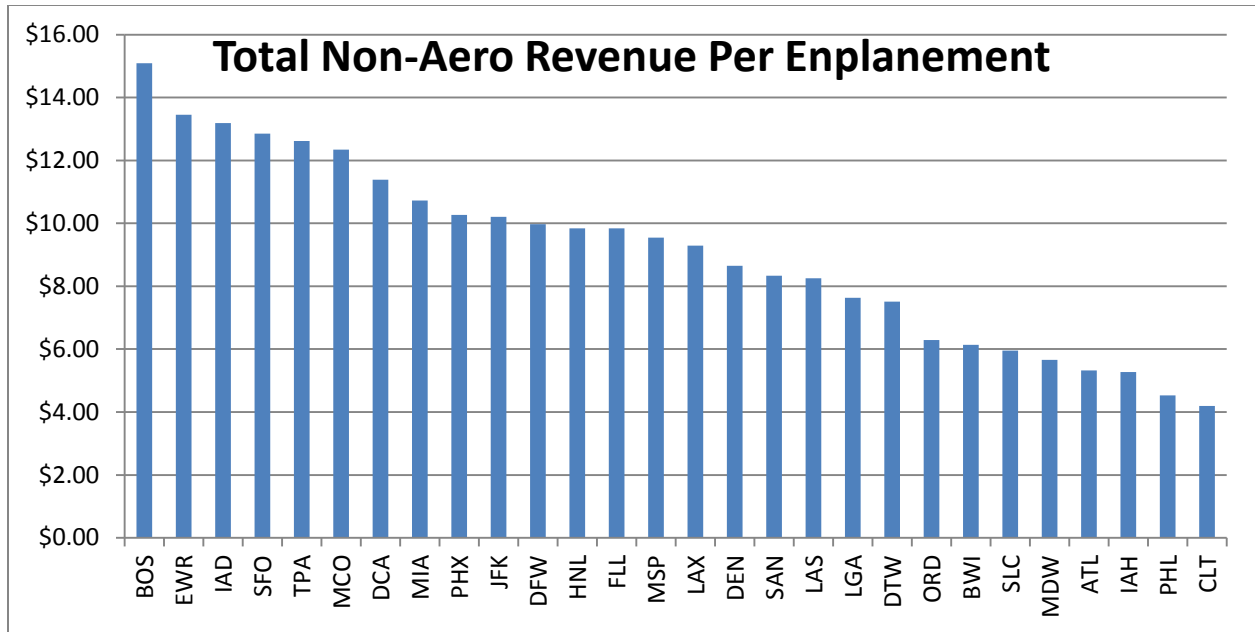
No, the airports with the lowest aero revenues per passenger are not automatically the most attractive to carriers. The reason for this is twofold:

Reason 1. The direct cost that airlines pay to the airport are only one consideration in determining whether or not an airport is attractive. The "indirect" costs incurred due to delays in the form of fuel costs, A/C utilization reduction, crew costs, etc., are also important in determining an airline's true cost of serving the airport

Reason 2. The cost of serving an airport is only a small piece of the airline's overall calculations. First and foremost is the level of demand at the airport and the yields. A high-yield, high-cost airport is often more attractive than a low-cost, low-yield airport

**3. Calculate the total non-aeronautical revenue per enplanement for each airport and make a chart showing the results**

BOS	\$15.09
EWR	\$13.45
IAD	\$13.19
SFO	\$12.85
TPA	\$12.62
MCO	\$12.34
DCA	\$11.39
MIA	\$10.73
PHX	\$10.26
JFK	\$10.21
DFW	\$9.97
HNL	\$9.84
FLL	\$9.84
MSP	\$9.55
LAX	\$9.29
DEN	\$8.65
SAN	\$8.33
LAS	\$8.26
LGA	\$7.63
DTW	\$7.50
ORD	\$6.29
BWI	\$6.13
SLC	\$5.95
MDW	\$5.65
ATL	\$5.33
IAH	\$5.27
PHL	\$4.53
CLT	\$4.19
SEA	



The airports with the highest values are BOS, EWR, IAD, SFO, TPA, and MCO

There are many possible reasons here:

- A well-developed concessions program (it is well-known that for instance SFO is very strong here)
- A strong retail-specific program in a place like MCO that brings in lots of tourists who can buy Mickey Mouse and other souvenirs at the airport
- High delays (e.g., EWR), resulting in plenty of opportunity for passengers to spend money while waiting
- A high-cost area (e.g., BOS), where the general price level is quite high
- Programs to drive other kinds of non-aero revenues (e.g., leases of facility space on airport grounds)
- Higher amounts of use of parking and ground transportation generating revenue for the airport (e.g., BOS)