



Airport Performance Report

Third Quarter 2018

Summary Results for Aviation Management

October 23, 2018

A Customer Experience Presentation



2018 ACI-ASQ Study Objectives



- Provide a Customer Satisfaction Evaluation of the airport environment and the services and amenities provided while customers are at the airport.
- → Provide a trended Benchmark Comparison for PA Airports to gauge our performance relative to: 1) PA service initiatives; and 2) the airport industry and our Peer Airports.
- → Advance our understanding of our customers via:
 - Demographics of the Market Base
 - Airport usage and behavior (e.g., airport access, kiosk check-in)
- Provide Business Intelligence to manage performance and provide guidance for marketing, planning, investment and service initiatives.

Methodology at a Glance



- ACI's Airport Service Quality (ASQ) is a monthly benchmarking program aggregated to a quarterly report.
- More than 330 airports worldwide participate in the study to ascertain their passengers' views with respect to its airport's products, services and amenities vis-à-vis:
 - ✓ Other worldwide airports by traffic type, size, region, benchmark, etc.;
 - ✓ Their particular importance for a specific airport, and;
 - ✓ How passengers' perceptions and priorities are evolving over time.

→ The ASQ Survey Questionnaire Design

- √ 34 items where passengers are asked to rate specific service related topics and their overall satisfaction with the airport on a scale of 1 (poor) to 5 (excellent)
- ✓ 21 questions related to the passenger profile.

→ Sample Composition and Stratification

✓ The questionnaire is self-completed by randomly selected passengers at the boarding gates of pre-selected flights. Flights are selected based on destination and carrier in order to obtain a representative stratified sample of all departures from the airport, covering all operating hours, with each day of a week evenly distributed between each month of a quarter. Data are weighted according to the proportion of actual international traffic and actual domestic traffic, when applicable. In Q3 2018, the Port Authority more than doubled the sample size for it's three airports to over 5,000 completes surveys, in order to provide a more robust database for detailed analysis.

Participating Airports Q3 2018



- → In Q3 2018, 335 airports have participated in the ACI ASQ Survey.
- → 164,383 passengers have completed the ASQ Survey, including 3,163 at JFK, 1,037 at EWR, and 984 at LGA.

	< 2 M	2 - 5 M	5 - 15 M	15 - 25 M	25 - 40 M	> 40 M	TOTAL
	13	6	6	1			
AFRICA	BFN, BZV, EBB, ELS, GRJ, HRE, KIM, LFW, MBA, PLZ, PNR, UTN, VFA	ABJ, ABV, ACC, LOS, MRU, RAK	ADD, CMN, CPT, DUR, NBO, TUN	JNB			26
	10	30	25	14	8	19	
ASIA PACIFIC		ATQ, BBI, BDO, CCJ, CJB, DRW, GAU, HBA, IDR, IXB, IXC, IXE, JAI, KOE, LKO, LOP, MDC, MLE, PAT, PDG, PKU, PLM, PNH, PNK, REP, SOC, SXR, TRV, VTZ, YIH	ADL, AMD, BPN, CGQ, CHC, CNS, CNX, COK, GOI, HET, HLP, INC, ITM, KHN, KNO, MFM, OOL, PEN, PER, PNQ, RGN, SJW, UPG, WLG, XNN	AKL, CCU, DPS, HAK, HKT, HRB, HYD, MAA, SHE, SUB, SYX, TAO, TSN, WUH	BLR, CKG, DMK, GMP, HGH, KIX, MEL, NKG	BKK, BOM, CAN, CGK, CTU, DEL, HKG, ICN, KMG, KUL, NRT, PEK, PVG, SHA, SIN, SYD, SZX, TPE, XIY	106
	25	19	36	13	9	9	
EUROPE	AES, BOO, DSA, EAS, GRO, GRX, INV, JER, KRS, LCG, LEI, MJV, MLN, OVD, PDL, PNA, REU, SDR, SKP, SPC, VDE, VGO, VLL, XRY, ZAZ	LPL, MAH, PFO, SCQ, SOU, SVG, TBS, TFN, TLL, TOS,	ACE, AER, ALC, BGO, BHX, BLQ, BRS, BSL, BUD, CIA, EDI, ESB, FAO, FUE, GLA, GOT, IBZ, KEF, KRK, LCA, LIN, LPA, LYS, MLA, MRS, NAP, NCE, NCL, OPO, OTP, RIX, SVQ, SXF, TFS, TLS, VLC	AGP, ATH, BRU, DUS, GVA, HAM, HEL, LED, MXP, PRG, TXL, VIE, WAW	ARN, CPH, DME, DUB, LIS, ORY, OSL, PMI, ZRH	AMS, BCN, CDG, FCO, LGW, LHR, MAD, MUC, SVO	111
LATIN	10	11	7	3	1		
AMERICA / CARIBBEAN	BDA, BRC, CUR, GPS, KIN, LIR, MDZ, POP, SAP, SLA	AUA, BGI, COR, GYE, NAS, POS, PVR, SDQ, SJD, SJO, UIO	AEP, CNF, EZE, GDL, PTY, PUJ, TIJ	CUN, GIG, SCL	BOG		32
	1		5	3	1	1	
MIDDLE EAST	SLL		AMM, BAH, DMM, MCT, MED	AUH, THR, TLV	RUH	DXB	11
	10	6	12	5	7	9	
NORTH AMERICA	LAN, PWM, YLW, YMM, YQB, YQM, YQR, YXE, YYJ, YYT	ELP, GRR, YHZ, YOW, YTZ, YWG	AUS, CLE, CMH, CVG, IND, JAX, MKE, PIT, SAT, SJC, STL, YEG	DAL, SAN, SLC, TPA, YUL	BOS, BWI, DTW, FLL, LGA, MSP, PHL	ATL, DEN, DFW, EWR, JFK, LAX, SEA, SFO, YYZ	49
TOTAL	69	72	91	39	26	38	335

Customized Peer Airport Panels



The following airports form the Port Authority's Peer Airport Panel. Airports are selected primarily based on passenger traffic, passenger composition and airport location/infrastructure.

	JFK PEER AIRPORTS						
IATA							
CODE	AIRPORT NAME						
AMS	AMSTERDAM AIRPORT SCHIPHOL						
ICN	INCHEON INT'L AIRPORT						
JFK	JOHN F. KENNEDY INT'L AIRPORT						
LAX	LOS ANGELES INT'L AIRPORT						
LHR	LONDON HEATHROW AIRPORT						
PVG	SHANGHAI PUDONG INT'L AIRPORT						
SIN	SINGAPORE CHANGI AIRPORT						

	EWR PEER AIRPORTS						
IATA							
CODE	AIRPORT NAME						
BOS	LOGAN INT'L AIRPORT						
EWR	NEWARK LIBERTY INT'L AIRPORT						
MSP	MINNEAPOLIS-SAINT PAUL INT'L AIRPORT						
MUC	MUNICH AIRPORT						
SEA	SEATTLE-TACOMA INT'L AIRPORT						
YYZ	TORONTO PEARSON INT'L AIRPORT						

IATA	
CODE	AIRPORT NAME
BOS	LOGAN INT'L AIRPORT
BWI	BALTIMORE-WASHINGTON INT'L AIRPORT
FLL	FORT LAUDERDALE-HOLLYWOOD INT'L AIRPORT
LGA	LAGUARDIA AIRPORT
MSP	MINNEAPOLIS-SAINT PAUL INT'L AIRPORT
PHL	PHILADELPHIA INT'L AIRPORT

LGA PEER AIRPORTS

"Who the Customer Is"

Q3 2018 Profile Comparison: PA Airport to Peer Airport Panel



	JFK	Panel	EWR	Panel	LGA	Panel
Business	12%	17%	25%	24%	25%	23%
International	58%	64%	33%	29%	8%	15%
Connecting	25%	28%	22%	27%	12%	24%
Local O-D Pax. Dwell Time (mins.)	108.4	105.1	103.7	102.1	97.0	99.3
Women	60%	54%	53%	52%	51%	56%
Average Age	41	39	45	45	43	46
First/Business Class	9%	8%	11%	11%	12%	11%
Economy/Tourist Class	91%	92%	89%	89%	88%	89%
Check-in at Kiosk	28%	27%	33%	34%	31%	35%
Check-in Internet/Phone	33%	31%	40%	42%	43%	42%
Check-in at Main Desk	34%	38%	23%	23%	19%	21%
Check-in Curbside	2%	2%	2%	2%	1%	2%
Bag Drop Only	19%	20%	17%	21%	16%	19%
Avg. # of Return Trips (P12 Mos.)	4.3	4.9	5.5	5.4	6.4	5.5
Top Modes of Access: *					_	
Personal Car	35%	29%	40%	36%	28%	39%
Rental Car	4%	8%	8%	9%	3%	11%
Taxi/Limo	31%	22%	22%	16%	45%	19%
Rail/Subway	12%	14%	7%	10%	1%	2%
Bus/Shuttle	7%	14%	9%	16%	10%	14%
Other (Uber/Lyft, etc.)	10%	12%	14%	13%	12%	15%

- → The demographic and airport passenger usage profiles of JFK, EWR and LGA generally align with what is seen in the Peer Airports Panels. The significant exceptions appear to be a stronger profile skew among the Peer Airports Panels.
- > Compared to their respective Peer Airports Panel, JFK and LGA have a somewhat (albeit statistically significant) lower presence of int'l and connecting pax. (JFK has less business travelers) as well as lower usage of all modes access, except for personal car (JFK) and taxi/Limo (LGA). JFK has less check-in at the main desk, while LGA pax. use less self-serv kiosks and bag drop. JFK pax. tend to be older and women, while LGA pax. are more apt to be younger and men. JFK pax. have fewer return trips and greater dwell time, while LGA has the the opposite.
- → EWR has more int'l pax. and less connecting pax. than the peer panel, as well as less check-in bag drop, less rail and bus/shuttle usage, but more taxi/limo usage.

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The Satisfaction Rating Attributes



verall Satisfactio	n	
	Ground transportation:	Ground transportation to/from airport
Access	Parking:	Parking facilities
	VFM: Parking facilities:	Value for the money of parking facilities
	Baggage carts/trolleys:	Availability of baggage carts/trolleys
	Check-in waiting time:	Waiting time in check-in queue/line
Check-in	Efficiency of staff:	Efficiency of check-in staff
	Courtesy of check-in staff:	Courtesy and helpfulness of check-in staff
Security	Inspection waiting time:	Waiting time at passport/personal ID inspection
•	Courtesy of inspection staff:	Courtesy and helpfulness of inspection staff
ID Check	Courtesy of inspection stair:	Courtesy and neiprumess of inspection stair
	Courtesy of security staff:	Courtesy and helpfulness of security staff
0'	Thoroughness:	Thoroughness of security inspection
Security	Security waiting time:	Waiting time at security inspection
	Safe/secure feeling:	Feeling of being safe and secure
	Ease of finding way:	Ease of finding your way through airport
Finding Way	Flight info screens:	Flight information screens
Finding Way	Walking distance:	Walking distance inside the terminal
	Ease of connections:	Ease of making connections with other flights
		Courtesy and helpfulness of airport staff
	Courtesy of airport staff:	(excluding check-in, passport control and securit
	Eating facilities:	Restaurant/Eating facilities
	VFM: Eating facilities:	Value for the money of restaurant/eating facilities
	Availability Bank/ATM/exchange:	Availability of bank/ATM facilities/money change
Airport	Shopping facilities:	Shopping facilities
Facilities	VFM: Shopping facilities:	Value for the money of shopping facilities
i aciiilles	Internet / Wi-Fi:	Internet access/Wi-Fi
	Business/Executives Lounges:	Business/Executive lounges
	Availability of washrooms:	Availability of washrooms/toilets
	Cleanliness of washrooms:	Cleanliness of washrooms/toilets
	Comfort of waiting/gate areas:	Comfort of waiting/gate areas
Airport	Terminal cleanliness:	Cleanliness of airport terminal
Environment	Airport Ambience:	Ambience of the airport
Environment	All port Allibience.	Ambience of the amport
Arrivals	Passport inspection:	Passport/Personal ID inspection
	Baggage delivery speed:	Speed of baggage delivery service
Services	Customs inspection:	Customs inspection

5-Point Rating Scale: 1-Poor, 2-Fair, 3-Good, 4- Very Good, 5- Excellent.



JFK Satisfaction Performance

JFK Airport Performance Trended

JFK Q3-Q2

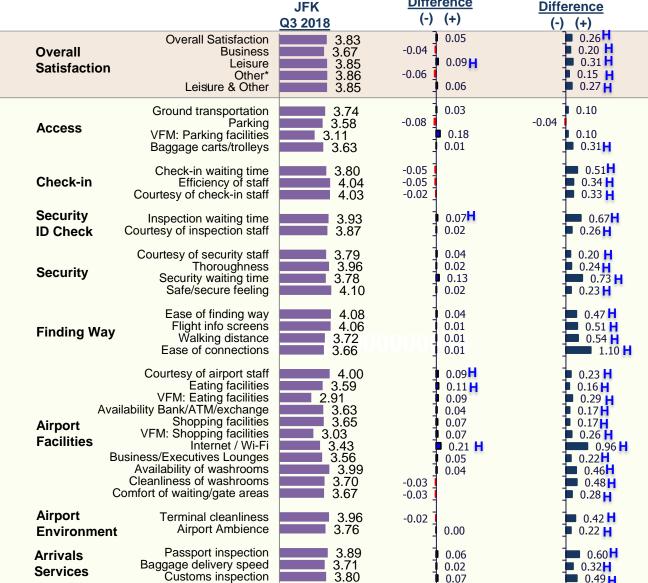
Difference
(-) (+)

JFK Q3

2018-17

Difference
(-) (+)





- → JFK shows significant improvement since one year ago in satisfaction overall and across nearly all airport elements.
- → More recent quarterly improvements center on our service-level initiatives (WiFi, TSA wait times, concessions offerings and employee courtesy).
- → In Q3 2018, JFK scores highest on ease of finding way (4.08) and lowest on eating facilities value for the money -- VFM (2.91).

Mean Scores based on rating scale: 1-Poor, 2-Fair, 3-Good, 4- Very Good, 5- Excellent. * Other may include Education, Family visit, Religious events, etc. H/L: Q3 2018 (N=3,163) Significantly Higher/Lower than Q2 2018 or Q3 2017.

JFK Airport Performance vs. Peer Panel



many airport elements since

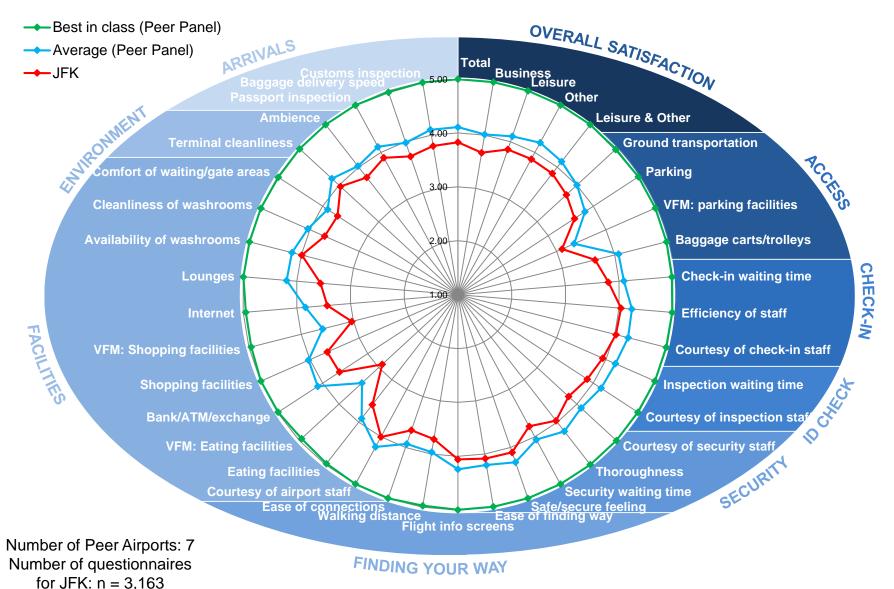
			Panel	Rank	~ AMS	LAX	<u>LHR</u>	<u>ICN</u>	PVG	SIN	→ Despite improvement on
	Overall Satisfaction	3.83 H3	4.11 H	6	4.04 H	3.81	4.12 H	5.00 H	5.00 H	5.00 H	• •
Overall	Business	3.67 H3	4.01 H	6	3.97 H	3.63	4.04 H	5.00 H	5.00 H	5.00 H	many airport elements sin
Satisfaction	Leisure	3.85 H2/3	4.11 H	6	4.07 H	3.84	4.14 H	5.00 H	5.00 H	5.00 H	Q2 2018 and YOY, JFK sti
Odtisiaction	Other*	3.86 H3	4.21 H	7	4.05	3.86	4.16 H	5.00 H	5.00 H	4.99 H	significantly underperforr
	Leisure & Other	3.85 H3	4.13 H	6	4.07 H	3.85	4.14 H	5.00 H	5.00 H	5.00 H	the peer airports panel
	Cround transportation	2.74	4.00.11	6	4.04 H	3.40 L	4.07 H	4.04.11	4.00.11	4 00 H	overall and on all airport
_	Ground transportation Parking	3.74	4.00 H 3.82 H	5	3.49	3.40 L 3.28 L	4.07 H	4.91 H 4.90 H	4.88 H 4.74 H	4.98 H 5.00 H	elements, with most items
Access	VFM: Parking facilities	3.11	3.35 H	4	2.85	3.06	3.08	4.90 H	4.74 FI 4.50 H	5.00 H	ranking last or next to last
	Baggage carts/trolleys	3.63 нз	4.07 H	6	4.08 H	3.56	4.06 H	4.79 H	4.85 H	4.99 H	except parking facilities,
	zaggago carto, il circ jo	0.00 115		-				4.0011	1.0011		where JFK leads LAX and
	Check-in waiting time	3.80 H3	4.09 H	7	3.81		4.01 H	4.85 H	4.81 H	4.98 H	comparable to AMS, while
Check-in	Efficiency of staff	4.04 H3	4.24 H	7	4.05	4.07	4.20 H	4.91 H	4.82 H	4.99 H	Satisfaction with JFK's
Со	urtesy of check-in staff	4.03 H3	4.26 H	7	4.04	4.09 H	4.27 H	4.90 H	4.83 H	4.99 H	parking value for the mon-
Security	Inspection waiting time	3.93 H2/3	4.19 H	7	3.94	4.00 H	4.18 H	4.94 H	4.79 H	4.99 H	(VFM) outperforms LAX ar
•	tesy of inspection staff	3.87 H3	4.19 H	7	4.09 H	3.97 H	4.18 H	4.94 H	4.79 H 4.82 H	4.99 H	is on a par with AMS (ac-
ID OHOOK Cou.	tooy or mopostion stan	0.07 113	7.17 11	•	1.0011	0.07 11		4.32 11	7.02 11	4.00 11	counting for its 4th rank in
Co	ourtesy of security staff	3.79 H3	4.11 H	7	4.06 H	3.92 H	4.06 H	4.90 H	4.83 H	5.00 H	the peer panel on this iten
Security	Thoroughness	3.96 H3	4.22 H	7	4.14 H	4.02 H	4.18 H	4.94 H	4.89 H	5.00 H	
occurity	Security waiting time	3.78 H3	4.06 H	7	3.97 H		3.94 H	4.94 H	4.79 H	5.00 H	→ JFK also outperforms AM
	Safe/secure feeling	4.10 H3	4.29 H	6	4.25 H	4.06	4.27 H	4.96H	4.91 H	5.00 H	on walking distance, gate
	Ease of finding way	4.08 H3	4 04 11	6	111	2.04.1	4 20 H	4.00.11	4.00.11	4.00.11	comfort and arrival bagga
	Flight info screens	4.06 H3	4.21 H 4.24 H	6 6	4.14 4.11	3.91 L 3.97 L	4.20 H 4.30 H	4.88 H	4.86 H 4.85 H	4.99 H 4.99 H	speed, and LAX on
Finding Way	Walking distance	3.72 H3	3.96 H	6	3.46 L	3.83 H	3.85 H	4.91 H 4.83 H	4.81 H	4.99 H 4.97 H	wayfinding, FIDS, airport
	Ease of connections	3.66 H3	3.93 H	6	4.05 H	3.54	3.92 H	4.90 H	4.88 H	5.00 H	staff courtesy and termina
			0.0011	ŭ		0.0 .	0.02	4.5011	4.0011	0.0011	cleanliness.
C	Courtesy of airport staff	4.00 H2/3	4.21 H	6	4.12 H	3.91 L	4.24 H	4.96 H	4.91 H	5.00 H	→ JFK performs on a par wit
	Eating facilities	3.59 H2/3	3.91 H	6	3.73 H	3.57	3.93 H	4.82 H	4.86 H	4.97 H	
A = !1 = I= !!!4	VFM: Eating facilities	2.91 H3	3.42 H	6	2.85	3.05 H	3.39 H	4.66 H	4.81 H	4.95 H	AMS on satisfaction with
	y Bank/ATM/exchange	3.63 H3	4.11 H	7	3.78 H		3.94 H	4.91 H	4.86 H	4.99 H	check-in related elements
Airport	Shopping facilities FM: Shopping facilities	3.65 H3 3.03 H3	4.03 H	6	3.87 H	3.62	4.00 H	4.91 H	4.87 H	4.99 H	security ID check wait tim
Facilities ^v	Internet / Wi-Fi	3.03 H3 3.43 H2/3	3.59 H	6 7	3.00 3.69 H	3.23 H 3.53 H	3.33 H 3.75 H	4.85 H	4.82 H	4.96 H	restroom cleanliness and
Rusines	ss/Executives Lounges	3.56 H3	3.84 H 4.19 H	7	3.69 n	3.73 H	3.73 П 4.02 Н	4.91 H	4.73 H	4.95 H 5.00 H	availability (also for LAX o
	ailability of washrooms	3.99 H3	4.18 H	5	3.95	3.96	4.11 H	4.86 H 4.94 H	4.93 H 4.89 H	4.99 H	availability), eating and
	anliness of washrooms	3.70 H3	4.04 H	7	3.73	3.83 H		4.94 H	4.84 H	4.99 H	shopping facilities VFM,
Comfo	rt of waiting/gate areas	3.67 H3	3.89 H	5	3.46 L	3.66	3.73 H	4.96 H	4.87 H	4.98 H	terminal cleanliness and
A ! at											ambiance, and arrivals
Airport	Terminal cleanliness	3.96 H3	4.18 H	6	4.04	3.89 L	4.21 H	4.99 H	4.95 H	4.99 H	passport/ customs
Environment	Airport Ambience	3.76 H3	4.02 H	6	3.89 H	3.72	4.00 H	4.99 H	4.96 H	5.00 H	inspection (same with LA)
Arrivale	Passport inspection	3.89 H3	4.12 H	7	3.89	3.92	3.96 H	4.00.11	4.00.11	5.00 H	•
Arrivals	aggage delivery speed	3.71 H3	4.12 H 3.98 H	, 5	3.69 3.45 L	3.92 3.71	3.79 H	4.90 H 4.74 H	4.90 H 4.87 H	5.00 H 4.97 H	→ JFK also performs on a pa
Services	Customs inspection	3.80 H3	3.96 П 4.10 Н	7	3.45 L	3.80	3.79 H	4.74 H 4.93 H	4.87 H 4.89 H	4.97 H 4.99 H	with LAX on baggage cart
14	nd on rating apple: 1 Pag	·							4.09 11		check-in staff efficiency,

Mean Scores based on rating scale: 1-Poor, 2-Fair, 3-Good, 4- Very Good, 5- Excellent. * Other may include Education, Family visit, Religious events, etc. H2/3; L2/3: Significantly Higher/Lower than Q2 2018/Q3 2017; H/L:Significantly Higher/Lower than JFK Q3 2018;

- Q2 2018 and YOY, JFK still significantly underperforms the peer airports panel overall and on all airport elements, with most items ranking last or next to last, except parking facilities, where JFK leads LAX and is comparable to AMS, while Satisfaction with JFK's parking value for the money (VFM) outperforms LAX and is on a par with AMS (accounting for its 4th rank in the peer panel on this item).
- → JFK also outperforms AMS on walking distance, gate comfort and arrival baggage speed, and LAX on wayfinding, FIDS, airport staff courtesy and terminal cleanliness.
- → JFK performs on a par with AMS on satisfaction with all check-in related elements. security ID check wait time, restroom cleanliness and availability (also for LAX on availability), eating and shopping facilities VFM, terminal cleanliness and ambiance, and arrivals passport/ customs inspection (same with LAX).
- → JFK also performs on a par with LAX on baggage carts, check-in staff efficiency, safe/secure feeling, connections, eating facilities and gate comfort.

JFK – Performance vs. Peer Panel





JFK- Airport Performance





Four of the five airport elements indicate a weakness for JFK (under 70% satisfaction for those who deem the item important), thereby excluding wayfinding. Security check wait-time, restroom cleanliness and Internet access/WiFi significantly underperform.



Notes: 1st most important 2nd most important 3rd most important

Top 5: from Q8: "Which of the items listed in Question 7 are the $1^{st}/2^{nd}/3^{rd}$ most important to you at this airport?" The figures represent the number of respondents who mention the item.

Satisfied Passengers are among the respondents who mention the item as important at Q8.

Satisfied Passengers among the respondents to Q7 items "Based on your experience today, please rate this airport on each service item". Base is Respondents providing a valid response



12

Scores 4 + 5

(Excellent+

Very Good)



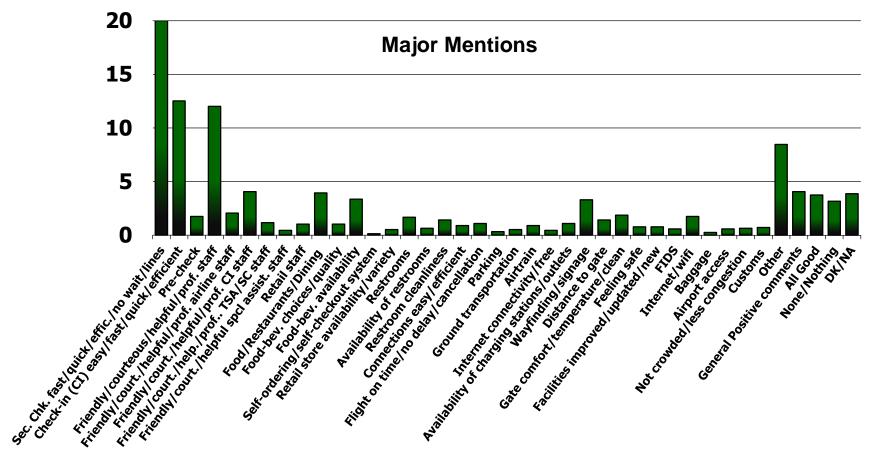
JFK Passenger Comments: Best/Worst Experience

Best Aspects of Airport Experience-JFK

% Total Responses – Q3 2018



Among the JFK passengers who articulated what they liked best about their airport experience, passengers focused primarily on the Security Check and Check-in process, the courtesy/helpfulness of the airport staff (especially CI and SC), food-beverage selection, availability and value, wayfinging and WiFi/Internet connectivity and cleanliness.



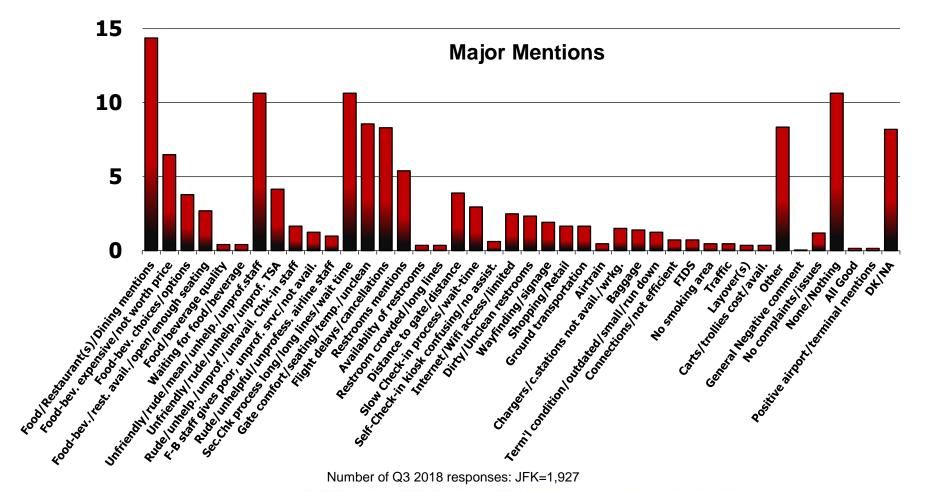
Number of Q3 2018 responses: JFK=1,549

Worst Aspects of Airport Experience-JFK

% Total Responses – Q3 2018



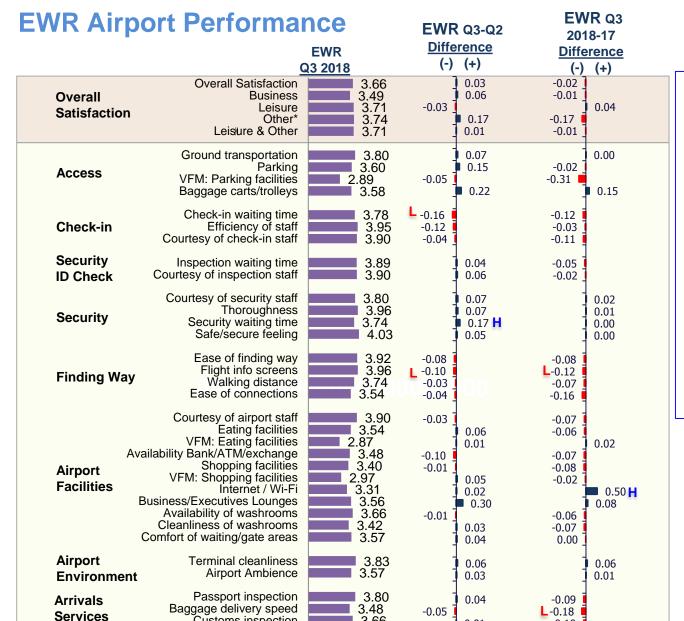
Many JFK passengers had something to say while about one-fifth didn't. Negative comments focused heavily on the food-beverage quality/variety/selection followed closely by the long lines/wait times at the Security Check, the various airport staff demeanor, gate comfort and flight delays/cancellations. Retreating a bit from last quarter were mentions of unclean restroom and limited/no free WiFi.



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EWR Satisfaction Performance



Customs inspection



- > EWR continues to be a work in progress, with significant improvement in passenger satisfaction with WiFi (YOY) and TSA wait times (since Q2).
- > Satisfaction with Check-in wait times and FIDS receded significantly in Q2.
- → In Q3 2018, EWR scores highest on safe secure feeling [in the security check area] (4.03) and lowest on eating facilities value for the money -- VFM (2.87).

Mean Scores based on rating scale: 1-Poor, 2-Fair, 3-Good, 4- Very Good, 5- Excellent. * Other may include Education, Family visit, Religious events, etc. H/L: Q3 2018 (N=1,037) Significantly Higher/Lower than Q2 2018 or Q3 2017.

3.66

0.01

-0.10

EWR Airport Performance vs. Peer Panel

ACI	-VOI
	NOU
	Airport Service Quality

			<u>Panel</u>	Rank~	BOS	MSP	MUC	SEA	YYZ
Overall Satisfaction	Overall Satisfaction Business Leisure Other* Leisure & Other	3.66 3.49 3.71 3.74 3.71	4.01 H 3.90 H 4.04 H 4.03 H 4.04 H	6 6 6 6	4.12 H 4.01 H 4.15 H 4.17 H 4.16 H	4.32 H 4.30 H 4.36 H 4.12 H 4.32 H	4.12 H 4.07 H 4.17 H 4.00 4.15 H	3.89 H 3.72 H 3.92 H 3.98 H 3.93 H	4.42 H 4.33 H 4.44 H 4.38 H 4.43 H
Access	Ground transportation	3.80	3.95 H	6	3.99 H	3.95	3.88	4.00 H	4.27 H
	Parking	3.60	3.66	5	3.48	3.85	3.70	3.63	4.11 H
	VFM: Parking facilities	2.89	2.82	4	2.65	3.14	2.37 L	2.91	3.63 H
	Baggage carts/trolleys	3.58	3.80 H	6	3.80 H	3.88 H	3.75	3.75	4.40 H
Check-in	Check-in waiting time	3.78 L2	4.00 H	6	4.15 H	4.19 H	3.96 H	3.91 H	4.31 H
	Efficiency of staff	3.95	4.17 H	6	4.23 H	4.34 H	4.11 H	4.19 H	4.40 H
	Courtesy of check-in staff	3.90	4.17 H	6	4.18 H	4.40 H	4.17 H	4.24 H	4.41 H
Security	Inspection waiting time courtesy of inspection staff	3.89	4.04 H	6	4.22 H	4.44 T	4.04 H	3.97	4.16 H
ID Check C		3.90	4.09 H	6	4.18 H	4.24 T	4.13 H	4.12 H	4.28 H
Security	Courtesy of security staff Thoroughness Security waiting time Safe/secure feeling	3.80 3.96 3.74 H2 4.03	4.06 H 4.13 H 3.94 H 4.20 H	6 6 6	4.13 H 4.19 H 4.06 H 4.20 H	4.19 H 4.31 H 4.04 H 4.39 H	4.06 H 4.11 H 3.88 H 4.21 H	4.07 H 4.09 H 3.87 H 4.17 H	4.38 H 4.38 H 4.29 H 4.51 H
Finding Way	Ease of finding way	3.92	4.12 H	6	4.26 H	4.30 H	4.08 H	4.07 H	4.32 H
	Flight info screens	3.96L2	/3 4.15 H	6	4.23 H	4.37 H	4.09 H	4.14 H	4.40 H
	Walking distance	3.74	3.82 H	5	4.04 H	3.77	3.59 L	3.77	4.03 H
	Ease of connections	3.54	3.95 H	6	3.99 H	4.08 H	4.02 H	3.98 H	4.20 H
Airport Facilities Busi	Courtesy of airport staff Eating facilities VFM: Eating facilities bility Bank/ATM/exchange Shopping facilities VFM: Shopping facilities Internet / Wi-Fi iness/Executives Lounges Availability of washrooms Cleanliness of washrooms Infort of waiting/gate areas	3.90 3.54 2.87 3.48 3.40 2.97 3.31 H3 3.56 3.66 3.42 3.57	4.17 H 3.76 H 3.76 H 3.72 H 3.16 H 3.75 H 3.82 H 4.03 H 3.85 H 3.76 H	665666665	4.21 H 3.83 H 3.35 H 3.86 H 3.64 H 3.24 H 3.95 H 3.72 4.18 H 3.91 H 3.92 H	4.34 H 4.16 H 3.52 H 3.85 H 4.02 H 3.42 H 4.08 H 4.02 H 4.32 H 4.24 H 4.04 H	4.16 H 3.79 H 2.85 3.77 H 3.94 H 3.18 H 3.61 H 4.03 H 4.11 H 4.09 H 3.85 H	4.20 H 3.68 H 3.07 H 3.65 3.71 H 3.03 3.80 H 3.83 H 3.98 H 3.77 H 3.52	4.45 H 4.01 H 3.60 H 4.16 H 3.92 H 3.49 H 3.94 H 4.17 H 4.31 H 4.20 H 4.12 H
Airport	Terminal cleanliness	3.83	4.06 H	6	4.10 H	4.34 H	4.34 H	3.86	4.47 H
Environment	Airport Ambience	3.57	3.86 H	6	3.92 H	4.18 H	4.09 H	3.67 H	4.29 H
Arrivals Services	Passport inspection Baggage delivery speed Customs inspection	3.80 3.48 L3 3.66	3.96 H 3.64 H 3.82 H	6 6 6	3.86 3.52 3.67	4.24 H 4.08 H 4.03 H	4.01 H 3.52 H 3.93 H	4.00 H 3.75 H 3.82 H	4.25 H 3.93 H 4.17 H

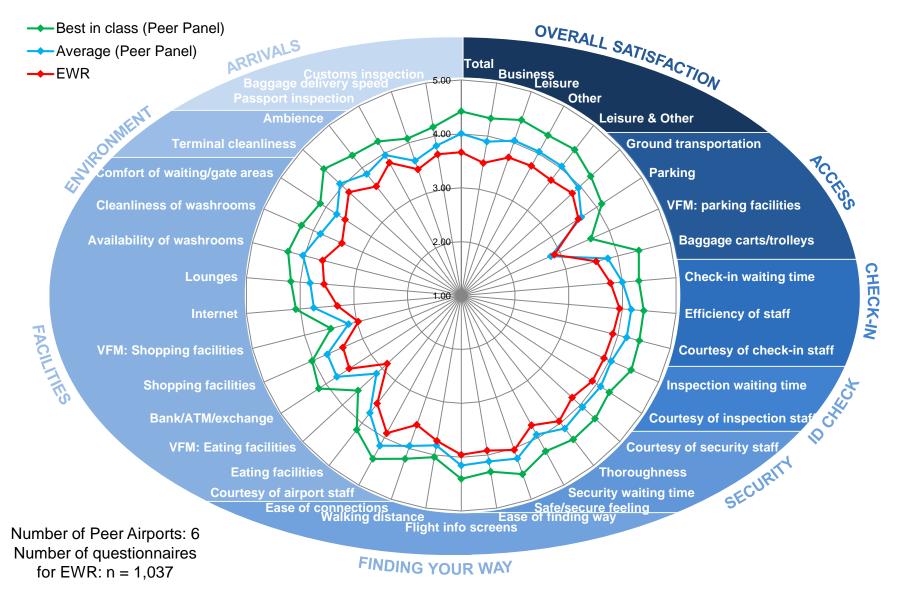
EWR

- → EWR also significantly underperforms the Peer Panel airports on overall satisfaction as well as nearly all airport elements, with most items ranking last or next to last.
- → The exceptions occur for satisfaction with EWR parking where it's on a par with all the Peer airports except YYZ (leader) and on EWR parking facilities value for the money (VFM), where it's significantly higher than MUC and on a par with all others except YYZ (leader).
- EWR also outperformsMUC on walking distance.
- EWR performs on a par with Peer airports on satisfaction with select airport elements:
 - -BOS: all three arrivals services elements and business lounges.
 - -MSP: walking distance.
 - -MUC: eating facilities VFM
 - -SEA: Sec. ID Check waittime, walking distance, ATMs/money exchanges, shopping facilities VFM, and gate comfort.

Mean Scores based on rating scale: 1-Poor, 2-Fair, 3-Good, 4- Very Good, 5- Excellent. * Other may include Education, Family visit, Religious events, etc. H2/3; L2/3: Significantly Higher/Lower than Q2 2018/Q3 2017; H/L: Significantly Higher/Lower than EWR Q3 2018; ~ Rank in Peer Panel of 7 airports; EWR N=1.037

EWR - Performance vs. Peer Panel



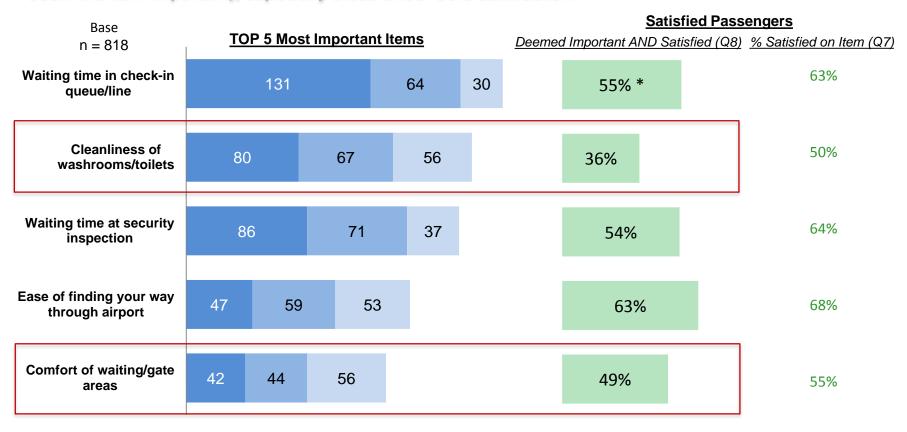


EWR-Airport Performance

Airport Service Quality

Top 5 Most Important Items – Satisfied Passengers

➤ All five airport elements indicate a weakness for EWR (under 70% satisfaction for those who deem the item important), especially those under 50% satisfaction.



Notes: 1st most important 2nd most important 3rd most important

Top 5: from Q8: "Which of the items listed in Question 7 are the $1^{st}/2^{nd}/3^{rd}$ most important to you at this airport?" The figures represent the number of respondents who mention the item.

Satisfied Passengers are among the respondents who mention the item as important at Q8.

Satisfied Passengers among the respondents to Q7 items "Based on your experience today, please rate this airport on each service item". Base is Respondents providing a valid response

GRMI

Scores 4 + 5

(Excellent+

Very Good)



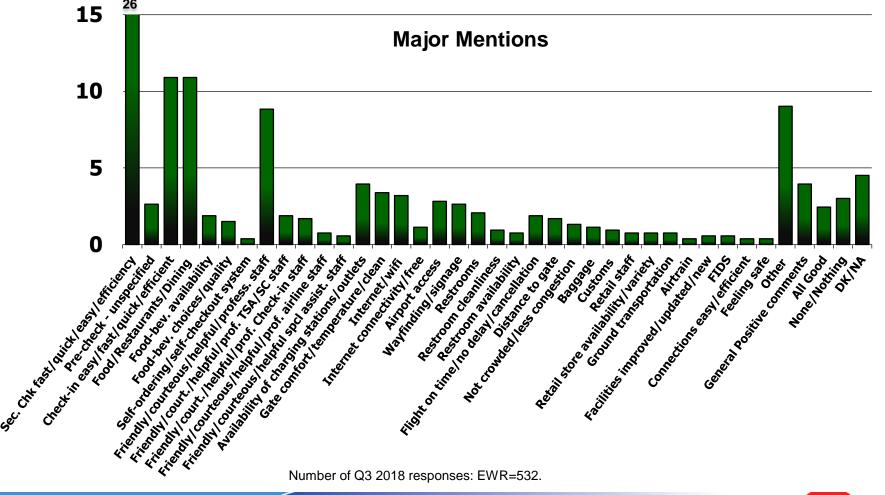
EWR Passenger Comments: Best/Worst Experience

Best Aspects of Airport Experience-EWR



% Total Responses – Q3 2018

Most passengers had positive something to say. More than one-fourth cited the efficiency of the Security Check process. At a distant second, passengers mentioned the selection of food-beverage and dining and efficiency of the Check-in process, followed by friendliness/courtesy of the various airport staff. Other major mentions include gate comfort, Internet/WiFi, airport access, wayfinding and restrooms.



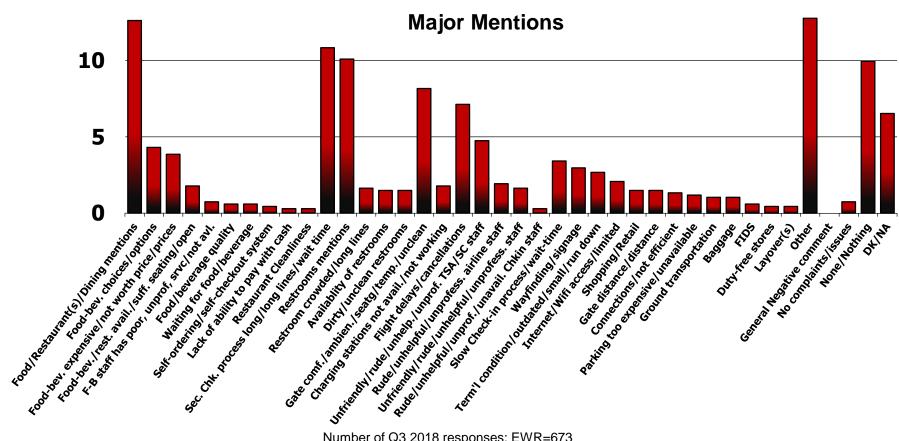
Worst Aspects of Airport Experience-EWR



% Total Responses – Q3 2018

15

Over one-fourth of EWR passengers couldn't articulate what was their worst experience on-airport. Among those who did, negative comments focused heavily on the long lines/wait times at the Security Checkpoint as well as the TSA demeanor, availability of/crowded/unclean restrooms, gate comfort, flight delays/cancellations, and food-beverage quality/choices/selection, available seating and pricing. To a lesser extent, passengers cited limited Internet/WiFi access, wayfinding, check-in process time and terminal conditions.



Number of Q3 2018 responses: EWR=673

23



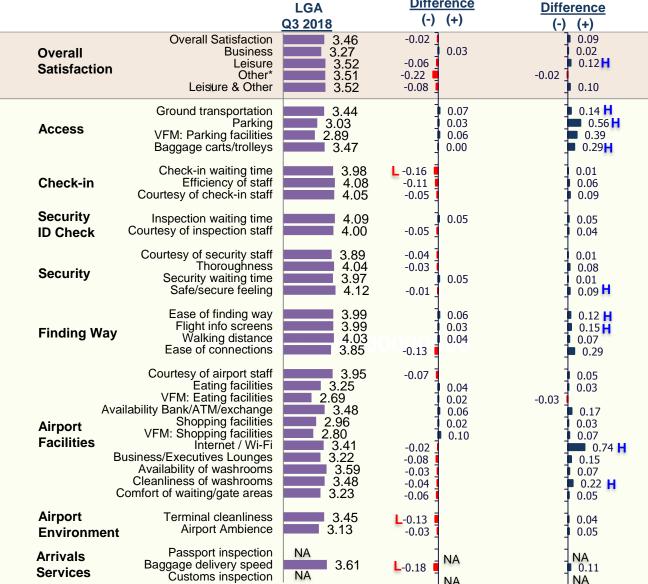
LGA Satisfaction Performance

LGA Airport Performance

LGA Q3-Q2
Difference
(-) (+)

LGA Q3
2018-17
Difference





- → LGA also significantly improved passenger satisfaction on numerous airport elements since one year ago, aligned with our service-level initiatives in airport access, WiFi, wayfinding and restroom cleanliness (Project Clean).
- There was some recent slippage though (from Q2) in Check-in wait times, terminal cleanliness and baggage speed.
- → In Q3 2018, LGA scores highest on safe/secure feeling [in the security check area] – (4.12) and lowest on eating facilities value for the money -- VFM (2.69).

Mean Scores based on rating scale: 1-Poor, 2-Fair, 3-Good, 4- Very Good, 5- Excellent. * Other may include Education, Family visit, Religious events, etc.

NA: Not applicable; H/L: Q3 2018 (N=984) Significantly Higher/Lower than Q2 2018 or Q3 2017.

LGA Airport Performance vs. Peer Panel



LGA

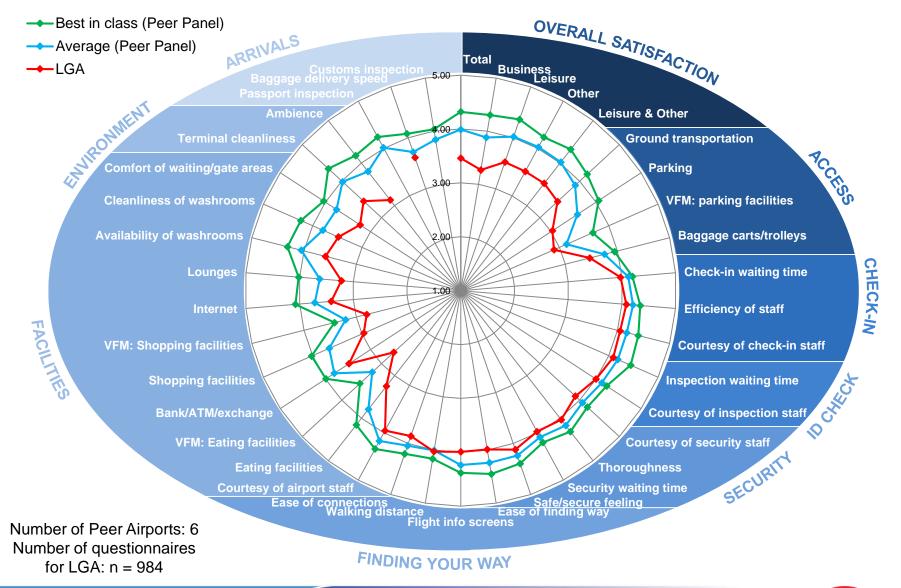
		<u>Panel</u>	Rank ~	BOS	BWI	FLL	MSP	PHL
Overall Satisfaction	3.46	3.99 H	6	4.12 H	4.18 H	4.07 H	4.32 H	4.02 H
Overall Business	3.27	3.88 H	6	4.01 H	4.01 H	4.07 H	4.30 H	3.95 H
Satisfaction Leisure	3.52 H3	4.02 H	6	4.15 H	4.24 H	4.09 H	4.36 H	4.03 H
Other"	3.51	4.03 H	6	4.17 H	4.24 H	4.01 H	4.12 H	4.09 H
Leisure & Other	3.52	4.02 H	6	4.16 H	4.24 H	4.07 H	4.32 H	4.04 H
Ground transportation	3.44 H3	3.89 H	6	3.99 H	4.19 H	4.00 H	3.95 H	4.09 H
Access Parking	3.03нз	3.59 H	6	3.48 H	4.06 H	3.60 H	3.85 H	3.54 H
VFM: Parking facilities	2.89	3.14	5	2.65	3.67 H	3.34 H	3.14	3.13
Baggage carts/trolleys	3.47 H3	3.75 H	6	3.80 H	3.95 H	3.80 H	3.88 H	3.71 H
Check-in waiting time	3.98 L2	4.12 H	6	4.15 H	4.18 H	4.08	4.19 H	4.20 H
Check-in Efficiency of staff	4.08	4.21 H	6	4.23 H	4.34 H	4.18	4.34 H	4.21 H
Courtesy of check-in staff	4.05	4.18 H	6	4.18 H	4.32 H	4.20 H	4.40 H	4.14
Security Inspection waiting time	4.09	4.18 H	6	4.22 H	4.24 H	4.21 H	4.44 T	4.17
ID Check Courtesy of inspection staff	4.00	4.13 H	6	4.18 H	4.17 H	4.21 H	4.24 T	4.10
Courtesy of security staff	3.89	4.07 H	6	4.13 H	4.11 H	4.19 H	4.19 H	4.02 H
Thoroughness	4.04	4.17 H	6	4.19 H	4.22 H	4.27 H	4.31 H	4.13 H
Security Security waiting time	3.97	4.09 H	6	4.06	4.15 H	4.20 H	4.04 H	4.13 H
Safe/secure feeling	4.12 H3	4.24 H	6	4.20 H	4.32 H	4.32 H	4.39 H	4.22 H
Ease of finding way	3.99 H3	4.24 H	6	4.26 H	4.45 H	4.31 H	4.30 H	4.22 H
Finding Way Flight info screens Walking distance	3.99 H3	4.24 H	6	4.23 H	4.38 H	4.24 H	4.37 H	4.30 H
waiking distance	4.03	4.01	4	4.04	4.16 H	4.13 H	3.77 L	3.86 L
Ease of connections	3.85	4.04	6	3.99	4.20 H	3.96	4.08	4.04
Courtesy of airport staff	3.95	4.17 H	6	4.21 H	4.33 H	4.22 H	4.34 H	4.14 H
Eating facilities	3.25	3.79 H	6	3.83 H	4.05 H	3.71 H	4.16 H	3.97 H
VFM: Eating facilities	2.69	3.23 H	6	3.35 H	3.54 H	3.15 H	3.52 H	3.34 H
Availability Bank/ATM/exchange	3.48	3.80 H	6	3.86 H	3.94 H	3.70 H	3.85 H	3.99 H
Airport Shopping facilities	2.96	3.66 H	6	3.64 H	3.91 H	3.61 H	4.02 H	3.98 H
VFM: Shopping facilities Facilities Internet / Wi-Fi	2.80 3.41 H3	3.21 H	6	3.24 H	3.41 H	3.16 H	3.42 H	3.34 H
Business/Executives Lounges	3.22	3.72 H	6	3.95 H	3.62 H	3.77 H	4.08 H	3.61 H
Availability of washrooms	3.22	3.63 H	6	3.72 H	3.71 H	3.53 H	4.02 H	3.90 H
Cleanliness of washrooms	3.59 3.48 H3	4.05 H	6	4.18 H	4.22 H	4.05 H	4.32 H	4.08 H
Comfort of waiting/gate areas	3.23	3.79 H	6	3.91 H	3.93 H	4.01 H	4.24 H	3.56
0 0		3.75 H	6	3.92 H	3.91 H	3.85 H	4.04 H	3.75 H
Airport Terminal cleanliness	3.45 L2	3.98 H	6	4.10 H	4.20 H	4.10 H	4.34 H	3.97 H
Environment Airport Ambience	3.13	3.80 H	6	3.92 H	4.03 H	3.94 H	4.18 H	3.87 H
Arrivals Passport inspection	NA	4.02	NA	3.86	4.22	4.12	4.24	4.10
Baggage delivery speed	3.61 L2	3.72	5	3.52	3.75	3.89 H	4.08 H	3.77 H
Services Customs inspection	NA	3.84	NA	3.67	3.99	3.89	4.03	4.01

- → LGA significantly underperforms the Peer Panel airports on overall satisfaction as well as many airport elements, with most items ranking last or next to last.
- > Exceptions occur for LGA, where it is on a par with parking facilities value for the money (VFM), with BOS, MSP and PHL It is also on a par with all peer airports for ease of connections, except BWI (leader).
- → LGA outperforms both MSP and PHL on walking distance.
- + LGA also performs on a par with Peer airports on satisfaction with select airport elements:
 - -BOS: security wait-time and arrivals baggage delivery.
 - -BWI: arrivals baggage delivery.
 - -FLL: Check-in wait-time/ staff efficiency.
 - -MSP: Sec. ID Check waittime/staff courtesy.
 - -PHL: Check-in staff courtesy and Sec. ID Check wait-time/ staff courtesy and restroom cleanliness.

Mean Scores based on rating scale: 1-Poor, 2-Fair, 3-Good, 4- Very Good, 5- Excellent. * Other may include Education, Family visit, Religious events, etc. NA: Not applicable; H2/3 L2/3: Significantly Higher/Lower than Q2 2018/Q3 2017; H/L: Significantly Higher/Lower than LGA Q3 2018; Significantly Higher/Lower than Q2 2018/Q3 2017; H/L: Significantly Higher/Lower than LGA Q3 2018; Significantly Higher/Lower than Q2 2018/Q3 2017; H/L: Significantly Higher/Lower than LGA Q3 2018; Significantly Higher/Lower than Q2 2018/Q3 2017; H/L: Significantly Higher/Lower than LGA Q3 2018; Significantly Higher/Lower than Q2 2018/Q3 2017; H/L: Significantly Higher/Lower than LGA Q3 2018; Significantly Higher/Lower than Q2 2018/Q3 2017; H/L: Significantly Higher/Lower than LGA Q3 2018; S T: Very small sample base; LGA Q3 2018 N=984

LGA – Performance vs. Customized Panel Total Traffic



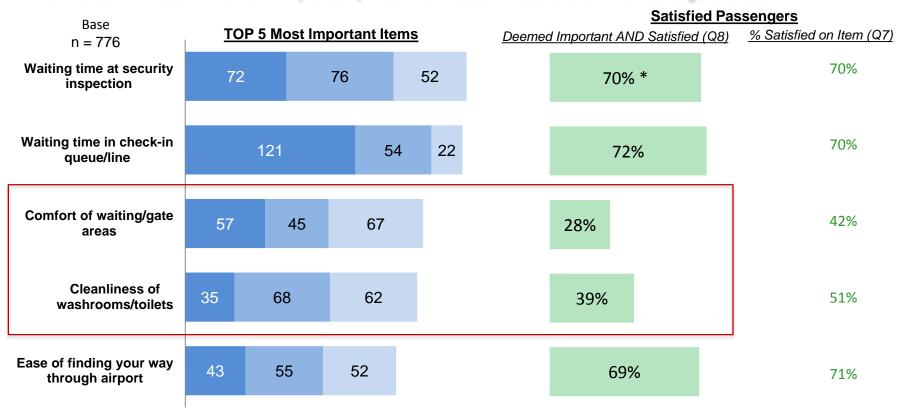


LGA- Airport Performance

Top 5 Most Important Items – Satisfied Passengers



Two out of the five airport elements below indicate a weakness for LGA (under 70% satisfaction) for those who deem the item important): restroom cleanliness and comfortable gate area.



Notes:

■ 1st most important
■ 2nd most important
■ 3rd most important

Scores 4 + 5(Excellent+ Very Good)

Top 5: from Q8: "Which of the items listed in Question 7 are the 1st / 2nd / 3rd most important to you at this airport?" The figures represent the number of respondents who mention the item.

Satisfied Passengers are among the respondents who mention the item as important at Q8.

Satisfied Passengers among the respondents to Q7 items "Based on your experience today, please rate this airport on each service item". Base is Respondents providing a valid response



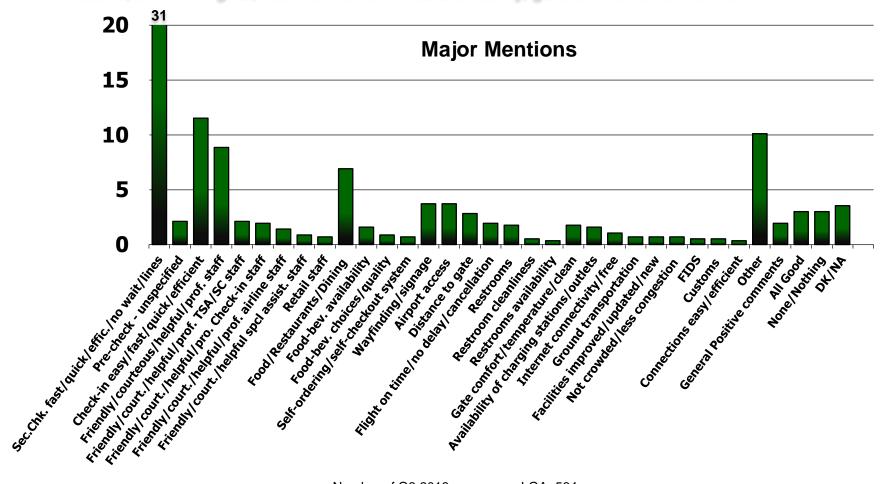
LGA Passenger Comments: Best/Worst Experience

Best Aspects of Airport Experience-LGA



% Total Responses – Q3 2018

Most LGA passengers cited something they liked best about their airport experience. Many passengers focused on the efficiency of the Security Check process, followed distantly by the Check-in process, helpful/courtesy/professionalism of the various airport staff, food-beverage/restaurant offerings/choices/quality. Other major positive mentions included wayfinding, airport access, on-time flights, restroom cleanliness/availability, gate comfort and Internet/WiFi.



Number of Q3 2018 responses: LGA=564

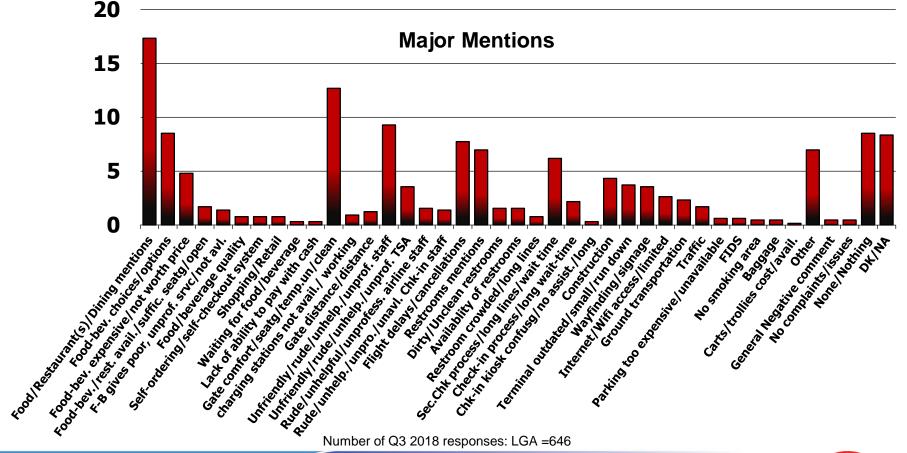
30

Worst Aspects of Airport Experience-LGA



% Total Responses - Q3 2018

➤ A good sized minority of LGA passengers (18%) couldn't articulate their worst experience on-airport. Among those who did, comments center on food-beverage options/selection/pricing/service quality, gate comfort (including seating, temperature and cleanliness), various airport staff demeanor, flight delays/cancellations, restroom cleanliness/availability/capacity and Security Check wait-times. Major themes mentioned to a lesser extent are construction, terminal condition, wayfinding/signage, Internet/WiFi, ground transportation and traffic.



Conclusions and Recommendations:



- All three Port Authority airports' performance improved in Q3 2018 compared to our first year-over-year (YOY) comparison, demonstrating that the service level initiatives and capital investment made within the last two quarters has improved passengers' experience at our airports.
 - ✓ JFK satisfaction improved significantly YOY overall and across nearly all airport elements, and continues to improve since Q2. EWR and LGA continue to be a work in progress, with significant improvement in passenger satisfaction on some of our service-level initiatives, but more needs to be accomplished.
- The improvements in passenger satisfaction we've observed YOY and since Q2 have yet to emerge as competitive advantages in the comparisons to the Peer Airport Panels, in that the three PA airports still rank last or second to last overall and on nearly all airport elements. This will be a slow path to improvement as we attempt to buttress our airports' image against competitor airports that are also aiming to improve their passenger satisfaction.
- Next steps: continued focus on the lowest scoring elements that are important to our travelers (e.g., Internet access/WiFi, gate area comfort, restroom cleanliness/condition/ functionality and better food-beverage selection in the gate areas. We should continue to deploy our new 2018 customer initiatives and advance our communications programs and platforms to inform and guide our customers in ways that that will enhance their experience on airport.



Thank You!

