

Appendix B
Economic Impacts on
The Bangkok International Airport



APPENDIX B

ECONOMIC IMPACTS ON THE BANGKOK INTERNATIONAL AIRPORT

In the economic study, the demographic and economic structures were considered. The population change analysis was based on the Bangkok's statistics. The Bangkok administrative zones, for the analytical purpose, were divided into four groups with eight levels as follows:

The four groups are composed of:

- (1) Saturated areas, the area with a high negative growth of population;
- (2) Slow growing areas, the area with a low negative growth of population;
- (3) Average growth areas, the area with a very low positive or negative growth of population; and
- (4) Fast growing areas, the area with a high positive growth of population.

The eight levels are composed of:

- Saturated areas of the inner area, including eight areas – Thon Buri, Bang Sue, Bang Phlat, Bang Rak, Pathum Wan, Phaya Thai, Yan Nawa and Sathon;
- Slow growing areas of the inner area, including six areas – Khlong San, Dusit, Bangkok Yai, Bang Kho Laem, Phra Nakhon and Samphanthawong;
- Slow growing areas of the intermediate area, including three areas – Khlong Toei, Chatuchak and Chom Thong;
- Moderately growing areas of the inner area, including three areas – Bangkok Noi, Pom Prap Sattru Phai and Ratchathewi;
- Moderately growing areas of the intermediate area, including six areas – Bang Kapi, Phra Khanong, Phasi Charoen, Rat Burana, Lat Phrao and Huai Khwang;
- Moderately growing areas of the outer area, including five areas – Don Muang, Bang Khun Thian, Prawet, Suan Luang and Nong Chok;
- Fast growing areas of the intermediate area, including two areas – Din Daeng and Bang Khen; and
- Fast growing areas of the outer area, including five areas – Taling Chan, Bueng Kum, Min Buri, Lat Krabang and Nong Khaem.

The Bangkok's demographic statistical report, during 1998-2002, displays in the following table.

Table B-1
Bangkok Population by Administrative Zone

(Unit: 1,000 Persons)

Zones	Population				
	1998	1999	2000	2001	2002
Saturated areas, the inner area	970.3	957.0	936.0	923.4	912.1
Slow growing areas, the inner area	616.8	611.8	601.8	593.7	584.2
Slow growing areas, the intermediate area	488.5	491.8	487.0	481.6	480.4
Moderately growing areas, the inner area	357.6	353.6	345.8	340.1	334.1
Moderately growing areas, the intermediate area	851.9	667.1	665.2	571.3	670.8
Moderately growing areas, the outer area	465.1	411.7	423.1	435.3	450.5
Don Muang	136.6	140.6	143.7	146.5	150.9
Fast growing areas, the intermediate area	333.8	333.9	334.2	332.1	333.1
Fast growing areas, the outer area	605.4	541.1	556.9	569.5	584.2
38 districts in total	4,826.1	4,508.6	4,493.9	4,393.4	4,500.4
Other districts	778.7	1,139,173.0	1,168.6	1,286.9	1,225.8
Total Amount of Bangkok	5,604.8	5,647.8	5,662.5	5,680.4	5,726.2
Don Muang/Bangkok (%)	2.44	2.49	2.54	2.58	2.64

Source: Bangkok statistics report during 1998-2002

The above information indicates that the total population in Khet Don Muang stands at about 150,000 people or 2.5% of the total population in Bangkok. The average population growth in Bangkok shows an increase of 0.54%, while that of Khet Don Muang shows an incremental rate of 2.5%.

Table B-2
Household Number by Administrative Zone

(Unit : 1,000 Persons)

Zones	Household Number				
	1998	1999	2000	2001	2002
Saturated areas, the inner area	269.9	269.6	268.4	269.8	271.1
Slow growing areas, the inner area	145.7	147.0	147.2	147.7	148.4
Slow growing areas, the intermediate area	167.0	173.5	175.1	177.6	179.3
Moderately growing areas, the inner area	84.9	86.8	86.9	87.4	88.2
Moderately growing areas, the intermediate area	305.6	234.8	237.0	238.8	243.6
Moderately growing areas, the outer area	169.5	143.9	147.7	152.3	156.0
Don Muang	48.8	50.7	51.0	51.8	53.0
Fast growing areas, the intermediate area	112.3	24.1	85.8	114.8	116.4
Fast growing areas, the outer area	208.9	180.1	187.2	191.1	195.4
38 Districts in total	1,512.6	1,310.4	1,386.4	1,431.3	1,451.3
Other districts	298.0	538.9	490.2	469.0	477.6
Total Amount of Bangkok	1,810,530.0	1,849,249.0	1,876.6	1,900,235.0	1,929.0
Don Muang/Bangkok (%)	2.70	2.74	2.72	2.73	2.75

Source: Bangkok statistics report during 1998-2002

The number of households in Khet Don Muang stands at about 50,000 households or 2.7 % of the total number of Bangkok. The household growths in the area, during 1999 to 2002, are at 0.62%, 1.58% and 2.30%, respectively. These are considered fast growing rates.

Table B-3
In-migration by Administrative Zone

(Unit: 1,000 Persons)

Zones	Number of In-migrants				
	1998	1999	2000	2001	2002
Saturated areas, the inner area	54.5	53.2	50.9	53.2	53.1
Slow growing areas, the inner area	34.4	38.6	35.9	40.6	34.7
Slow growing areas, the intermediate area	34.8	31.7	30.7	34.5	34.4
Moderately growing areas, the inner area	19.4	17.9	18.3	18.3	17.2
Moderately growing areas, the intermediate area	77.0	49.5	44.5	50.5	55.6
Moderately growing areas, the outer area	45.6	38.6	33.8	39.9	42.4
Don Muang	25.4	15.0	14.4	15.6	16.8
Fast growing areas, the intermediate area	40.4	24.8	23.9	26.6	26.8
Fast growing areas, the outer area	84.3	53.1	50.7	53.7	56.5
38 Districts in total	415.8	322.3	303.3	332.9	337.5
Other districts	21.2	97.8	98.0	110.2	114.1
Total Amount of Bangkok	436.9	420.0	401.4	443.0	451.6
Don Muang/Bangkok (%)	5.82	3.56	3.60	3.53	3.72

Source: Bangkok statistics report during 1998-2002

The average number of in-migrants in Bangkok stands at about 420,000 a year, compared to 15,000 people moving into Khet Don Muang or 3.5% of the total in-migrating people in Bangkok. The in-migration rate in the area in 2001 and 2002 reached a high rate of 8.32% and 7.70%, respectively.

Table B-4
Out-migration by Administrative Zone

(Unit: 1,000 Persons)

Zones	Number of Out-migrants				
	1998	1999	2000	2001	2002
Saturated areas, the inner area	88.9	91.9	85.1	84.56	84.6
Slow growing areas, the inner area	57.6	61.4	56.6	53.3	56.0
Slow growing areas, the intermediate area	35.6	36.4	34.2	34.6	33.8
Moderately growing areas, the inner area	64.3	62.4	58.3	57.5	54.4
Moderately growing areas, the intermediate area	65.4	50.6	46.1	47.0	49.7
Moderately growing areas, the outer area	25.7	25.3	22.5	24.2	26.4
Don Muang	16.9	10.7	10.8	11.2	11.6
Fast growing areas, the intermediate area	40.1	27.6	24.8	26.2	26.2
Fast growing areas, the outer area	54.9	38.4	35.4	36.6	40.9
38 Districts in total	449.4	404.8	373.9	375.1	383.6
Other districts	17.7	89.4	89.3	105.8	99.3
Total Amount of Bangkok	467.1	494.3	463.2	480.9	482.9
Don Muang/Bangkok (%)	3.61	2.17	2.33	2.33	2.41

Source: Bangkok statistics report during 1998-2002

The average number of people moving out of Bangkok stands at about 480,000 people/year, compared to 11,000 people/year of Khet Don Muang or equivalent to 2.5% of the total out-migrating people in Bangkok. The out-migration rates in the area in 2001 and 2002 are at 3.60% and 3.75%, respectively.

Table B-5
Bangkok GPP Value by Manufacturing Lines, during 1993-2000

(Unit: Billion Baht)

Manufacturing Lines	1993	1994	1995	1996	1997	1998	1999	2000
Agriculture	7.4	8.4	9.3	10.7	11.1	10.9	11.2	12.1
Production	400.5	418.8	471.1	504.6	519.2	505.3	536.6	576.6
Wholesaling-Retailing	261.7	293.5	324.7	345.8	366.3	352.0	359.5	380.7
Hotel & Restaurant	190.8	218.9	253.6	290.4	296.1	283.0	299.4	316.1
Transport	152.7	168.5	184.6	206.2	215.9	222.9	238.6	254.9
Other services	318.3	364.0	392.8	411.5	404.9	290.1	254.5	247.0
GPP	1,331.4	1,472.2	1,636.1	1,769.3	1,813.5	1,664.2	1,699.7	1,787.5

Source: TEAM-AEC-MSI-SLC, Suvannabhumi Aerotropolis Development Plan

Table B-6
Year-end Accumulated Number of Factories Granted Permits

(Unit: Factory)

Zone	Number of Factories			
	1999	2000	2001	2002
Don Muang	58	66	74	89
Total Amount of Bangkok	18,120	21,147	21,026	20,207
Ratio of Don Muang/Bangkok	0.0032	0.0031	0.0035	0.0044

Source: Bangkok statistics report during 1998-2002

The above statistics show that from 2000 onwards, there are about 20,000 factories in Bangkok with a rather constant trend. The number of factories in Khet Don Muang during 1999-2002 has soared continually from year to year.

Table B-7
Year-end Investment Capital of the Factories Granted Permits

(Unit: Million Baht)

Zone	Investment Capital			
	1999	2000	2001	2002
Don Muang	5,360	5,392	5,464	7,191
Total Amount of Bangkok	245,347	272,740	261,429	266,322
Ratio of Don Muang/Bangkok	0.0218	0.0198	0.0209	0.0270

Source: Bangkok statistics report during 1998-2002

The investment capital, during 1999 to 2002, in Don Muang area has been on the rise, especially in 2002. The 2002 investment reached 7,191 million baht – 1,727 million baht higher than the previous year, which amounted to 5,464 million baht. As for the overall Bangkok, the average investment capital stands at 260,000-270,000 million baht a year with a moderate trend of change.

Table B-8
Year-end Number of Laborers in the Factories Granted Permits

(Unit: Person)

Zone	Laborers			
	1999	2000	2001	2002
Don Muang	3,710	3,996	4,334	10,731
Total Amount of Bangkok	591,878	615,043	608,088	595,751
Ratio of Don Muang/Bangkok	0.0063	0.0065	0.0071	0.0180

Source: Bangkok statistics report during 1998-2002

The total number of factory workers in Bangkok is approximately 600,000/year. For Khet Don Muang, during 1999-2001, the number is about 3,700–4,300 people. However, in 2003 a high labor growth was reported, i.e. 10,731 people or an increase of 2.5 times over the previous year.

Table B-9
Number of Buildings and Space with Construction Permits by Type of Building

Zone	Accommodation									
	Number (places)					Space (1,000 m ²)				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Don Muang	23	1	-	1	-	117.6	1.2	-	1,964	-
Total Amount of Bangkok	868	185	90	87	68	4,369.9	471.1	281.3	269.1	239.6
Don Muang/Bangkok(%)	2.65	0.54	0.00	1.15	0.00	2.69	2.60	0.00	0.73	0.00

Source: Bangkok statistics report during 1998-2002

For the number of buildings and space with construction permits classified by type of building in Bangkok and Khet Don Muang, accommodation building has faced a diminishing growth rate, only 1,288 places, during 1998 to 2002. Twenty-five out of the total accommodation buildings are in Khet Don Muang or 2% of all buildings granted permits in Bangkok.

Table B-10
**Number of Buildings and Space with Construction Permits
 by Type of Building in Bangkok**

Zone	Commercial Buildings									
	Number (places)					Space (1,000 m ²)				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Don Muang	12	1	1	-	-	964.2	1.9	982.0	-	-
Total amount of Bangkok	267	64	57	32	59	3,387.0	227.2	707.3	52.1	96.7
Don Muang/Bangkok (%)	4.49	1.56	1.75	0.00	0.00	28.47	0.82	0.014	0.00	0.00

Source: Bangkok statistics report during 1998-2002

The number of commercial buildings granted permits in Bangkok has steadily declined during 1998-2001, while a growth was noted in 2002 with 479 commercial buildings. Fourteen out of the total are in Khet Don Muang or 3% of all buildings granted permits in Bangkok.

Table B-11
Number of Commercial-residential Buildings

Zone	Commercial-residential Buildings									
	Number (places)					Space (1,000 m ²)				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Don Muang	1	-	-	-	-	1.2	-	-	-	-
Total amount of Bangkok	85	25	15	26	17	775.9	212.4	128.3	37.9	44.5
Don Muang/Bangkok (%)	0.01	0.00	0.00	0.00	0.00	0.0015	0.00	0.00	0.00	0.00

Source: Bangkok statistics report during 1998-2002

A total of 168 commercial-residential buildings were granted permits in Bangkok during 1998-2002 with one in Khet Don Muang.

Table B-12
Number of Industrial Buildings

Zone	Industrial Buildings									
	Number (places)					Space (1,000 m ²)				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Don Muang	-	-	NA	-	-	-	-	NA	-	-
Total amount of Bangkok	10	1	NA	1	1	40.6	1.3	NA	3.8	1.2
Don Muang/Bangkok (%)	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00

Source: Bangkok statistics report during 1998-2002

Table B-13
Number of Depots

Zone	Depots									
	Number (places)					Space (1,000 m ²)				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Don Muang	-	-	-	-	-	-	-	-	-	-
Total amount of Bangkok	20	17	2	9	11	44.4	30.3	24.2	17.6	38.1
Don Muang/Bangkok (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Bangkok statistics report during 1998-2002

Table B-14
Number of Parking Buildings

Zone	Parking Buildings									
	Number (places)					Space (1,000 m ²)				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Don Muang	1	-	-	-	-	1.6	-	-	-	-
Total amount of Bangkok	17	4	7	3	4	101.1	18.3	1.0	3.5	5.5
Don Muang/ Bangkok (%)	5.88	0.00	0.00	0.00	0.00	1.59	0.00	0.00	0.00	0.00

Source: Bangkok statistics report during 1998-2002

During 1998-2002, the number of industrial buildings, depots, and parking buildings granted construction permits in Bangkok stands, in total, at 13, 59 and 35 places, respectively, with one car parking in Khet Don Muang.

Table B-15
Number of Business by Type of Economic Activity and Area

(Unit: 1,000)

Zone	Economic activities						
	Manufacturing	Wholesaling/Retailing	Hotel & Restaurant	Services	Construction	Others	Total
Don Muang	0.8	2.2	0.6	1.6	0.1	0.3	5.7
Total amount of Bangkok	47.0	83.0	22.3	48.3	2.9	19.7	223.2
Don Muang/ Bangkok (%)	1.68	2.65	2.87	3.37	3.54	0.02	0.03

Source: Industrial census of 1997, National Statistical Office

The number of business by type of economic activity indicates that the most typical business in Bangkok, including Khet Don Muang, is wholesale and retail business, followed by service business, manufacturing, hotel and restaurant, construction, and others, respectively.