### **APPENDIX B** TERMINAL DEMAND/CAPACITY AND FACILITY REQUIREMENTS

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#### TERMINAL 1 GATE UTILIZATION – AUGUST 13, 2008 SCHEDULE<sup>1</sup> Lambert-St. Louis International Airport

			PMAWD	18		Active AC Gate	Extra	008 Avg. Ga
Airline	Gate #	Existing PBB		Dep/Gate	Max AC Gauge	Utilization	RON	Time
	A2	Υ			B737-5,6,7,8,9w		_	
Delta	A4 A6	Y Y	38		B737-5,6,7,8,9w B727	CR7/CRJ/ERJ/M88	3	0:33
Total	3	3	38	6.3	DIZI			0
Midwest Connect/Northwest	A3 A5	Y Y	34		B737-5,6,7,8,9w B738	CRJ		0:25
Total	2	2	34	8.5	B730			0
Unassigned	A8	Υ			B737-3,4			
Unassigned	A10	Y			B737-5,6,7,8,9W			
Unassigned	A12	Υ			A321			
Continental	A9	Y	32		B757-2,3	ERJ		C
Total	A14 <b>2</b>	Y 2	32	8.0	EMBRAER(E170,175)			(
Total	A15	Y	- JZ	0.0	B737-5,6,7,8,9w			`
US Airways	A16	Y	30		B737-5,6,7,8,9w	319/320/CR9/CRJ/E70/		0:44
	A17	Υ			B737-5,6,7,8,9w	E75/E90/ERJ		
Total	3	3	30	5.0				(
	A18	Υ			DC-8			
United/Air Canada/GoJet	A19	Υ	44		B737-7w	CRJ/733/CR7/ER4	1	0:35
Total	A21	Y 3	44	7.3	F70/F100			
Total	3	3	**	7.3				
Unassigned	B2	Υ			MD80			
Unassigned	В3				COMMUTER			
Unassigned	B4	Y			MD80			
Unassigned	В6				MD80			
Unassigned	B7				COMMUTER			
Unassigned Unassigned	B8 B14	Y			CR2 COMMUTER			
Unassigned	B16				COMMUTER			
AirTran	B10	Υ	10		B737	B717	1	0:32
	B12 <b>2</b>	Y		2.5	B737-5,6,7,8,9w	DITI	'	0.32
Total		2	10	2.5				'
	C1	Υ			RJ-70,85,100,115			
	C2	Υ			B737-5,6,7,8,9,w			
	C3	Y			RJ-70,85,100,115			
	C5 C6	Y			Saab 340 B757-200	$\geq$		
	C7	Y			F28	,		
	C8	Υ			A321			
	C9	Y		77.0.	EMBRAER(E170,175)	B757/ER3/ER4/ERD/		
American <sup>2</sup>	C10 C12	Y	278		B757-200 B737-5,6,7,8,9,w	M80/M83	9	0:48
	C15	Y	.0		EMBRAER(E170,175)	Widdy Widd		
	C16	Υ	1.O		B737-5,6,7,8,9,w			
	C17	Y		<b>\O</b> `	B737-3,4			
	C18 C19	Y			B707 EMBRAER(E170,175)			
	C21	Y		o $O$	Saab 340			
	C23	Y	(O)		CRJ-7,9			
Total	C24 <b>18</b>	Y 18	278	7.7	B757-200			
Unassigned	C25	Y	270	111	B757			<u> </u>
Unassigned	C27	Y			B737-5,6,7,8,9,w			
Unassigned	C28 C29	Y	0,		B767			
Unassigned Unassigned / International	C30	Y			B737-5,6,7,8,9,w B707			
Unassigned	C31	Y			B737-5,6,7,8,9,w			
Unassigned / International	C32	Y			B707			
Unassigned Unassigned / International	C33 C34	Y			B757 B767			
Unassigned / International Unassigned	C34 C35	Y			MD80			
Unassigned / International	C36	Ϋ́			B747-400			
Unassigned <sup>3</sup>	C38	Y			A330			
Unaccionad	D0	Y			D707 400 000			
Unassigned Unassigned	D2 D6	Y			B737-100,200 A318,319			
Frontier	D4	Υ	6		B737-100,200	A318/A319		0:40
Total	1	3	6	3.0	F1100:155			(
Great Lakes	D8 D10		28		EMBRAER EMBRAER	BE1		0:51
Total	2	2	28	7.0				(
Closed	D12	Y			B757			
Closed Closed	D14 D16	Y			MD80 MD80			
Closed	D18	Y			B757			
Closed	D20	Υ			B757			
	D22 D24	Y			MD80 B763			
Closed	11/4	r			B763 B727/MD80			
	D26				DC9/B717			
Closed Closed Closed Closed	D26 E34	Υ			B757			
Closed Closed Closed Closed Closed	D26 E34 E36	Y						I
Closed Closed Closed Closed Closed Closed Closed Closed	D26 E34 E36 E38	Y Y			EMBRAER EMBRAER			
Closed Closed Closed Closed Closed	D26 E34 E36	Y			EMBRAER EMBRAER			
Closed Closed Closed Closed Closed Closed Closed Closed	D26 E34 E36 E38	Y Y					Total	Total A
Closed Closed Closed Closed Closed Closed Closed Closed Closed	D26 E34 E36 E38 E40	Y Y Y	PMAWD				Extra	Time (
Closed Closed Closed Closed Closed Closed Closed Closed Total Gates 2008	D26 E34 E36 E38 E40	Y Y Y	PMAWD Operations	Dep/Gate				Time
Closed Closed Closed Closed Closed Closed Closed Closed Total Gates 2008 Assigned	D26 E34 E36 E38 E40	Y Y Y	Operations				Extra RON	Time ( Gate
Closed Closed Closed Closed Closed Closed Closed Closed Total Gates 2008	D26 E34 E36 E38 E40 73 36	Y Y Y		Dep/Gate			Extra	Time ( Gate
Closed Closed Closed Closed Closed Closed Closed Closed Assigned Unassigned Closed	D26 E34 E36 E38 E40  73 36 25 12	Y Y Y 166 34 21 11	Operations 500	6.9	EMBRAER		Extra RON 14	Time ( Gate 0:44
Closed Closed Closed Closed Closed Closed Closed Closed Assigned Unassigned Closed Max AC Gauge	D26 E34 E36 E38 E40  73 36 25 12  Gate Mix	Y Y Y Y 66 34 21 11	500 % of Total	6.9	EMBRAER		Extra RON 14 % of Total	Time ( Gate 0:44
Closed Max AC Gauge Md Regiona	D26 E34 E36 E38 E40  73 36 25 12  Gate Mix II (Group II)	Y Y Y Y 66 34 21 11	500 % of Total 18%	6.9	EMBRAER  ive AC Gauge Gate Mix  Md Regional (Group II)	12	Extra RON 14 % of Total 33%	Time ( Gate 0:44
Closed Max AC Gauge Md Regiona Lrg Regiona Narrowbody	D26 E34 E36 E38 E40  73 36 25 12  Gate Mix II (Group III) (Group III)	Y Y Y Y 66 34 21 11	500 % of Total	6.9	EMBRAER  ive AC Gauge Gate Mix  Md Regional (Group II)  Lrg Regional (Group III)  Narrowbody (Group III)	12 - 20	Extra RON 14 % of Total	Time ( Gate 0:44
Closed  Total Gates 2008 Assigned Unassigned Closed  Max AC Gauge Md Regiona Lrg Regiona Narrowbody B757w	D26 E34 E36 E38 E40  73 36 25 12  Gate Mix II (Group III) II (Group IIII) (Group III)	9 Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	500  % of Total 18% 10% 47% 14%	6.9	EMBRAER  ive AC Gauge Gate Mix  Md Regional (Group II)  Lrg Regional (Group III)  Narrowbody (Group III)  B757w (Group IIIa)	12 - 20 4	Extra RON 14 % of Total 33% 0% 56% 11%	Time ( Gate 0:44
Closed  Max AC Gauge Md Regiona Lrg Regiona Narrowbody B757w Widebody	D26 E34 E36 E38 E40  73 36 25 12  Gate Mix II (Group III) II (Group IIII) (Group III)	Y Y Y Y 66 34 21 11 2008 13 7	500  % of Total 18% 10% 47%	6.9	EMBRAER  ive AC Gauge Gate Mix  Md Regional (Group II)  Lrg Regional (Group III)  Narrowbody (Group III)	12 - 20 4	Extra RON 14 % of Total 33% 0% 56%	Total A Time o Gate

1 Existing gate numbers, loading bridge, and Aircraft gauge based on field observations/assumptions, aerial data, and information Notes: received from the airport

- 2 AA gates C21 & C23 operate from one hold room door with split jetways
- 3 Gate C38 closes gates Gate C35 when B757/B767 at gate
- In December 2008 Lambert closed a 12 gate section of Concourse D followed by the entire concourse in 2010

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# TERMINAL 2 GATE UTILIZATION – AUGUST 13, 2008 SCHEDULE<sup>1</sup> Lambert-St. Louis International Airport

				200	08			20	800
				PMAD				Extra	Avg. Gate
	Airline	Gate #	<b>Existing PBB</b>	Operations	Dep/Gate	Max AC Gauge	AC Gate Utilization	RON	Time
		E4	Υ			B737			
		E6	Υ			B737			
		E8	Υ			B737			
ш		E10	Υ			B737			
se	Southwest <sup>2</sup>	E12	Υ	158		B737	B733/B735/B73G	0	0:25
Ĭ		E14	Υ			B737			
ğ		E16	Υ			B737			
2/Concourse		E18	Υ		. 0	B737			
		E20	Υ		X	B737			
erminal	Total	9	9	158	8.8	\ C			0:25
rm	Unassigned	E2			2)` ·\	B737			
Ę	Unassigned	E22		C		B737			
	Unassigned	E24				B737			
	Unassigned	E25			X	B737			
	USA 3000/Charter	E29	Y	, () (	S	• B737			
	(International)	E31	Y	8	)i N	B737	A320/B734	0	0:40
	(international)	E33	Υ		C-	B737			
	Total	3	3	8	1.3				0:40
	Total Gates 2008	16	12	7, ~					
	Assigned	12	12	166	6.9			0	0:25
	Unassigned	4	4	0'					
40	Max	Gate Mix	2008	% of Total	Max AC G	auge Gate Mix Assigned	2008	% of Total	
tals	Md Regiona	(Group II)	$\Omega_{i}$	0%		Md Regional (Group II)	-	0%	
Ţ	Lrg Regional	(Group III)	V.	0%		Lrg Regional (Group III)	-	0%	
	Narrowbody			100%		Narrowbody (Group III)	12	100%	
		Group IIIa)		0%		B757w (Group IIIa)	-	0%	
	Widebody			0%		Widebody (Group IV)	-	0%	
		(Group V)		0%		Jumbo (Group V)	-	0%	
		Total	16	100%		Total	12	100%	

Notes:

- Existing gate numbers, loading bridge, and Aircraft gauge based on field observations/assumptions, aerial data, and information received from the airport
- 2 In order to accommodate additional markets, Southwest has requested preferential use of Gates E22 & E24 (per STL planning staff)

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#### INITIAL GATE REQUIREMENTS

As described in the previous section present and future gate requirements were based on preferential use analyses. However, for future long range planning considerations a common use gate operational policy demand was also prepared and evaluated in order to provide a point of comparison range of planning alternatives such as evaluating between common use and preferential gate usage relative to future terminal programmatic space requirements.

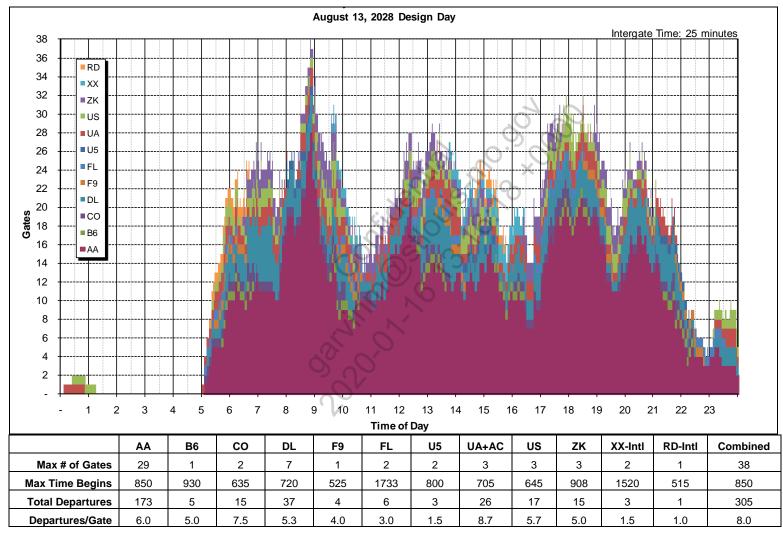
Initial gate requirements and assumptions evaluated and shown in the following tables and include:

- Terminal 1 Preferential & Common Use
- Terminal 2 Preferential Use

The results from the 2028 DDFS are presented the following exhibits. These graphs represent individual peak gate needs by airline and aircraft design group throughout a 24 hour period. Each show both preferential and common use gate need by airline. The combined total (Common Use) is not the sum of the individual airlines (Preferential Use) as each airlines peak gate need occurs at different times throughout the day.

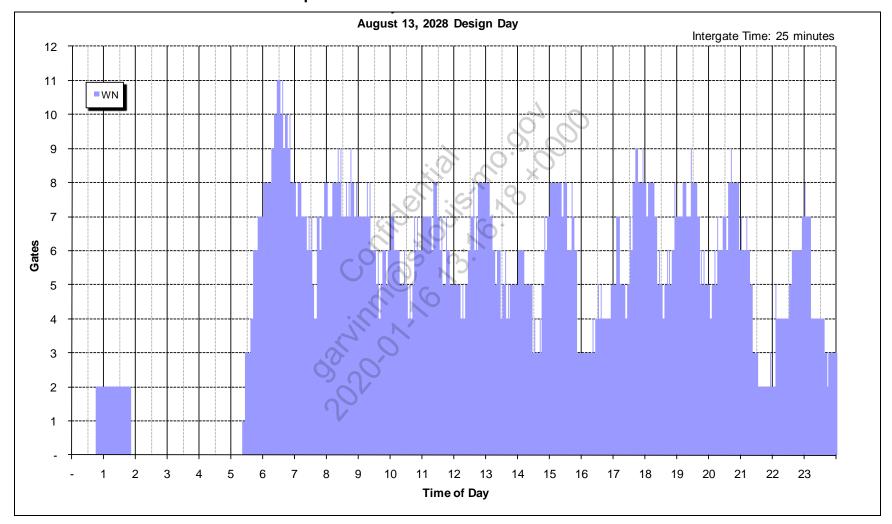
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# TERMINAL 1 2028 DDFS PROJECTED GATE DEMAND BY AIRLINE Lambert-St. Louis International Airport



Source: Landrum & Brown Analysis

# TERMINAL 2 2028 DDFS PROJECTED GATE DEMAND BY AIRLINE Lambert-St. Louis International Airport



Source: Landrum & Brown Analysis

#### TERMINAL 1 PROJECTED GATE DEMAND - PREFERENTIAL USE SCENARIO PEAK MONTH AVERAGE DAY DEPARTURES PER GATE SUMMARY Lambert-St. Louis International Airport

			F	RECOMMENDE	D FACILITIES	5
	Existing	Facilities		Forecast Y	ear Activity	
	_	Year Activity	2013	2018	2023	2028
Total Enplanements	4,98	7,691	5,011,900	5,593,600	6,128,700	6,703,400
Annual Passengers	9,97	5,382	10,023,800	11,187,200	12,257,400	13,406,800
PMAD Departures	2	50	243	265	284	305
Aircraft Design Group (ADG)	Max AC Gauge <sup>1</sup>	Active AC Gauge Utilized	5. XO	RECOMMEN	DED GATES⁵	
Small Regional (Group I)	-		90 -	-	-	-
Medium Regional (Group II)	13	12	24	26	29	31
Large Regional (Group III)	17	0,00,00	2	2	2	2
Narrowbody (Group III)	34(1)	20	18(2)	19(2)	20(2)	21(2)
B757(Group IV)	10	@ 4 K	-	-	-	-
Widebody (Group IV)	7(3)		-	-	-	1(1)
Jumbo (Group V)	2(2)		-	-	-	-
Total Gates <sup>2</sup>	73(6)	36(0)	44(2)	47(2)	51(2)	55(3)
Departures per Gate		6.9	5.5	5.6	5.6	5.5
Total NBEG <sup>3</sup>	74.5	32.8	36.8	39.2	42.3	46.1
Total Linear Frontage <sup>4</sup>	10,665	4,750	5,360	5,710	6,160	6,710
Annual Enplanements per NBEG	·V	152,100	136,200	142,700	144,900	145,400

PMAD = Peak Month Average Day

- Notes: 1 Represents the largest aircraft gauge in each design group, not necessarily the aircraft gauge currently being utilized
  - 2 Existing gates C21 & C23 operate from 1 hold room door with split jetways
  - 3 Narrowbody Equivalent Gate (NBEG): Used to normalize the apron frontage demand and capacity to that of a typical narrowbody aircraft gate
  - 4 Total Linear Frontage equals aircraft wingspan plus standard planning practice of 25 foot wingtip separation excluding any potential adjacency wingtip conflicts
  - 5 Existing and future International gate demand in parenthesis

#### TERMINAL 1 PROJECTED GATE DEMAND - COMMON USE SCENARIO PEAK MONTH AVERAGE DAY DEPARTURES PER GATE SUMMARY Lambert-St. Louis International Airport

				RECOMMENDE	D FACILITIES	5
	Existing	Facilities		Forecast Y	ear Activity	
	2008 Base	Year Activity	2013	2018	2023	2028
Total Enplanements	4,98	4,987,691		5,593,600	6,128,700	6,703,400
Annual Passengers	9,97	5,382	10,023,800	11,187,200	12,257,400	13,406,800
PMAD Departures	2	50	243	265	284	305
Aircraft Design Group (ADG)	Max AC Gauge <sup>1</sup>			RECOMMEN	DED GATES <sup>5</sup>	
Small Regional (Group I)	-		90 -	-	-	-
Medium Regional (Group II)	13	12	16	18	20	22
Large Regional (Group III)	17	0,00,00	-	-	-	-
Narrowbody (Group III)	34(1)	20	14(2)	15(2)	15(2)	15(2)
B757(Group IV)	10	@ 4 K	-	-	-	-
Widebody (Group IV)	7(3)	200	-	-	-	1(1)
Jumbo (Group V)	2(2)		-	-	-	-
Total Gates <sup>2</sup>	73(6)	36(0)	30(2)	33(2)	35(2)	38(3)
Departures per Gate	20	6.9	8.1	8.0	8.1	8.0
Total NBEG <sup>3</sup>	74.5	32.8	25.2	27.6	29.0	31.8
Total Linear Frontage <sup>4</sup>	10,665	4,750	3,670	4,020	4,230	4,650
Annual Enplanements per NBEG	· V	152,100	198,900	202,700	211,300	210,800

PMAD = Peak Month Average Day

- Notes: 1 Represents the largest aircraft gauge in each design group, not necessarily the aircraft gauge currently being utilized
  - 2 Existing gates C21 & C23 operate from 1 hold room door with split jetways
  - 3 Narrowbody Equivalent Gate (NBEG): Used to normalize the apron frontage demand and capacity to that of a typical narrowbody aircraft gate
  - 4 Total Linear Frontage equals aircraft wingspan plus standard planning practice of 25 foot wingtip separation excluding any potential adjacency wingtip conflicts
  - 5 Existing and future International gate demand in parenthesis

#### TERMINAL 2 PROJECTED GATE DEMAND - PREFERENTIAL USE SCENARIO PEAK MONTH AVERAGE DAY DEPARTURES PER GATE SUMMARY Lambert-St. Louis International Airport

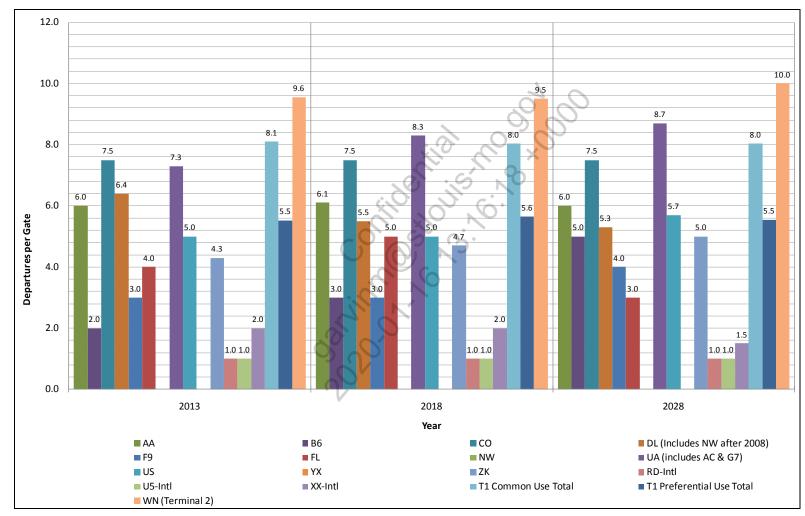
			F	RECOMMENDE	D FACILITIES	5
	Existing	Facilities		Forecast Y	ear Activity	
	2008 Base	Year Activity	2013	2018	2023	2028
Total Enplanements	2,220,199		2,436,500	2,711,300	2,949,100	3,219,300
Annual Passengers	4,44	0,398	4,873,000	5,422,600	5,898,200	6,438,600
PMAD Departures		30	86	95	102	110
Aircraft Design Group (ADG)	Max AC Gauge <sup>1</sup>	Active AC Gauge Utilized	5. XO	RECOMMEN	DED GATES <sup>4</sup>	
Small Regional (Group I)	-		90 -	ı	-	-
Medium Regional (Group II)	-	. 20 - 113	_	-	-	-
Large Regional (Group III)	-	0,00,00	-	-	-	-
Narrowbody (Group III)	16(3)	12(3)	9	10	10	11
B757(Group IV)	<u> </u>	(A) - K)	-	-	-	-
Widebody (Group IV)	-	200	-	-	-	-
Jumbo (Group V)			-	-	-	-
Total Gates	16(3)	12(3)	9(0)	10(0)	10(0)	11(0)
Departures per Gate		6.7	9.6	9.5	10.2	10.0
Total NBEG <sup>2</sup>	16.0	12.0	9.0	10.0	10.0	11.0
Total Linear Frontage <sup>3</sup>	2,290	1,720	1,290	1,430	1,430	1,570
Annual Enplanements per NBEG	·V	185,000	270,000	271,100	294,900	292,700

PMAD = Peak Month Average Day

- Notes: 1 Represents the largest aircraft gauge in each design group, not necessarily the aircraft gauge currently being utilized
  - 2 Narrowbody Equivalent Gate (NBEG): Used to normalize the apron frontage demand and capacity to that of a typical narrowbody aircraft gate
  - 3 Total Linear Frontage equals aircraft wingspan plus standard planning practice of 25 foot wingtip separation excluding any potential adjacency wingtip conflicts
  - 4 Existing and future International gate demand in parenthesis

# DESIGN DAY FORECASTS DAILY DEPARTURES PER GATE SUMMARY (PRE AA CAPCITY REDUCTION)

Lambert-St. Louis International Airport



Source: Landrum & Brown Analysis

# TERMINAL 1 PROJECTED GATE DEMAND – COMMON USE SCENARIO (Post AA Capacity Reduction) PEAK MONTH AVERAGE DAY DEPARTURES PER GATE SUMMARY Lambert-St. Louis International Airport

			F	RECOMMENDE	D FACILITIES	S
	Existing	Facilities		Forecast Ye	ear Activity	
	2008 Base \	Year Activity	2013	2018	2023	2028
Total Enplanements	4,98	4,987,691		3,930,647	4,308,810	4,703,945
Annual Passengers	9,97	5,382	7,155,712	7,861,294	8,617,620	9,407,890
PMAD Departures	2	50	159	171	182	194
Aircraft Design Group (ADG)	Max AC Gauge <sup>1</sup>	Active AC Gauge Utilized RECOMMENDED GATE		DED GATES <sup>5</sup>		
Small Regional (Group I)	-	-	02 -	-	-	-
Medium Regional (Group II)	13	12	9	11	12	12
Large Regional (Group III)	17	(10, -0)	ò · -	-	-	-
Narrowbody (Group III)	34(1)	20	11(2)	11(2)	11(2)	11(2)
B757(Group IV)	10	34 55	-	-	-	-
Widebody (Group IV)	7(3)		-	-	-	1(1)
Jumbo (Group V)	2(2)	V. 10	-	-	-	-
Total Gates <sup>2</sup>	73(6)	36(0)	20(2)	32(2)	23(2)	24(3)
Departures per Gate		6.9	8.0	7.8	7.9	8.1
Total NBEG <sup>3</sup>	74.5	32.8	17.3	18.7	19.4	20.8
Total Linear Frontage <sup>4</sup>	10,665	4,750	2,500	2,700	2,800	3,000
Annual Enplanements per NBEG	0,7	152,100	206,800	210,200	222,100	226,200

PMAD = Peak Month Average Day

9

- 1 Represents the largest aircraft gauge in each design group, not necessarily the aircraft gauge currently being utilized
- 2 Existing gates C21 & C23 operate from 1 hold room door with split jetways
- 3 Narrowbody Equivalent Gate (NBEG): Used to normalize the apron frontage demand and capacity to that of a typical narrowbody aircraft gate
- 4 Total Linear Frontage equals aircraft wingspan plus standard planning practice of 25 foot wingtip separation excluding any potential adjacency wingtip conflicts
- 5 Existing and future International gate demand in parenthesis

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# ALTERNATE FORECAST GATE SCENARIOS HIGH FORECAST SCENARIO – ANNUAL PASSENGERS PER GATE APPROACH Lambert-St. Louis International Airport

YEAR	ANNUAL ENPLANEMENTS	ANNUAL DEPATURES	ENPLANED PAX/DEP	ENPLANED PAX/GATE	GATES <sup>1</sup>
2008	7,207,890	110,705	65.1	150,200	48 <sup>2</sup>
2013	7,571,300	119,900	63.1	145,700	52
2018	8,625,500	129,900	66.4	153,200	56
2023	9,708,400	140,700	69.0	159,200	61
2028	10,924,400	152,400	71.7	165,400	66

Notes: 1 Indicates total airport Preferential Use gates

2 Indicates total airport base year utilized gates

## HIGH FORECAST SCENARIO – ANNUAL DEPARTURES PER GATE APPROACH Lambert-St. Louis International Airport

YEAR	ANNUAL ENPLANEMENTS	ANNUAL DEPATURES	DAILY DEP/GATE	ANNUAL DEP/GATE	GATES <sup>1</sup>
2008	7,207,890	110,705	6.8	2,310	48 <sup>2</sup>
2013	7,571,300	119,900	5.8	1,940	62
2018	8,625,500	129,900	5.0	2,010	65
2023	9,708,400	140,700	6.2	2,080	68
2028	10,924,400	152,400	6.4	2,150	71

Notes: 1 Indicates total airport Preferential Use gates

2 Indicates total airport base year utilized gates

# LOW FORECAST SCENARIO – ANNUAL PASSENGERS PER GATE APPROACH Lambert-St. Louis International Airport

YEAR	ANNUAL ENPLANEMENTS	ANNUAL DEPATURES	ENPLANED PAX/DEP	ENPLANED PAX/GATE	GATES <sup>1</sup>
2008	7,207,890	110,705	65.1	150,200	48 <sup>2</sup>
2013	6,598,500	113,700	58.0	133,900	49
2018	7,169,400	116,800	61.4	141,600	51
2023	7,706,400	120,000	64.2	148,100	52
2028	8,285,800	123,300	67.2	155,000	53

Notes: 1 Indicates total airport Preferential Use gates

2 Indicates total airport base year utilized gates

## LOW FORECAST SCENARIO – ANNUAL DEPARTURES PER GATE APPROACH Lambert-St. Louis International Airport

YEAR	ANNUAL ENPLANEMENTS	ANNUAL DEPATURES	DAILY DEP/GATE	ANNUAL DEP/GATE	GATES <sup>1</sup>
2008	7,207,890	110,705	6.8	2,310	48 <sup>2</sup>
2013	6,598,500	113,700	5.8	1,940	59
2018	7,169,400	116,800	6.0	2,010	58
2023	7,706,400	120,000	6.2	2,080	58
2028	8,285,800	123,300	6.4	2,150	57

Notes:

- 1 Indicates total airport Preferential Use gates
- 2 Indicates total airport base year utilized gates

#### RECOMMENDED TERMINAL FACILITIES ALTERNATIVE SCENARIOS

#### Terminal 1

- Hybrid Utilizes existing airline lease agreements until 2023 at which point all areas including gates have transitioned to Common Use
- Common Use All areas are transitioned from Preferential Use lease agreements by 2013

	Units	Existing Terminal Space (sf) Full Capacity	2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
General <sup>1</sup>						
Overall Airport Statistics						
Annual Passengers		9,975,382	7,155,712	7,861,294	8,617,620	9,407,890
Annual Enplanements		4,987,691	3,577,856	3,930,647	4,308,810	4,703,945
Annual Domestic Enplanements		-	-	-	-	-
Annual International Enplanements		-	-	-	-	-
O&D Passengers		-	3,267,195	3,592,644	3,939,553	4,300,853
Connecting Passengers		-	310,662	338,004	369,257	403,092
Peak Hour Passenger Statistics						
Peak Hour Enplaned - Domestic		1,741	1,261	1,427	1,524	1,630
Peak Hour Enplaned - International		287	286	286	313	341
Total Peak Hour Enplaned <sup>2</sup>		1,741	1,261	1,427	1,524	1,630
Peak Hour Deplaned - Domestic		1,745	X 1,174	1,246	1,398	1,573
Peak Hour Deplaned - International		- 9	-	-	-	-
Total Peak Hour Deplaned <sup>2</sup>		1,745	1,174	1,246	1,398	1,573
Total Peak Hour Deplaned <sup>2</sup> Total Peak Hour <sup>2</sup> Total Peak Hour <sup>2</sup>		3,737	2,136	2,274	2,520	2,797
σ ·	~ C	S. 3.				
Aircraft Gates/Positions (International in parenthesis)		(0) 1				
Small Commuter (Cessna)		- 0,	-	-	-	-
Medium Commuter (CRJ/ERJ/BE1)	::(	13	9	11	12	12
Large Commuter (CR7/E70)	2	7	-	-	-	-
Narrowbody (B737/A320)	.0	33 (1)	11 (2)	11 (2)	11 (2)	11 (2)
B-757	05	10	-	-	-	-
Widebody (B767)	CV	7 (3)	-	-	-	1 (1)
Jumbo (B777/A340/B747)	7	2 (2)	-	-	-	-
NLA (A380)	V	-	-	-	-	-
То	tal Gates:	72	20	22	23	24
To	tal EQA <sup>3</sup> :	73.6	14.6	15.4	15.8	17.7
Tota	al NBEG <sup>4</sup> :	73.5	17.3	18.7	19.4	20.8
Total	Positions:	72	20	22	23	24

Forecasted annual passenger numbers based on forecast sensitivity analysis section
The total peak hour numbers represent the total enplanement/deplanements peak hour, not the sum of the components (i.e. the enplaned/deplaned and total peak hours do not necessarily occur in the same hour). Domestic and International Peak Hour may differ

EQA normalizes gate based on seating capacity of accommodated aircraft
 NBEG: Used to normalize the apron frontage demand and capacity to that of a typical narrowbody aircraft gate

Domestic Airline Space   Profile	mbert ot. Louis Thternational Amport							
Domestic Alline Space   Tricket Courser   Tric			<b>Existing Terminal</b>					
Table   Courter   Country   Countr								
Ticket Counter Check-in Positione (Kicsk)		Units	Full Capacity	Facilit	ties	Facilities	Facilities	Facilities
Linear Courser Check-in Positions (Kloski)   Dos   137 (49)   45(28)   50(26)   332(21)   34(24)	Domestic Airline Space							
Total Checkin Locations (Kosak)	Ticket Counter							
Total Unear Position Length   If 370   190   220   130   130   130	Linear Counter Check-in Positions (Kiosk)							
Number of Unassigned Check in Position &	Total Check-in Locations (Kiosk)							
Total Unassigned Position Length				190		220	130	130
Counter Area (includes any cuto check)				-		-	-	-
Ticketing Queue (including any tree standing klosks)				-		-	-	-
Curbcheck Positions								
Airline Ticked Offices   st   11,779   5,700   6,500   3,900					4,600	5,200	3,000	
Baggage Claim   Units 6   3   3   4   4   4   4   4   4   4   4				6		6	2	_
Claim Devices		st	11,779		5,700	6,500	3,900	3,900
Linear Frontage Programmed								
Linear Frontage Programmed   f   480   480   640   640   62400   880   880   822400   880   880   822400   880							4	4
Baggage Services   S			954					
Baggage Services		II.	- 04.000	480	16.000			
Arline Clubs/VP Lounges								
Ticket Counter   Tick		_						
Ticket Counter   Ticket Counter   Check-in Positions (Klosk)   pos included above   (6(0)	•							
Ticket Counter   Linear Counter Check-in Positions (Klosk)		ı otaı:	81,230	10	33,200	35,000	35,000	35,300
Linear Counter Check-in Positions (Kiosk)	International Airline Space		<u> </u>		<u>. 60. </u>			
Total Check-in Locations (Kiosk)	Ticket Counter							
Total Check-in Locations (Kiosk)	Linear Counter Check-in Positions (Kiosk)	pos	included above	6(0)	h ·	6(0)	6(0)	8(0)
Ticketing Queue (including any free standing kiosks)	Total Check-in Locations (Kiosk)	pos	included above	6(0)	9			8(0)
Ticketing Queue (including any free standing kiosks)	Total Linear Position Length	lf	included above	30		30	30	40
Curbcheck Positions	Counter Area (Includes any curb check)	sf	included above		300	300	300	400
Airline Clubs/VIP Lounges	Ticketing Queue (including any free standing kiosks)	sf			800	800	800	1,000
Airline Clubs/VIP Lounges	Curbcheck Positions		included above	0		0	v	0
Other Airline Space	Airline Ticket Offices				900	900	900	1,200
Outbound Bag Make-Up <sup>4</sup>			included above		-	-	-	-
Outbound Bag Make-Up <sup>4</sup> sf         64,962 h,962         44,900 hound Bag Delivery         23,700 hound Bag Delivery         26,600 hound Bag Delivery         34,530 hourd Bag Delivery         47,900 hound Bag Delivery         23,700 hound Bag Delivery         26,600 hound Bag Delivery         8,000 hound Bag Delivery         8,000 hourd Bag Delivery	Sub	Total:	9,0%		2,000	2,000	2,000	2,600
Inbound Bag Delivery	Other Airline Space		~0"					
Baggage Train Circulation	Outbound Bag Make-Up <sup>4</sup>	sf	64,962		44,900	47,900	23,700	26,600
Checked Baggage Screening (TSA Space) <sup>5</sup>   Sf 7,799   8,600   8,600   8,600   8,600   Level 1 Inspection Units (EDS) <sup>5</sup>   no	Inbound Bag Delivery	sf	14,530			6,000	8,000	8,000
Level 1 Inspection Units (EDS) <sup>6</sup>	Baggage Train Circulation							5,200
Airline Operations		sf	7,799				8,600	8,600
Other Airline Offices/Systems and Support         sf         27,504         8,700         9,200         9,800         11,000           Departure Lounges           Gates/Positions           Small Regional (Cessna/Metro)         sf         -							2	2
SubTotal: 293,074   133,600   141,400   120,200   132,600								
Departure Lounges           Gates/Positions         Small Regional (Cessna/Metro)         sf         -								
Gates/Positions         sf         -	Sub	Total:	293,074		133,600	141,400	120,200	132,600
Small Regional (Cessna/Metro)         sf         - <th< td=""><td>Departure Lounges</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Departure Lounges							
Small Regional (Cessna/Metro)         sf         - <th< td=""><td>Gates/Positions</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Gates/Positions							
Medium Regional (BE1/CRJ,CR7,9/ERJ/SF340)       sf       -       9,300       10,100       10,100       10,100         Large Regional (Q400/E170,175,190)       sf       -       2,200       2,200       -       -         Narrowbody (A320/B737w)       sf       -       31,400       33,300       21,600       21,600         B-757(winglets)       sf       -       -       -       -       -       -		sf	_		_	_	_	_
Large Regional (Q400/E170,175,190)       sf       -       2,200       2,200       -       -         Narrowbody (A320/B737w)       sf       -       31,400       33,300       21,600       21,600         B-757(winglets)       sf       -       -       -       -       -       -					9.300	10 100	10 100	10 100
Narrowbody (A320/B737w)       sf       -       31,400       33,300       21,600       21,600         B-757(winglets)       sf       -       -       -       -       -       -			_				-	-
B-757(winglets) sf			_				21.600	21.600
viidebody (prof/NiDTT)   SE   -     -     -     -     3.200	Widebody (B767/MD11)	sf	-		-	-	-	3,200
Jumbo (B747,787,777/A330,340) sf			-		-	-	-	-
Super Jumbo (A380)								
SubTotal: 107,778 42,900 45,600 31,700 34,900	Super Jumbo (A360)							<u> </u>

	Units	Existing Terminal Space (sf) Full Capacity	2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
Non-Secure Concessions Space						
Rental Car						
Number of Counters	pos	6	6	6	6	7
Counter Area/Offices	sf	2,197	2,400	2,400	2,400	2,800
Queue	sf	1,613	1,800	1,800	1,800	2,100
Non-Secure Concessions	sf	19,099	10,400	11,000	9,700	10,700
Non-Secure Storage	sf	27,574	2,600	2,700	2,400	2,700
	SubTotal:	50,483	17,200	17,900	16,300	18,300
Secure Concessions Space						
Secure Concessions	sf	52,237	33,000	34,700	30,600	33,900
Secure Storage	sf	9,753	8,300	8,700	7,700	8,500
	SubTotal:	61,990	41,300	43,400	38,300	42,400

	Units	Existing Terminal Space (sf) Full Capacity	2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
Primary Processing	Units					
Primary Inspection Booths (Double Counters)	units	4	5	5	6	7
Area Primary Inspection Booths	sf	760	1,900		2,300	2,700
Primary Inspection Queue	sf	3,962	4,700		5,600	6,600
Primary Inspection Support	sf	11,566	700		700	700
	SubTotal:	16,288	7,300	7,300	8,600	10,000
Baggage Claim						
Claim Devices Required	units		3	3	3	4
Linear Frontage Required	lf .	266	500	500	540	590
Linear Frontage Programmed	lf	-	510	510	510	680
Linear Frontage Programmed  Baggage Claim Hall	sf	9,388	17,900		17,900	23,800
	SubTotal:	9,388	17,900	17,900	17,900	23,800
Secondary Processing  Passport Control Check Positions  Area Passport Control Check  Area Secondary Waiting  Exam Podiums and Baggage Belts (2 belts per unit)  Area Secondary Inspection  Baggage X-Ray Processing (1 X-Ray per unit)  Area X-Ray Inspection		XII'O	X			
Passport Control Check Positions	pos	0	1	1	1	1
Area Passport Control Check	sf		200		200	200
Area Secondary Waiting	sf	11, 10, 10.	800	800	800	1,100
Exam Podiums and Baggage Belts (2 belts per unit)	units	0	0	0	0	0
Area Secondary Inspection	sf	8,384	-	-	-	-
Baggage X-Ray Processing (1 X-Ray per unit)	units	0	1	1	1	1
Area X-Ray Inspection	sf	/, <sup>/</sup> O -	1,500		1,500	1,500
Secondary Inspection Support	sf	5,058	1,100	1,100	1,100	1,100
<u> </u>	SubTotal:	13,442	3,600	3,600	3,600	3,900
Secondary Inspection Support  Support Space  CRD Administration	20' 0	,,0				
CDF AUTHINISTIATION	sf	-	800	800	800	900
CBP Administration Support	sf	-	600	600	600	700
Other Space  Sterile Corridor Circulation	SubTotal:	-	1,400	1,400	1,400	1,600
2 Other Space						
- Cicilio Collidol Cilodiation	sf	3,141	4,300	4,300	4,300	7,200
In-Transit/Sterile Holding Areas	sf	-	-	-	-	-
Public Sterile Restrooms	sf	623	1,000	1,000	1,000	1,000
General Circulation	sf	645	3,700	3,700	3,800	4,900
Greeter Lobby						
Greeter Waiting Area	sf	-	700	700	900	1,100
Other	sf	-	-	-	-	-
Baggage Recheck						
Number Recheck Positions	pos	0	0	0	0	0
Area Recheck Positions	sf	2,560	-	-	-	-
Queue Baggage Recheck	sf	-	-	-	-	-
	SubTotal:	6,969	9,700	9,700	10,000	14,200

		Existing Terminal	2013	2018	2023	2028
	Units	Space (sf) Full Capacity	Recommended Facilities	Recommended Facilities	Recommended Facilities	Recommended Facilities
Security Screening Checkpoint (SSCP)						
Number of Lanes	pos	15	6	7	8	8
Queuing Area	sf	8,534	4,100	4,700	5,000	5,400
Checkpoint Screening Area	sf	16,992	8,600	9,600	10,600	10,600
TSA Offices	sf	6,276	1,300	1,400	1,600	1,600
	SubTotal:	31,802	14,000	15,700	17,200	17,600
Circulation						
Ticket Lobby Circulation	sf	11,258	4,200	4,700	2,900	2,900
Baggage Claim Circulation	sf	17,871	4,800	4,800	6,000	6,000
Secure Circulation (Incl. Fire/Service Stairs to Apron)	sf	180,721	69,400	74,000	52,400	56,200
General Public Circulation (Includes Vestibules, Vert Circ, Corridors) Public Seating Domestic Meeter/Greeter Lobby	sf	77,438	39,000	41,100	37,700	40,700
Public Seating	sf	-	6,000	6,600	7,200	7,900
Domestic Meeter/Greeter Lobby	sf	770	5,100	5,400	6,100	6,900
Transportation (Shuttle Service) & Hotel Courtesy Phones	sf	100	200	200	200	200
Transportation (Shuttle Service) & Hotel Courtesy Phones	SubTotal:		128,700	136,800	112,500	120,800
Restrooms	Gubiotai	200,130	5	130,000	112,300	120,000
Public Restrooms - Secure	sf	10,821	4,800	4,800	3,200	4,800
Public Restrooms - Non-Secure	sf	5,333	5,600	5,900	6,600	7,300
T dbile (Code of its Troit ocodie)	SubTotal:		10,400	10,700	9,800	12,100
Other Space	Jubi otai.	10,154	10,400	10,700	3,000	12,100
Misc Tenant						
American Credit Union (AAFCU), Central Carts, Chapel, USO, USPS	sf	8,877	8,900	8,900	8,900	8,900
Smoking Lounge	sf	1,458	1,500	1,500	1,500	1,500
Other (Displays, Information Counters, Visitors Commission etc)	sf	677	700	700	700	700
Strict (Bropia)s, illionnation Scattered, violence Schillingsistings	SubTotal:	7// - /	11,100	11,100	11,100	11,100
No. At Page 7	<del>Jun Tulan</del>	,	11,100	11,100	,	11,100
Non-Airline Tenant Space Airport Administration						
Offices/Support (City)	of	63,944	64,800	64,800	64,800	64,800
Airport Police (Includes Locker Facilities)	sf sf	1,853	2,000	2,000	2,000	2,000
Other Tenants	51	1,000	2,000	2,000	2,000	2,000
	sf	4,870	6,500	6,500	6,500	6,500
IVIISC TETIATIL	-					
Misc Tenant Other Space	SubTotal:	70,667	73,300	73,300	73,300	73,300
				1		•
Non-Public Restrooms	sf	4,073	2,200	2,300	2,100	2,200
Non-Public Circulation	sf	19,480	22,200	23,200	20,700	22,100
Other	sf	-	-	-	-	-
Non-Public Restrooms Non-Public Circulation Other	SubTotal:	23,553	24,400	25,500	22,800	24,300
Terminal Function						
Maintenance/Janitorial/Storage/Shops	sf	4,075	5,700	6,000	5,300	5,800
Mechanical/Electrical/Telephone/Plumbing	sf	131,890	69,200	72,400	64,300	70,000
Building Systems (Structure/Non-net/Void)	sf	36,124	16,600	17,400	15,400	16,800
Exterior - Other (ie Public Gardens, etc)	sf	-	·-	<u>-</u>		
	SubTotal:	172,089	91,500	95,800	85,000	92,600

	Units	Existing Terminal Space (sf) Full Capacity	2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
General						
Annual Enplanements		4,987,691	3,577,856	3,930,647	4,308,810	4,703,945
Annual O&D Enplanements (%)		3,917,292 (76.2%)	3,267,195 (91.3%)	3,592,644 (91.4%)	3,939,553 (91.4%)	4,300,853 (91.4%)
Annual Connecting Enplanements (%)		1,186,226 (23.8%)	310,662 (8.7%)	338,004 (8.6%)	369,257 (8.6%)	403,092 (8.6%)
Peak Hour Enplaned Domestic		1,741	1,261	1,427	1,524	1,630
Peak Hour Enplaned International		287	286	286	313	341
Peak Hour Deplaned Domestic		1,745	1,174	1,246	1,398	1,573
Peak Hour Deplaned International		-	-	-	-	-
Gates/Positions		72	29	31	23	24
Airline Space						
Domestic Airline Space	sf	81,230	33,200	35,000	35,000	35,300
International Airline Space	sf	-	2,000	2,000	2,000	2,600
Other Airline Space	sf	293,074	133,600	141,400	120,200	132,600
Departure Lounges	sf	107,778	42,900	45,600	31,700	34,900
	SubTotal:	482,082	211,700	224,000	188,900	205,400
Concessions			110	X		
Non-Secure Concessions Space	sf	50,483	17,200	17,900	16,300	18,300
Secure Concessions Space	sf	61,990	41,300	43,400	38,300	42,400
	SubTotal:	112,473	58,500	61,300	54,600	60,700
US Customs & Border Protection		,	. 70 /0	0.,000	0.,000	30,130
US Customs & Border Protection  Design Hour Passengers  Primary Processing  Baggage Claim	pax	400	286	286	372	484
Primary Processing	sf	16,288	7,300	7,300	8,600	10,000
Baggage Claim	sf	9,388	17,900	17,900	17,900	23,800
Secondary Processing	sf	13,442	3,600	3,600	3,600	3,900
Support Space	sf	10,112	1,400	1,400	1,400	1,600
Other Space	sf	6,969	9,700	9,700	10,000	14,200
Suite. Space	SubTotal:	46,087	39,900	39,900	41,500	53,500
Public Space		7,0,01				
Security	sf	31,802	14,000	15,700	17,200	17,600
Circulation	sf	288,158	128,700	136,800	112,500	120,800
Restrooms	sf	16,154	10,400	10,700	9,800	12,100
Other Space	sf	11,012	11,100	11,100	11,100	11,100
	SubTotal:	347,126	164,200	174,300	150,600	161,600
Non-Public Space		5 , 5	,	,	,	.0.,000
Non-Airline Tenant Space	sf	70,667	73,300	73,300	73,300	73,300
Other Space	sf	23,553	24,400	25,500	22,800	24,300
Terminal Functions	sf	172,089	91,500	95,800	85,000	92,600
	SubTotal:	266,309	189,200	194,600	181,100	190,200
Total		200,000	100,200	101,000	101,100	100,200
Total	Total Functional Terminal Area:	1,082,000 8	572,000	598,300	531,700	578,800
	Total Gross Terminal Area:	1,254,100 <sup>8</sup>	663,500	694,100	616,700	671,400

Notes:

- 4 Outbound Baggage Make-up based on Preferential Use
- 5 EDS area represents Airport Experience planned In-Line EDS inspection area. Existing area shown represents current in-lobby standalone airline baggage screening excluding AA In-Line space (no info available), approximately 21,350 square feet will be reconfigured within the existing building drip line (per STL planning staff)
- 6 Existing recommended EDS units are based on existing standalone in lobby devices and existing AA In-Line baggage system
- These are minimum facility standards set by the Customs and Boarder Protection "Airport Technical Design Standards August 2006". The CBP may evaluate the airports traffic projections on a case by case basis and update any requirements as needed
- 8 Represents the total current available functional and gross terminal square footage (leased, non-leased, airport owned, and closed areas) and totals may not sum due to rounding

	Units	Existing Terminal Space (sf) Full Capacity	2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
General <sup>1</sup>						
Overall Airport Statistics						
Annual Passengers		9,975,382	7,155,712	7,861,294	8,617,620	9,407,890
Annual Enplanements		4,987,691	3,577,856	3,930,647	4,308,810	4,703,945
Annual Domestic Enplanements		-	-	-	-	-
Annual International Enplanements		-	-	-	-	-
O&D Passengers		-	3,267,195	3,592,644	3,939,553	4,300,853
Connecting Passengers		-	310,662	338,004	369,257	403,092
Peak Hour Passenger Statistics						
Peak Hour Enplaned - Domestic		1,741	1,261	1,427	1,524	1,630
Peak Hour Enplaned - International		287	286	286	313	341
Total Peak Hour Enplaned <sup>2</sup>		1,741	1,261	1,427	1,524	1,630
Peak Hour Deplaned - Domestic		1,745	1,174	1,246	1,398	1,573
Peak Hour Deplaned - International		-9	-	-	-	-
Total Peak Hour Deplaned <sup>2</sup>		1,745	1,174	1,246	1,398	1,573
Total Peak Hour Deplaned <sup>2</sup> Total Peak Hour <sup>2</sup>	4	3,737	2,136	2,274	2,520	2,797
5	60	(2)				
Aircraft Gates/Positions (International in parenthesis)	0					
Small Commuter (Cessna)	4	- 0,7	-	-	-	-
Medium Commuter (CRJ/ERJ/BE1)		13	9	11	12	12
Large Commuter (CR7/E70)	2	7	-	-	-	-
Narrowbody (B737/A320)		33 (1)	11 (2)	11 (2)	11 (2)	11 (2)
B-757	0500	10	-	-	-	-
Widebody (B767)	I CV	7 (3)	-	-	-	1 (1)
Jumbo (B777/A340/B747)	97	2 (2)	-	-	-	-
NLA (A380)	<b>V</b>	-	-	-	-	-
	Total Gates:	72	20	22	23	24
	Total EQA <sup>3</sup> :	73.6	14.6	15.4	15.8	17.7
	Total NBEG <sup>4</sup> :	73.5	17.3	18.7	19.4	20.8
	Total Positions:	72	20	22	23	24

Annual Passenger numbers based on forecast sensitivity analysis section.
The total peak hour numbers represent the total enplanement/deplanements peak hour, not the sum of the components (i.e. the enplaned/deplaned and total peak hours do not necessarily occur in the same hour). Domestic and International Peak Hour may differ.

EQA normalizes gate based on seating capacity of accommodated aircraft.
 NBEG: Used to normalize the apron frontage demand and capacity to that of a typical narrowbody aircraft gate.

	Units	Existing Terminal Space (sf) Full Capacity		2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
Domestic Airline Space							
Ticket Counter							
Linear Counter Check-in Positions (Kiosk)		137 (49)		9(16)	32(18)	33(21)	34(24)
Total Check-in Locations (Kiosk)		159 (55)		9(16)	32(18)	33(21)	34(24)
Total Linear Position Length		570	12	20	130	130	130
Number of Unassigned Check-in Positions	pos		-		-	-	-
Total Unassigned Position Length		82		4.000	- 4 400	-	- 4 400
Counter Area (Includes any curb check)	sf	8,298	_	1,300	1,400	1,400	1,400
Ticketing Queue (including any free standing kiosks)  Curbcheck Positions	sf	8,247	2	2,800	3,000	3,000	3,000
Airline Ticket Offices	pos sf	11,779		3,600	3,900	3,900	3,900
Baggage Claim	51	11,779		3,000	3,900	3,900	3,900
Claim Devices	units	6	3		3	1	1
Linear Frontage Required		954		30	460	520	590
Linear Frontage Programmed	 If	-		80	480	640	640
Baggage Claim Hall (Includes Device, Queues & Circulation)	sf	31,926	Ť	16,800	16,800	22,400	22,400
Baggage Services	sf	5,447		2,000	2,100	2,300	2,600
Airline Clubs/VIP Lounges	sf	15,533		2,000	2,000	2,000	2,000
SubT	otal:	81,230		28,500	29,200	35,000	35,300
International Airline Space			Cit	) S G.	-,,		
Ticket Counter				1/0 VO			
Linear Counter Check-in Positions (Kiosk)	pos	included above	6/	(0)	6(0)	6(0)	8(0)
	pos	included above		(0)	6(0)	6(0)	8(0)
Total Check-in Locations (Kiosk) Total Linear Position Length Counter Area (Includes any curb check)	lf	included above		0	30	30	40
Counter Area (Includes any curb check)	sf	included above	30	300	300	300	400
Ticketing Queue (including any free standing kiosks)	sf	included above		800	800	800	1,000
Ticketing Queue (including any free standing kiosks)  Curbcheck Positions  Airline Ticket Offices	pos	included above	0	_	0	0	0
Airline Ticket Offices	sf	included above	0	900	900	900	1,200
Airline Clubs/VIP Lounges	sf	included above		-	-	-	-
SubT	otal:	3) (1)		2,000	2,000	2,000	2,600
Other Airline Space		201					
Outbound Bag Make-Up <sup>4</sup>	sf	64,962		21,900	23,100	23,700	26,600
Inbound Bag Delivery	sf	14,530		6,000	6,000	8,000	8,000
Baggage Train Circulation	sf	39,985		4,200	4,400	4,800	5,200
Checked Baggage Screening (TSA Space) <sup>5</sup>	sf	7,799		8,600	8,600	8,600	8,600
Level 1 Inspection Units (EDS) <sup>6</sup>	no			2	2	2	2 2 400
				00 000			35 400
Airline Operations	sf	138,294		29,200	30,800	31,600	35,400
Other Airline Offices/Systems and Support	sf	27,504		4,400	4,600	4,700	5,300
Other Airline Offices/Systems and Support SubT	sf						
Other Airline Offices/Systems and Support  SubT  Departure Lounges	sf	27,504		4,400	4,600	4,700	5,300
Other Airline Offices/Systems and Support  SubT  Departure Lounges  Gates/Positions	sf otal:	27,504		4,400	4,600	4,700	5,300
Other Airline Offices/Systems and Support  SubT  Departure Lounges  Gates/Positions  Small Regional (Cessna/Metro)	sf Total:	27,504		4,400 <b>74,300</b>	4,600 77,500	4,700 81,400	5,300 <b>89,100</b>
Other Airline Offices/Systems and Support  SubT  Departure Lounges  Gates/Positions  Small Regional (Cessna/Metro)  Medium Regional (BE1/CRJ,CR7,9/ERJ/SF340)	sf  Total:  sf sf	27,504 293,074		4,400 <b>74,300</b> - - 7,300	4,600 77,500	4,700	5,300 <b>89,100</b>
Other Airline Offices/Systems and Support  SubT  Departure Lounges  Gates/Positions  Small Regional (Cessna/Metro)  Medium Regional (BE1/CRJ,CR7,9/ERJ/SF340)  Large Regional (Q400/E170,175,190)	sf  Total:  sf sf sf sf	27,504 293,074		4,400 <b>74,300</b> - 7,300	4,600 77,500 - 8,900	4,700 81,400	5,300 89,100 - 9,800
Other Airline Offices/Systems and Support  SubT  Departure Lounges  Gates/Positions  Small Regional (Cessna/Metro)  Medium Regional (BE1/CRJ,CR7,9/ERJ/SF340)  Large Regional (Q400/E170,175,190)  Narrowbody (A320/B737w)	sf  otal:  sf  sf  sf  sf  sf	27,504 293,074		4,400 <b>74,300</b> - - 7,300	4,600 77,500	4,700 81,400	5,300 89,100 - 9,800
Other Airline Offices/Systems and Support  SubT  Departure Lounges  Gates/Positions  Small Regional (Cessna/Metro)  Medium Regional (BE1/CRJ,CR7,9/ERJ/SF340)  Large Regional (Q400/E170,175,190)  Narrowbody (A320/B737w)  B-757(winglets)	sf Total:  sf sf sf sf sf sf sf	27,504 293,074		- 7,300 - 21,600 -	4,600 77,500 - 8,900 - 21,600 -	4,700 81,400 - 9,800 - 21,600	5,300 89,100 - 9,800 - 21,600
Other Airline Offices/Systems and Support  SubT  Departure Lounges  Gates/Positions  Small Regional (Cessna/Metro)  Medium Regional (BE1/CRJ,CR7,9/ERJ/SF340)  Large Regional (Q400/E170,175,190)  Narrowbody (A320/B737w)  B-757(winglets)  Widebody (B767/MD11)	sf Total:  sf sf sf sf sf sf sf sf	27,504 293,074		- 74,300 - 7,300 - 21,600 - -	4,600 77,500 - 8,900 - 21,600 - -	4,700 81,400 - 9,800 - 21,600 - -	5,300 89,100 - 9,800 - 21,600 - 3,000
Other Airline Offices/Systems and Support  SubT  Departure Lounges  Gates/Positions  Small Regional (Cessna/Metro)  Medium Regional (BE1/CRJ,CR7,9/ERJ/SF340)  Large Regional (Q400/E170,175,190)  Narrowbody (A320/B737w)  B-757(winglets)	sf Total:  sf sf sf sf sf sf sf	27,504 293,074		- 7,300 - 21,600 -	4,600 77,500 - 8,900 - 21,600 -	4,700 81,400 - 9,800 - 21,600	5,300

	Units	Existing Terminal Space (sf) Full Capacity	2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
Non-Secure Concessions Space						
Rental Car						
Number of Counters	pos	6	6	6	6	7
Counter Area/Offices	sf	2,197	2,400	2,400	2,400	2,800
Queue	sf	1,613	1,800	1,800	1,800	2,100
Non-Secure Concessions	sf	19,099	8,600	9,000	9,600	10,700
Non-Secure Storage	sf	27,574	2,100	2,200	2,400	2,700
	SubTotal:	50,483	14,900	15,400	16,200	18,300
Secure Concessions Space			•			
Secure Concessions	sf	52,237	27,100	28,400	30,600	33,800
Secure Storage	sf	9,753	6,800	7,100	7,600	8,400
	SubTotal:	61,990	33,900	35,500	38,200	42,200

	Units	Existing Terminal Space (sf) Full Capacity	2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
Primary Processing	Units					
Primary Inspection Booths (Double Counters)	units	4	5	5	6	7
Area Primary Inspection Booths	sf	760	1,900		2,300	2,700
Primary Inspection Queue	sf	3,962	4,700		5,600	6,600
Primary Inspection Support	sf	11,566	700		700	700
	SubTotal:	16,288	7,300	7,300	8,600	10,000
Baggage Claim			_			
Claim Devices Required	units		3	3	3	4
Linear Frontage Required	lf	266	500	500	540	590
Linear Frontage Programmed	lf	-	510	510	510	680
Linear Frontage Programmed  Baggage Claim Hall	sf	9,388	17,900		17,900	23,800
	SubTotal:	9,388	17,900	17,900	17,900	23,800
Secondary Processing  Passport Control Check Positions  Area Passport Control Check  Area Secondary Waiting  Exam Podiums and Baggage Belts (2 belts per unit)  Area Secondary Inspection  Baggage X-Ray Processing (1 X-Ray per unit)  Area X-Ray Inspection		XII'O	X			
Passport Control Check Positions	pos	0	1	1	1	1
Area Passport Control Check	sf		200		200	200
Area Secondary Waiting	sf	11, 10, 10.	800	800	800	1,100
Exam Podiums and Baggage Belts (2 belts per unit)	units	0	0	0	0	0
Area Secondary Inspection	sf	8,384	-	-	-	-
Baggage X-Ray Processing (1 X-Ray per unit)	units	0	1	1	1	1
Area X-Ray Inspection	sf	/, <sup>/</sup> O -	1,500		1,500	1,500
Secondary Inspection Support	sf	5,058	1,100	1,100	1,100	1,100
<u> </u>	SubTotal:	13,442	3,600	3,600	3,600	3,900
Secondary Inspection Support  Support Space  CRD Administration	20' 0	,,0				
CDF AUTHINISTIATION	sf	-	800	800	800	900
CBP Administration Support	sf	-	600	600	600	700
Other Space  Sterile Corridor Circulation	SubTotal:	-	1,400	1,400	1,400	1,600
2 Other Space						
- Cicilio Collidol Cilodiation	sf	3,141	4,300	4,300	4,300	7,200
In-Transit/Sterile Holding Areas	sf	-	-	-	-	-
Public Sterile Restrooms	sf	623	1,000	1,000	1,000	1,000
General Circulation	sf	645	3,700	3,700	3,800	4,900
Greeter Lobby						
Greeter Waiting Area	sf	-	700	700	900	1,100
Other	sf	-	-	-	-	-
Baggage Recheck						
Number Recheck Positions	pos	0	0	0	0	0
Area Recheck Positions	sf	2,560	-	-	-	-
Queue Baggage Recheck	sf	-	-	-	-	-
	SubTotal:	6,969	9,700	9,700	10,000	14,200

		<b>Existing Terminal</b>	2013	2018	2023	2028
	Unit	Space (sf) Full Capacity	Recommended Facilities	Recommended Facilities	Recommended Facilities	Recommended Facilities
Security Screening Checkpoint (SSCP)	·					_
Number of Lanes	pos	15	6	7	8	8
Queuing Area	sf	8,534	4,100	4,700	5,000	5,400
Checkpoint Screening Area	sf	16,992	8,600	9,600	10,600	10,600
TSA Offices	sf	6,276	1,300	1,400	1,600	1,600
	SubTotal	31,802	14,000	15,700	17,200	17,600
Circulation						
Ticket Lobby Circulation	sf	11,258	2,600	2,900	2,900	2,900
Baggage Claim Circulation	sf	17,871	4,800	4,800	6,000	6,000
Secure Circulation (Incl. Fire/Service Stairs to Apron)	sf	180,721	46,700	50,500	52,400	56,200
General Public Circulation (Includes Vestibules, Vert Circ, Corridors)	sf	77,438	32,700	34,200	37,500	40,400
Public Seating	sf	-	6,000	6,600	7,200	7,900
Domestic Meeter/Greeter Lobby	sf	770	5,100	5,400	6,100	6,900
Transportation (Shuttle Service) & Hotel Courtesy Phones	sf	100	200	200	200	200
	SubTotal	288,158	98,100	104,600	112,300	120,500
Restrooms		70, :	12 10			
Public Restrooms - Secure	sf	10,821	3,200	3,200	3,200	4,800
Public Restrooms - Non-Secure	sf	5,333	5,600	5,900	6,600	7,300
	SubTotal	16,154	8,800	9,100	9,800	12,100
Other Space		0 (0) 1				
Misc Tenant		4,70				
American Credit Union (AAFCU), Central Carts, Chapel, USO, USPS	sf	8,877	8,900	8,900	8,900	8,900
Smoking Lounge	sf	1,458	1,500	1,500	1,500	1,500
Other (Displays, Information Counters, Visitors Commission etc)	sf	677	700	700	700	700
	SubTotal	11,012	11,100	11,100	11,100	11,100
Non-Airline Tenant Space		-01				
Airport Administration						
Offices/Support (City)	sf	63,944	64,800	64,800	64,800	64,800
Airport Police (Includes Locker Facilities)	sf	1,853	2,000	2,000	2,000	2,000
Other Tenants						
Misc Tenant	sf	4,870	6,500	6,500	6,500	6,500
	SubTotal	70,667	73,300	73,300	73,300	73,300
Other Space						
Non-Public Restrooms	sf	4,073	1,600	1,600	1,700	1,800
Non-Public Circulation	sf	19,480	15,900	16,300	16,800	17,700
Other	sf	-	-	· -	-	-
	SubTotal	23,553	17,500	17,900	18,500	19,500
Terminal Function				, , , , , , , , ,		
Maintenance/Janitorial/Storage/Shops	sf	4,075	4,500	4,600	4,900	5,300
Mechanical/Electrical/Telephone/Plumbing	sf	131,890	53,900	55,900	59,000	64,100
Building Systems (Structure/Non-net/Void)	sf	36,124	12,500	12,900	13,700	14,800
Exterior - Other (ie Public Gardens, etc)	sf	-	-	-	-	-
	SubTotal	172,089	70,900	73,400	77,600	84,200

	Units	Existing Terminal Space (sf) Full Capacity	2013 Recommended Facilities	2018 Recommended Facilities	2023 Recommended Facilities	2028 Recommended Facilities
General						
Annual Enplanements		4,987,691	3,577,856	3,930,647	4,308,810	4,703,945
α Annual O&D Enplanements (%)		3,917,292 (76.2%)	3,267,195 (91.3%)	3,592,644 (91.4%)	3,939,553 (91.4%)	4,300,853 (91.4%)
Annual Connecting Enplanements (%)		1,186,226 (23.8%)	310,662 (8.7%)	338,004 (8.6%)	369,257 (8.6%)	403,092 (8.6%)
Peak Hour Enplaned Domestic		1,741	1,261	1,427	1,524	1,630
Peak Hour Enplaned International		287	286	286	313	341
Peak Hour Deplaned Domestic		1,745	1,174	1,246	1,398	1,573
Peak Hour Deplaned International		-	-	-	-	-
Gates/Positions		72	20	22	23	24
Airline Space						
Domestic Airline Space	sf	81,230	28,500	29,200	35,000	35,300
International Airline Space	sf	-	2,000	2,000	2,000	2,600
Other Airline Space	sf	293,074	74,300	77,500	81,400	89,100
Departure Lounges	sf	107,778	28,900	30,500	31,400	34,400
	SubTotal:	482,082	133,700	139,200	149,800	161,400
Concessions				X		
Non-Secure Concessions Space	sf	50,483	14,900	15,400	16,200	18,300
Secure Concessions Space	sf	61,990	33,900	35,500	38,200	42,200
	SubTotal:	112,473	48,800	50,900	54,400	60,500
US Customs & Border Protection Services <sup>7</sup>	-		10 10			
Design Hour Passengers Primary Processing Baggage Claim	pax	400	286	286	372	484
Primary Processing	sf	16,288	7,300	7,300	8,600	10,000
Baggage Claim	sf	9,388	17,900	17,900	17,900	23,800
Secondary Processing	sf	13,442	3,600	3,600	3,600	3,900
Support Space	sf		1,400	1,400	1,400	1,600
Other Space	sf	6,969	9,700	9,700	10,000	14,200
	SubTotal:	46,087	39,900	39,900	41,500	53,500
Public Space		20 01				
Security	sf	31,802	14,000	15,700	17,200	17,600
Circulation	sf	288,158	98,100	104,600	112,300	120,500
Restrooms	sf	16,154	8,800	9,100	9,800	12,100
Other Space	sf	11,012	11,100	11,100	11,100	11,100
	SubTotal:	347,126	132,000	140,500	150,400	161,300
Non-Public Space						
Non-Airline Tenant Space	sf	70,667	73,300	73,300	73,300	73,300
Other Space	sf	23,553	17,500	17,900	18,500	19,500
Terminal Functions	sf	172,089	70,900	73,400	77,600	84,200
	SubTotal:	266,309	161,700	164,600	169,400	177,000
Total			• • • • • • • • • • • • • • • • • • • •	•	· · · · · · · · · · · · · · · · · · ·	
	al Terminal Area:	1,082,000	445,200	461,700	487,900	529,500
Total Gros	s Terminal Area:	1,254,100	516,100	535,100	565,500	613,700

#### Note

- 4 Outbound Baggage Make-up based on Preferential Use.
- 5 EDS area represents Airport Experience planned In-Line EDS inspection area. Existing area shown represents current in-lobby standalone airline baggage screening excluding AA In-Line space (no info available), approximately 21,350 square feet will be reconfigured within the existing building drip line (per STL planning staff).
- 6 Existing recommended EDS units are based on existing standalone in lobby devices and existing AA In-Line baggage system.
- These are minimum facility standards set by the Customs and Boarder Protection "Airport Technical Design Standards August 2006". The CBP may evaluate the airports traffic projections on a case by case basis and update any requirements as needed.
- 8 Represents the total current available functional and gross terminal square footage (leased, non-leased, airport owned, and closed areas) and totals may not sum due to rounding.

#### TERMINAL AREA REQUIREMENTS

#### **AIRLINE SPACE**

#### **Domestic/International Airline Space**

#### • <u>Ticket Counter Length</u>

#### 1. Terminal 1:

The current 137 linear check-in counter positions account for a total length of 570 feet. A future preferential use requirement of 67 (domestic and international) in-line check-in positions (agent and kiosk) were calculated from the individual airline's peak hour requirements. A total 275 linear feet requirement is based on using an equivalent 1.2 kiosk to standard agent counter position ratio (67  $\div$  1.2  $\times$  5). A common use total equates to 42 in-line check-in positions calculated from the total peak hour demand and 170 linear feet (42  $\div$  1.2  $\times$  5).

#### 2. Terminal 2:

The current 38 check-in counter positions account for a total length of approximately 200 feet. A future preferential use requirement of 25 in-line check-in positions (agent and kiosk) were calculated from the individual airline's peak hour requirements. A total 110 linear feet requirement is based on using an equivalent 1.1 kiosk to standard agent counter position ratio  $(25 \div 1.1 \times 5)$ .

#### • Ticket Counter Area

#### 1. Terminal 1:

The existing ticket counter area measures approximately 6,300 square feet. Based on an industry standard depth of ten feet from the face of the ticket counters to the back wall behind the counters a preferential use requirement of 3,000 square feet would be needed by 2028 with a common use area of 1,800 square feet.

#### 2. Terminal 2:

The existing ticket counter area measures approximately 2,850 square feet. Based on an industry standard depth of ten feet from the face of the ticket counters to the back wall behind the counters 1,100 square feet would be needed by 2028.

#### Ticket Counter Queue

#### 1. Terminal 1:

The existing area measures approximately 8,250 square feet. By 2028 a preferential use area of 6,700 square feet (444 passengers in queue) or a common use area of 4,000 square feet (265 passengers in queue) would be needed to adequately handle the check in locations.

#### 2. Terminal 2:

The existing area measures approximately 1,830 square feet. By 2028 an area of 2,500 square feet (166 passengers in queue) would be needed to adequately handle the check-in locations.

#### • Airline Ticket Offices (ATO)

#### 1. Terminal 1:

The existing offices are approximately 11,800 square feet and are located directly behind the linear check-in counters. The future preferential use ATO requirement of 8,300 square feet and common use of 5,100 square feet is based on a depth of 30 feet along the required ticket counter length.

#### 2. Terminal 2:

The existing offices are approximately 5,600 square feet and are located directly behind the linear check-in counters. The future ATO requirement of 3,300 square feet is based on a depth of 30 feet along the required ticket counter length.

#### Baggage Claim (Domestic)

#### 1. Terminal 1:

There are six existing sloped bed claim devices with approximately 950 linear foot of claim frontage. The future 2028 demand results in a need for approximately 590 linear feet of claim. The total provided claim length of 640 linear feet resulted in 4 claim devices or approximately 0.5 linear feet per peak hour terminating passenger.

The baggage claim hall area is recommended to be sized at 35 square feet per linear feet of claim to provide adequate queuing and circulation space within the claim area. There is an existing claim area of approximately 31,900 square feet. Spacing between the claim devices themselves appear to be adequate. The future demand results in a need of 22,400 square feet of claim hall by 2028.

#### 2. Terminal 2:

There are 2 existing sloped bed claim devices with approximately 360 linear foot of claim frontage (180 LF/Device). The future 2028 demand results in a need for approximately 630 linear feet of claim. The total provided claim length of 720 linear feet resulted in 4 claim devices or approximately 0.6 linear feet per peak hour terminating passenger.

Due to the increased capacity added to T2 by Southwest Airlines additional claim device analyses were conducted in order to predict if additional devices would be required at an earlier date. Follow-up discussions with the Southwest station manager revealed their two existing claim devices operate at an acceptable level of service and are sufficient for their needs even given their increase in capacity. Initial requirements used a linear feet per claiming passenger ratio of 1.5 (1.0 to 1.5 range) which is a typical IATA LOS C planning factor. The existing 1.1-linear feet per claiming passenger (LF/pax) was compared against the initial 1.5 factor in order to see the effects of when additional devices would be required. Other assumptions used in the analyses included a percent of passengers checking baggage ratio. Additional discussions with Southwest indicated the initial 80 percent factor used may be too low given their no checked baggage fees. A suggested 90 percent factor was used for comparative purposes in the analyses. Results indicate and additional device would be immediately needed by 2013 when using the 1.5-LF/pax ratio. However, utilizing the existing 1.1-LF/pax ratio suggest the need for an additional device by 2018 or 2023 depending on the percent checked baggage ratio used. Results are tabulated on the following page.

The baggage claim hall area is recommended to be sized at 35 square feet per linear feet of claim to provide adequate queuing and circulation space within the claim area. The existing claim area is approximately 10,300 square feet. Spacing between the claim devices themselves appear to be adequate. The future demand results in a need of 25,200 square feet of claim hall by 2028.

#### Baggage Services (Domestic)

#### 1. Terminal 1:

Currently there appears to be space for 8 to 9 offices totaling 5,450 square feet. The future planning factor of 1 square feet per peak hour terminating passenger resulted in a need of 2,600 square feet by 2028.

#### 2. Terminal 2:

Currently there appears to be 1 office totaling approximately 370 square feet. The future planning factor of 1 square feet per peak hour terminating passenger resulted in a need of 2,200 square feet by 2028.

#### Airline Clubs/V.I.P. Lounges (Domestic)

#### 1. Terminal 1:

At the time of this analysis there was one substantial airline club operated by American Airlines. American's space totaled approximately 15,500 square feet. Given American's recent capacity reduction it's not known at this time whether the airline will maintain this club area. However, a planning ratio of 2,000 square feet per club was used to determine the future 2028 requirement of 2,000 square feet.

#### 2. Terminal 2:

At the time of this analysis there was no airline club space at the terminal and no plans for any future requirements given Southwest will be the dominant airline operating from the terminal.

#### Other Airline Space

#### Outbound Bag Make-Up

#### 1. Terminal 1:

The existing leased preferential use make-up areas totaled approximately 62,000 square feet of the total 65,000 available square feet for a planning ratio of 2,100 square feet per EQA. The airlines which were interviewed indicated having sufficient space for their operational needs. The future 2028 preferential use demand requirement when using the existing leased 2,100 square foot per EQA resulted in a need for 66,900 square feet of space which includes 9,700 square feet of circulation and staging areas. Using a common use ratio of 1,500 square feet per EQA required an area of 31,800 square feet which includes 5,200 square feet of circulation and staging areas would be required by 2028.

#### 2. Terminal 2:

The existing leased preferential use make-up areas totaled approximately 25,100 square feet for a planning ratio of 2,100 square feet per EQA. Southwest indicated this area was sufficient for their operational needs. For a terminal of this size the existing leased 2,100 square feet per EQA was used to calculate the future recommended requirements. The future 2028 demand resulted in a need for approximately 37,300 square feet of space which includes 5,800 square feet of circulation and staging areas.

#### **TERMINAL 2 BAGGAGE CLAIM DEVICE PLANNING SCENARIOS**

								AGE CLAIM DEVICE PLANNING SCENARIOS
							•	ecking bags & 1.0 to 1.5 LF/Claiming Pax (LOS C Typical Range)
201		20			23	2028		
80%	90%	80%	90%	80%	90%	80%		% Pax Checking Bags
1.1		1.		1.		1.1		LF/Claiming Pax (LOS C low - existing ratio)
360	380	398		421	445	446		Claim Length Required (LF)
360	360	360	360	360	360	360		Existing Total Claim Length (LF)
0	(20)	(38)	(60)	(61)	(85)	(86)	_ ,	Surplus/(Deficiency) LF
2.0	2.1	2.2	2.3	2.3	2.5	2.5		Number of Required Claim Devices @ 180 LF/Device (Existing T2 Length/Device)
2.2	2.4	2.5	2.6	2.6	2.8	2.8	2.9	Number of Required Claim Devices @ 160 LF/Device (Existing T1 Length/Device, For Consolidated Terminal @ T1)
1.5	-	1.	_	1.	_	1.5		LF/Claiming Pax (LOS C high - typical planning standard)
507	570	560	630	593	667	629		Claim Length Required (LF)
360	360	360	360	360	360	360		Existing Total Claim Length (LF)
(147)	(210)	(200)	(270)	(233)	(307)	(269)		Surplus/(Deficiency) LF
2.8	3.2	3.1	3.5	3.3	3.7	3.5	3.9	Number of Required Claim Devices @ 180 LF/Device (Existing T2 Length/Device)
3.2	3.6	3.5	3.9	3.7	4.2	3.9	4.4	Number of Required Claim Devices @ 160 LF/Device (Existing T1 Length/Device, For Consolidated Terminal @ T1)
Source:	Lanuru	m & Brov	wii Ariaiy	515				Number of Required Claim Devices @ 180 LF/Device (Existing T2 Length/Device)  Number of Required Claim Devices @ 160 LF/Device (Existing T1 Length/Device, For Consolidated Terminal @ T1)

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#### Inbound Bag

#### 1. Terminal 1:

The existing area totaled approximately 14,500 square feet for a total of 1,800 square feet per off-load area. Most airlines when interviewed voiced concerns of short input belt lengths and overcrowding when multiple inbound flights were utilizing the off-load area at the same time. The calculated future 2028 requirement resulted in a total need for 8,000 square feet.

#### 2. Terminal 2:

The existing area totaled approximately 5,600 square feet for a total of 2,800 square feet per off-load area. Using a more typical 1,800 square feet per off-load area resulted in a 2028 requirement of 7,200 square feet.

#### Checked Baggage Screening

#### 1. Terminal 1:

Inline EDS requirements were based on an assumed processing rate of 500 bags per hour with 65 percent of the originating domestic and 100 percent of the international passengers checking bags. A domestic 0.8 bags per passenger and an international 1.5 bags per passenger ratios were used. A planning ratio of approximately 4,300 square feet per EDS unit was based on the Airport Experience Program planned inline EDS system provided by the client. The 2028 demand year results in a need for approximately 8,500 square feet of space.

#### 2. Terminal 2:

Inline EDS requirements were based on an assumed processing rate of 500 bags per hour with 80 percent of the originating passengers checking bags and 0.7 bags per passenger. A planning ratio of approximately 4,000 square feet per EDS unit was used to determine the 2028 demand requirement of approximately 7,900 square feet.

#### Airline Operations

#### 1. Terminal 1:

There is currently approximately 138,600 square feet of apron level operations, of which 79,200 square feet was leased by the airlines. The leased square foot per EQA ratio is approximately 2,700 which is indicative of a airline hub location. However, with the merger of Delta and Northwest as well as American's capacity reductions this area could be less. This information was not available at the time of this analysis. The airlines interviewed reported adequate for their this area as The 2028 preferential use demand level requires approximately 73,200 square feet of space while the common use scenario requires an area of 35,400 square feet.

#### 2. Terminal 2:

There is currently approximately 17,900 square feet of apron level operations, of which 16,500 square feet was leased by the airlines. The leased square foot per EQA ratio is approximately 1,500 which of the airlines interviewed indicated was adequate for their operations. Based on this factor the 2028 demand level requires 22,500 square feet of space.

#### Other Airline Offices/Systems and Support

Areas such as centralized ground power, preconditioned air, computer rooms, etc. have been included in this category. A typical allowance of a percentage of the Airline Operations space has been used and should be considered as supplemental to the overall mechanical and electrical systems area in the program.

#### 1. Terminal 1:

Using an allowance of 15 percent of the airline operations space resulted in the future 2028 preferential use demand of approximately 11,000 square feet. A common use demand of 5,300 square is required by 2028.

#### 2. Terminal 2:

Southwest indicated additional need for operational storage, computers and electronics space. The existing leased ratio of 9 percent was increased to accommodate these future needs. Using an allowance of 10 percent of the airline operations space resulted in the future 2028 demand of 2,250 square feet.

#### **Departure Lounges (Hold Rooms)**

#### Terminal 1:

The existing hold room capacity at Terminal 1 (including Concourses B and D) operating regional and narrowbody aircraft is approximately 107,800 square feet. With the closure of both Concourses B and D this area is reduced to an operational capacity of approximately 73,700 square feet of which 41,000 square feet is currently leased by the airlines. The majority of this unused area is located in Concourse C. Using the physical hold room planning factors the 2028 preferential use demand level requires 53,100 square feet with a common use requirement of 34,400 square feet.

#### Terminal 2:

The existing hold room capacity at Terminal 2 operating narrowbody aircraft is approximately 47,700 square feet of which approximately 42,800 square feet is currently leased by the airlines. When using the physical hold room planning factors the 2028 preferential use demand level requires 37,700 square feet.

#### **Concessions Space**

#### • Terminal 1:

The future 2028 demand requires 54,500 square feet of space. A common use scenario requires 44,600 square feet of public concessions space by 2028. A RAC area of approximately 4,900 square feet has been accounted for in 2028 which consists of the area occupied by their offices, counters and queues.

#### Terminal 2:

The future 2028 demand requires 21,450 square feet of space. Currently there are no rental car counters in Terminal 2 and no areas are programmed for future requirements. An additional area is typically reserved for storage and service areas which is equal to 25-35 percent of the total concessions space program. These areas typically include storage areas, preparation kitchens, employee lockers, loading docks, trash compactors, and concessionaires' administrative offices.

#### Terminal 1:

A review of the airport CAD drawings suggests there is an existing area of approximately 37,300 square feet or 34 percent of the total concessions area. The result is a preferential use area of approximately 13,600 square feet with a common use area of 11,100 square feet by 2028. However this initial estimate for future requirements should be reviewed by the concession operators.

#### • Terminal 2:

A review of the airport CAD drawings suggests there is an existing area of approximately 6,000 square feet or 26 percent of the total concessions area. This ratio has more or less been used for future space requirements. The result is a need for 5,400 square feet by 2028. However this initial estimate for future requirements should be reviewed by the concession operators.

#### **Public Space**

#### Security Screening Checkpoint (SSCP)

#### 1. Terminal 1:

The combined total of the existing security screening functions equals approximately 31,800 square feet. The future 2028 demand requires an area of approximately 17,600 square feet. This area includes a queue area utilizing a LOS C of 5,380 square feet or LOS A minimum of 6,820 square feet.

#### 2. Terminal 2:

The combined total of the existing security screening functions equals approximately 7,700 square feet. The future 2028 demand requires an area of approximately 15,500 square feet. This area includes a queue area utilizing a LOS C of 5,300 square feet or LOS A minimum of 6,820 square feet.

#### Circulation

#### <u>Ticket Lobby</u>

#### 1. Terminal 1:

The current circulation depth within the terminal is approximately 24 feet. A future planning requirement of 24 feet has been used for this analysis. The existing ticket lobby circulation equals approximately 11,260 square feet of space. The preferential use 2028 demand year requires 4,730 square feet of space with a common use requirement of 2,860 square feet.

#### 2. Terminal 2:

The current circulation depth within the terminal is approximately 33 feet. A future planning requirement of 33 feet has been used for this analysis. The existing ticket lobby circulation equals approximately 12,275 square feet of space. The 2028 demand year requires 3,520 square feet of space.

#### Baggage Claim Circulation

#### 1. Terminal 1:

The existing baggage claim circulation equals approximately 17,900 square feet of space. Using a general circulation depth planning factor of 25 feet the 2028 demand totals an area of 6,000 square feet.

#### 2. Terminal 2:

The existing baggage claim circulation equals approximately 7,000 square feet of space. When using a 25 foot general circulation depth the 2028 demand totals an area 6,000 square feet.

#### • Secure Circulation

#### 1. Terminal 1:

The existing secure circulation equals approximately 180,700 square feet of space of which 73,300 square feet is being utilized which includes the closure of Concourses B and D. The future preferential use 2028 demand year using 2,700 square feet per NBEG ratio (45 foot wide double-loaded corridor with moving walkways) requires 85,000 square feet with a common use scenario requiring 56,200 square feet of secure circulation.

#### 2. Terminal 2:

The existing secure circulation equals approximately 50,400 square feet, of space of which 36,000 square feet is being utilized. Using an existing

calculated square feet per NBEG ratio of 2,400 (20 foot single-loaded corridor with no moving walks) results in the 2028 demand year requiring 36,000 square feet of secure circulation.

#### • General Circulation

#### 1. Terminal 1:

For the future requirements an existing planning ratio of 23 percent has been used. The future preferential use requirement of approximately 48,600 square feet is recommended to meet the 2028 planning level year. A common use requirement utilizing the same planning ration equates to approximately 40,400 square feet of space by 2028.

#### 2. Terminal 2:

For the future requirements a typical planning standard of 15 percent for a terminal of this size has been used which is slightly above the existing 11 percent. The future requirement of 20,700 square feet is recommended to meet the 2028 planning level year.

#### • Public Seating

#### 1. Terminal 1:

No public seating area was calculated in the existing terminal plans. However, most seating on the ticketing level is located in the vestibule areas which lead from the curb to the ticketing lobby. In baggage claim they tend to be located along the positive claim rail. The future 2028 demand year requires approximately 7,900 square feet of space.

#### 2. Terminal 2:

No public seating area was calculated in the existing terminal plans. However, most seating on the ticketing level is located along the glass façade within the ticket lobby circulation spine. In baggage claim they tend to be located along both sides of the positive claim rail. The future 2028 demand year requires approximately 7,400 square feet of space.

#### Domestic Meeters/Greeters Lobby

#### 1. Terminal 1:

a. There is a small 800 square foot area allocated to this function in the terminal located near American's claim unit M1 called "The Meeting Place" with no seating. The 2028 demand year requires a total area of approximately 6,900 square feet to meet the projected peak hour level of activity.

#### 2. Terminal 2:

a. The 2028 demand year requires a total area of approximately 6,000 square feet to meet the projected peak hour level of activity.

#### • Transportation (Shuttle Service) & Hotel Courtesy Phones

This results in an area of approximately 200 square feet for both terminals by the year 2028 for Terminal 1.

#### **Restrooms**

#### Terminal 1:

The existing secure area measures approximately 10,800 square feet while the non-secure area measures approximately 5,300 square feet. The 2028 preferential use demand level year requires a secure area of 6,400 square feet with a non-secure area requirement of 7,300 square feet. The 2028 common use scenario equates to a secure area of 4,800 square feet with a non-secure area of 7,300 square feet.

#### Terminal 2:

The existing secure area measures approximately 3,800 square feet while the non-secure area measures approximately 2,800 square feet. The 2028 preferential use demand level year requires a secure area of 3,200 square feet with a non-secure area requirement of 6,400 square feet.

#### **NON-PUBLIC SPACE**

#### Non-Airline Tennant Space

#### Airport Administration

#### 1. Terminal 1:

A review of the airport CAD drawings suggests there is approximately 63,900 square feet of administration/support with roughly 1,850 square feet of airport police space within the terminal area. No change is anticipated for the existing or future terminal however future space requirements should be reviewed by the Airport.

#### 2. Terminal 2:

A review of the airport CAD drawings suggests there is approximately 4,300 square feet of administration/support with no area allocated to airport police space within the terminal area. No change is anticipated for the existing or future terminal however future space requirements should be reviewed by the Airport.

#### **Other Tenants**

#### 1. Terminal 1:

A review of the airport CAD drawings suggests there is approximately 4,900 square feet of other tenant space within the terminal area. A slight increase is anticipated for the future terminal to account for any potential tenant additions however future space requirements should be reviewed by the Airport.

#### 2. Terminal 2:

A review of the airport CAD drawings suggests there is approximately 4,500 square feet of other tenant space within the terminal area. Using the existing 200 square feet per 100,000 annual enplanements resulted in a need for approximately 8,600 square feet of space by the 2028 demand year. This assumes a future tenant will utilize the space given the planned growth of the terminal.

#### **Other Space**

#### **Non-Public Restrooms**

#### 1. Terminal 1:

Mild 100.9006 The existing area is approximately 4,100 square feet. An existing ratio of non-public space to non-public restrooms has been used for future planning requirements and results in a preferential use area of approximately 2,600 square feet with a common use area of 1,800 square feet by 2028.

#### 2. Terminal 2:

The existing area is approximately 4,100 square feet. An existing ratio of non-public space to non-public restrooms has been used for future planning requirements and results in a preferential use area of approximately 1,800 square feet by 2028.

#### Non-Public Circulation

#### 1. Terminal 1:

A preferential use area of 26,400 square feet is required by 2028 with a common use area of 18,000 square feet.

#### 2. Terminal 2:

An area of 9,200 square feet is required by 2028.

#### **Terminal Functions**

#### • Maintenance/Janitorial/Storage/Shops

#### 1. Terminal 1:

The 2028 preferential use demand level requires 7,000 square feet with a common use area of 5,300 square feet.

#### 2. Terminal 2:

The 2028 demand level requires 3,100 square feet.

#### Mechanical/Electrical/Telephone/Plumbing

#### 1. Terminal 1:

Using an existing ratio of 12 percent the total 2028 preferential use requirement equates to 84,200 square feet with a common use requirement of 64,100 square feet.

#### 2. Terminal 2:

Using an existing ratio of 12 percent the total 2028 preferential use requirement equates to 37,500 square feet.

#### Building Systems (Structural/Non-Net/Void)

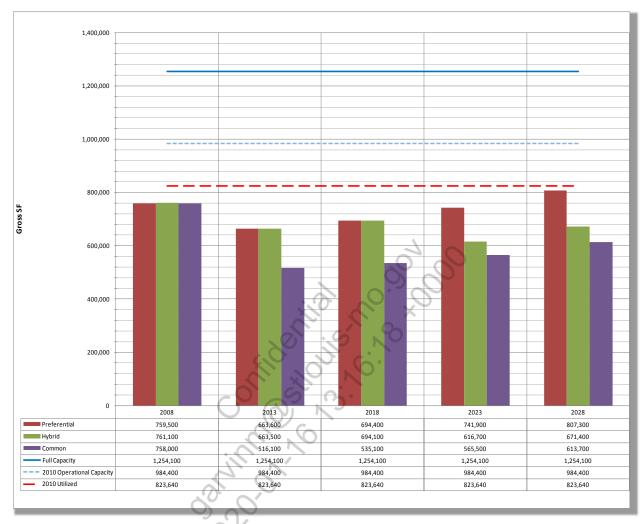
#### 1. Terminal 1:

An existing ratio of approximately three percent has been used for this analysis resulting in a preferential use area of 20,200 square feet with a common use area of 14,800 square feet by 2028.

#### 2. Terminal 2:

An existing ratio of approximately two percent has been used for this analysis resulting in an area of 5,500 square feet by 2028.

# TERMINAL 1 PROGRAM SCENARIO COMPARISONS Lambert-St. Louis International Airport



# TERMINAL 2 PROGRAM COMPARISON Lambert-St. Louis International Airport

