Airport Airside Simulation

5 Time Units: Minutes Replications:

Key Performance Indicators

System Average 12

Number Out

Model Filename: E:\Sem 6\airport(1) Page 8

Airport Airside Simulation

Replications: 5 Time Units: Minutes

Entity

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VA Time	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Plane	53.8268	61.01	0.00	90.4636	0.00	101.
NVA Time	A	11-16/07:141-	Minimum	Maximum	Minimum	Maxim
	Average	Half Width	Average	Average	Value	Va
Plane	0.00	0.00	0.00	0.00	0.00	0.
Wait Time	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Plane	8.7495	11.46	0.00	20.3312	0.00	53.15
Transfer Time	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Plane	4.2000	4.76	0.00	7.0000	0.00	7.00
Other Time	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Plane	0.00	0.00	0.00	0.00	0.00	0.
Total Time	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Plane	66.7762	75.95	0.00	117.79	0.00	142.
Other						
Number In	Average	Half Width	Minimum Average	Maximum Average		
Plane	112.20	12.21	100.00	125.00		
Number Out	Average	Half Width	Minimum Average	Maximum Average		
Plane	12.4000	15.52	0.00	28.0000		
WIP	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Plane	46.8564	18.16	33.5750	64.4144	0.00	125.

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Airport Airside Simulation

Replications: 5 Time Units: Minutes

Queue

Time

Waiting Time	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Board Passengers.Queue	1.8106	1.00	0.7231	2.5589	0.00	12.05
Deboard Passengers.Queue	1.4258	2.36	0.00	4.2807	0.00	15.32
Get a Tug to Runway.Queue	0.00	0.00	0.00	0.00	0.00	0.
Get a Tug.Queue	0.00	0.00	0.00	0.00	0.00	0.
Landing.Queue	4.6258	0.95	3.7037	5.8223	0.00	21.58
Load Luggage.Queue	0.02763468	0.08	0.00	0.1382	0.00	2.94
Park in Apron.Queue	1.2403	1.92	0.00	3.7208	0.00	21.94
Refuel Plane.Queue	0.1767	0.22	0.00	0.3808	0.00	4.94
Remove Baggage.Queue	0.06407376	0.09	0.01042880	0.1700	0.00	4.93
TakeOff.Queue	2.9254	3.42	0.00	5.6285	0.00	24.73

Other

Number Waiting	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Board Passengers.Queue	0.03918884	0.04	0.00535603	0.08529613	0.00	2.00
Deboard Passengers.Queue	0.04099043	0.07	0.00	0.1149	0.00	2.00
Get a Tug to Runway.Queue	5.8937	1.46	4.4339	7.1194	0.00	8.00
Get a Tug.Queue	35.6392	17.55	22.7738	52.6682	0.00	112.
Landing.Queue	0.4815	0.12	0.3429	0.5822	0.00	4.00
Load Luggage.Queue	0.00092116	0.00	0.00	0.00460578	0.00	1.00
Park in Apron.Queue	2.3700	0.52	1.8352	2.8100	0.00	3.00
Refuel Plane.Queue	0.00256757	0.00	0.00	0.00859358	0.00	1.00
Remove Baggage.Queue	0.00173528	0.00	0.00007725	0.00456607	0.00	1.00
TakeOff.Queue	0.05804004	0.08	0.00	0.1352	0.00	2.00

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Airport Airside Simulation

Replications: 5 Time Units: Minutes

Resource

Usage

Apron 2 0.9444 0.04 0.9066 0.9 Apron 3 0.9422 0.04 0.9027 0.9 Apron 4 0.9232 0.05 0.8701 0.9 Apron 5 0.9484 0.06 0.8709 0.9 Apron 6 0.9455 0.06 0.8637 0.9 Apron 7 0.9312 0.06 0.8548 0.9 Apron 8 0.9419 0.04 0.9038 0.9 Baggage Handler 1 0.1388 0.10 0.05437775 0.2 Baggage Handler 2 0.1137 0.08 0.04297477 0.1	0.00	
Apron 3 0.9422 0.04 0.9027 0.9 Apron 4 0.9232 0.05 0.8701 0.9 Apron 5 0.9484 0.06 0.8709 0.9 Apron 6 0.9455 0.06 0.8637 0.9 Apron 7 0.9312 0.06 0.8548 0.9 Apron 8 0.9419 0.04 0.9038 0.9 Baggage Handler 1 0.1388 0.10 0.05437775 0.2 Baggage Handler 2 0.1137 0.08 0.04297477 0.1		1.00
Apron 4 0.9232 0.05 0.8701 0.9 Apron 5 0.9484 0.06 0.8709 0.9 Apron 6 0.9455 0.06 0.8637 0.9 Apron 7 0.9312 0.06 0.8548 0.9 Apron 8 0.9419 0.04 0.9038 0.9 Baggage Handler 1 0.1388 0.10 0.05437775 0.2 Baggage Handler 2 0.1137 0.08 0.04297477 0.1	0.00	1.00
Apron 5 0.9484 0.06 0.8709 0.9 Apron 6 0.9455 0.06 0.8637 0.9 Apron 7 0.9312 0.06 0.8548 0.9 Apron 8 0.9419 0.04 0.9038 0.9 Baggage Handler 1 0.1388 0.10 0.05437775 0.2 Baggage Handler 2 0.1137 0.08 0.04297477 0.1	0.00	1.00
Apron 6 0.9455 0.06 0.8637 0.9 Apron 7 0.9312 0.06 0.8548 0.9 Apron 8 0.9419 0.04 0.9038 0.9 Baggage Handler 1 0.1388 0.10 0.05437775 0.2 Baggage Handler 2 0.1137 0.08 0.04297477 0.1	0.00	1.00
Apron 7 0.9312 0.06 0.8548 0.9 Apron 8 0.9419 0.04 0.9038 0.9 Baggage Handler 1 0.1388 0.10 0.05437775 0.2 Baggage Handler 2 0.1137 0.08 0.04297477 0.1	910 0.00	1.00
Apron 8 0.9419 0.04 0.9038 0.9 Baggage Handler 1 0.1388 0.10 0.05437775 0.2 Baggage Handler 2 0.1137 0.08 0.04297477 0.1	906 0.00	1.00
Baggage Handler 1 0.1388 0.10 0.05437775 0.2 Baggage Handler 2 0.1137 0.08 0.04297477 0.1	0.00	1.00
Baggage Handler 2 0.1137 0.08 0.04297477 0.1	0.00	1.00
	2457 0.00	1.00
Raggage Handler 3 0.0928 0.08 0.02882966 0.1	941 0.00	1.00
baggage Handler 6 0.0020 0.02002000 0.1	657 0.00	1.00
Bowser 1 0.1203 0.08 0.05089180 0.2	2004 0.00	1.00
Bowser 2 0.1164 0.09 0.04668159 0.1	987 0.00	1.00
Bowser 3 0.1082 0.09 0.03363817 0.2	2037 0.00	1.00
Mobile Lounge 1 0.2238 0.17 0.07891621 0.3	964 0.00	1.00
Mobile Lounge 2 0.2081 0.15 0.0902 0.3	3567 0.00	1.00
Mobile Lounge 3 0.1839 0.15 0.06190402 0.3	3477 0.00	1.00
Runway 0.6416 0.05 0.5788 0.6	8864 0.00	1.00
Tug 1 0.8260 0.15 0.6747 0.9	0.00	1.00
Tug 2 0.8296 0.14 0.6886 0.9	0.00	1.00
Tug 3 0.8355 0.14 0.6941 0.9		

Model Filename: E:\Sem 6\airport(1)

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Values Across All Replications

Airport Airside Simulation

Replications: 5 Time Units: Minutes

Resource

Usage

Number Busy	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Apron 1	0.9532	0.03	0.9072	0.9741	0.00	1.00
Apron 2	0.9444	0.04	0.9066	0.9792	0.00	1.00
Apron 3	0.9422	0.04	0.9027	0.9744	0.00	1.00
Apron 4	0.9232	0.05	0.8701	0.9542	0.00	1.00
Apron 5	0.9484	0.06	0.8709	0.9910	0.00	1.00
Apron 6	0.9455	0.06	0.8637	0.9906	0.00	1.00
Apron 7	0.9312	0.06	0.8548	0.9800	0.00	1.00
Apron 8	0.9419	0.04	0.9038	0.9743	0.00	1.00
Baggage Handler 1	0.1388	0.10	0.05437775	0.2457	0.00	1.00
Baggage Handler 2	0.1137	0.08	0.04297477	0.1941	0.00	1.00
Baggage Handler 3	0.0928	0.08	0.02882966	0.1657	0.00	1.00
Bowser 1	0.1203	0.08	0.05089180	0.2004	0.00	1.00
Bowser 2	0.1164	0.09	0.04668159	0.1987	0.00	1.00
Bowser 3	0.1082	0.09	0.03363817	0.2037	0.00	1.00
Mobile Lounge 1	0.2238	0.17	0.07891621	0.3964	0.00	1.00
Mobile Lounge 2	0.2081	0.15	0.0902	0.3567	0.00	1.00
Mobile Lounge 3	0.1839	0.15	0.06190402	0.3477	0.00	1.00
Runway	0.6416	0.05	0.5788	0.6864	0.00	1.00
Tug 1	0.8260	0.15	0.6747	0.9515	0.00	1.00
Tug 2	0.8296	0.14	0.6886	0.9460	0.00	1.00
Tug 3	0.8355	0.14	0.6941	0.9532	0.00	1.00

Airport Airside Simulation

Replications: 5 Time Units: Minutes

Resource

Usage

Number Scheduled	Average	Half Width	Minimum Average	Maximum Average	Minimum Value	Maxim Va
Apron 1	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Apron 2	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Apron 3	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Apron 4	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Apron 5	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Apron 6	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Apron 7	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Apron 8	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Baggage Handler 1	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Baggage Handler 2	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Baggage Handler 3	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Bowser 1	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Bowser 2	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Bowser 3	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Mobile Lounge 1	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Mobile Lounge 2	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Mobile Lounge 3	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Runway	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Tug 1	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Tug 2	1.0000	0.00	1.0000	1.0000	1.0000	1.00
Tug 3	1.0000	0.00	1.0000	1.0000	1.0000	1.00

April 26, 2018

Values Across All Replications

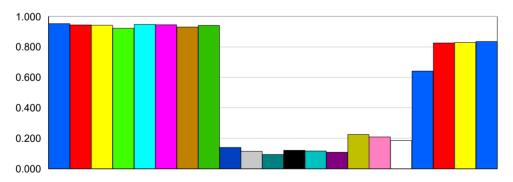
Airport Airside Simulation

Replications: 5 Time Units: Minutes

Resource

Usage

Scheduled Utilization	Average	Half Width	Minimum Average	Maximum Average	
Apron 1	0.9532	0.03	0.9072	0.9741	
Apron 2	0.9444	0.04	0.9066	0.9792	
Apron 3	0.9422	0.04	0.9027	0.9744	
Apron 4	0.9232	0.05	0.8701	0.9542	
Apron 5	0.9484	0.06	0.8709	0.9910	
Apron 6	0.9455	0.06	0.8637	0.9906	
Apron 7	0.9312	0.06	0.8548	0.9800	
Apron 8	0.9419	0.04	0.9038	0.9743	
Baggage Handler 1	0.1388	0.10	0.05437775	0.2457	
Baggage Handler 2	0.1137	0.08	0.04297477	0.1941	
Baggage Handler 3	0.0928	0.08	0.02882966	0.1657	
Bowser 1	0.1203	0.08	0.05089180	0.2004	
Bowser 2	0.1164	0.09	0.04668159	0.1987	
Bowser 3	0.1082	0.09	0.03363817	0.2037	
Mobile Lounge 1	0.2238	0.17	0.07891621	0.3964	
Mobile Lounge 2	0.2081	0.15	0.0902	0.3567	
Mobile Lounge 3	0.1839	0.15	0.06190402	0.3477	
Runway	0.6416	0.05	0.5788	0.6864	
Tug 1	0.8260	0.15	0.6747	0.9515	
Tug 2	0.8296	0.14	0.6886	0.9460	
Tug 3	0.8355	0.14	0.6941	0.9532	





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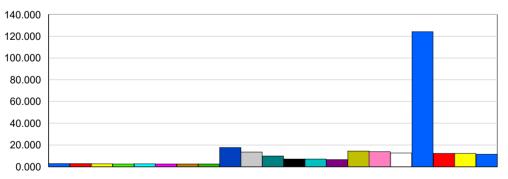
Airport Airside Simulation

Replications: 5 Time Units: Minutes

Resource

Usage

Total Number Seized	Average	Half Width	Minimum Average	Maximum Average	
Apron 1	2.8000	2.22	1.0000	5.0000	
Apron 2	2.8000	2.22	1.0000	5.0000	
Apron 3	2.6000	1.88	1.0000	4.0000	
Apron 4	2.4000	1.88	1.0000	4.0000	
Apron 5	2.6000	1.88	1.0000	4.0000	
Apron 6	2.4000	2.08	1.0000	5.0000	
Apron 7	2.4000	2.08	1.0000	5.0000	
Apron 8	2.4000	1.67	1.0000	4.0000	
Baggage Handler 1	17.6000	12.83	6.0000	30.0000	
Baggage Handler 2	13.4000	9.72	5.0000	24.0000	
Baggage Handler 3	9.8000	8.75	3.0000	18.0000	
Bowser 1	7.0000	5.04	3.0000	12.0000	
Bowser 2	7.0000	5.04	3.0000	12.0000	
Bowser 3	6.4000	5.45	2.0000	12.0000	
Mobile Lounge 1	14.4000	10.33	6.0000	24.0000	
Mobile Lounge 2	13.8000	10.29	6.0000	25.0000	
Mobile Lounge 3	12.6000	10.52	4.0000	23.0000	
Runway	124.20	11.01	113.00	136.00	
Tug 1	12.2000	9.99	4.0000	21.0000	
Tug 2	12.2000	10.69	4.0000	24.0000	
Tug 3	11.4000	10.48	3.0000	22.0000	





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