

# Current status of air cargo in Taiwan and development strategy of Taoyuan airport

Prof. Joel Zhengyi Shon

熊正一 教授

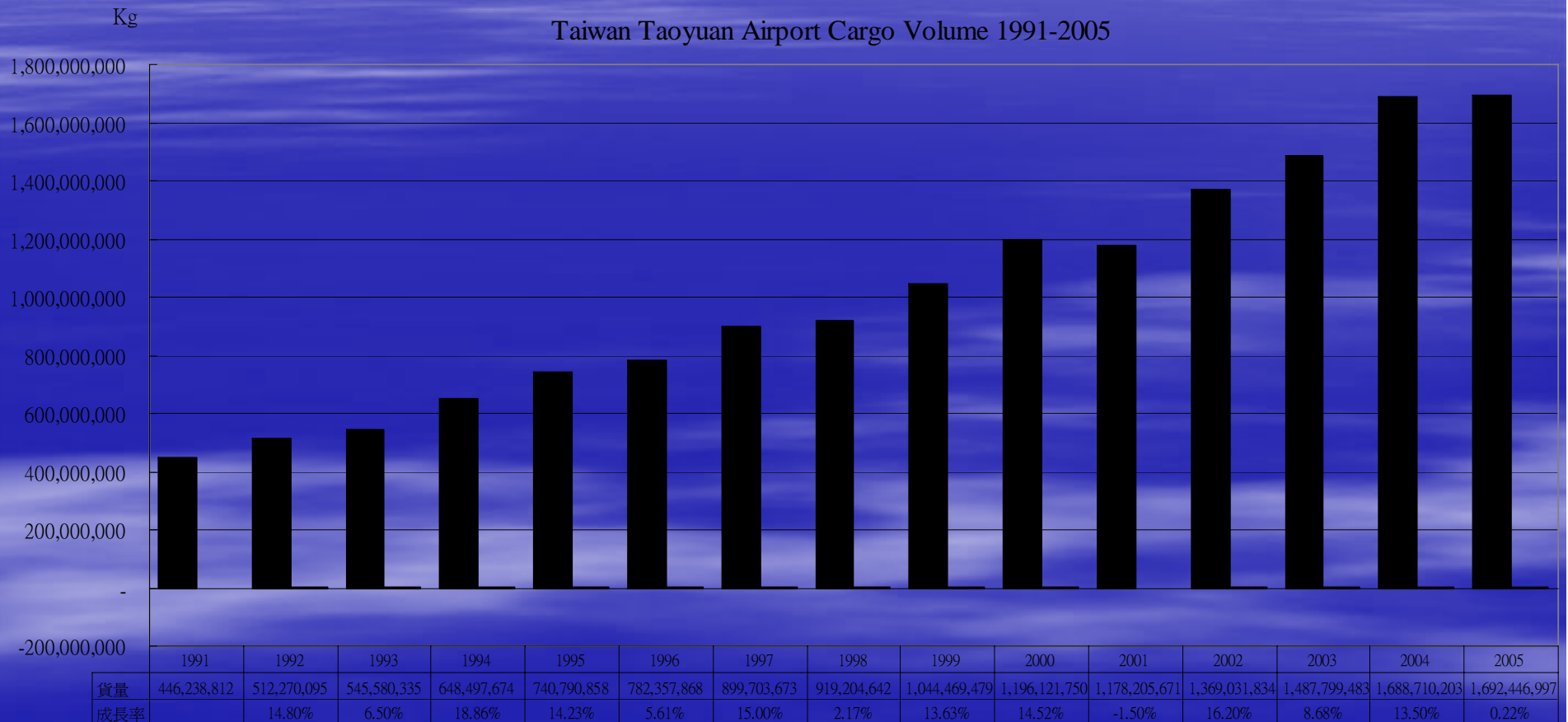
Tainan University of Technology

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# Content

- Taiwan Cargo Industry: A Brief Introduction
- What do we carry? The Content of the Cargo
- Where do the cargo go? The O/D of the Cargo
- Business Environment Limitations
- Airline Strategy – Strategic Alliances
- Airport Strategy – the Free Trade Zone Project
- Conclusions – Where is the future of Taoyuan?

# Taiwan Taoyuan Airport Cargo Volume 1991-2005



# IATA Airline Cargo Ranking

International			International + Domestic		
Rank	Airlines	K Ton-KM	Rank	Airlines	K Ton-KM
1	Korean Air	7,982	1	Fedex	144,408
2	Lufthansa	7,669	2	UPS	9,075
3	Singapore Airlines	7,603	3	Korean Air	8,072
4	Cathay Pacific	6,458	4	Lufthansa	7,680
5	China Airlines	6,037	5	Singapore Airlines	7,603
6	Fedex	5,642	6	Cathay Pacific	6,458
7	Air France	5,528	7	China Airlines	6,037
8	Eva	5,285	8	Air France	5,532
9	Cargolux	5,149	9	Eva	5,285
10	British Airways	4,760	10	Cargolux	5,149

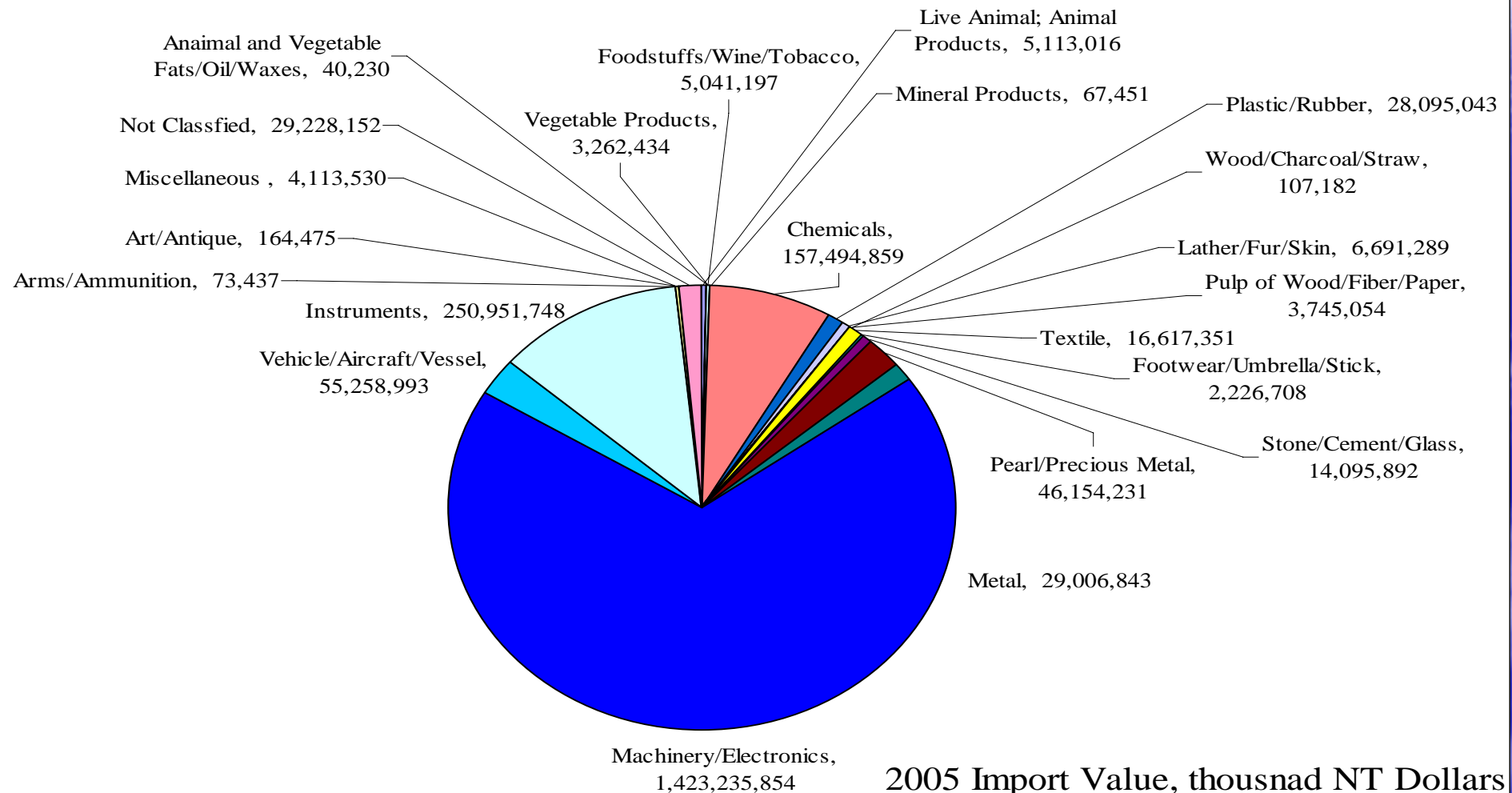
IATA WATS 2005

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# ACI Airport Cargo Ranking

Rank	City (Airport)	Total Cargo	% Change
1	MEMPHIS (MEM)	3 598 500	1.2
2	HONG KONG (HKG)	3 433 349	9.9
3	ANCHORAGE (ANC)*	2 553 937	13.4
4	TOKYO (NRT)	2 291 073	(3.5)
5	SEOUL (ICN)	2 150 140	0.8
6	PARIS (CDG)	2 010 361	7.2
7	FRANKFURT (FRA)	1 962 927	6.7
8	LOS ANGELES (LAX)	1 938 430	1.3
9	SHANGHAI (PVG)	1 856 655	13.1
10	SINGAPORE (SIN)	1 854 610	3.3
11	LOUISVILLE (SDF)	1 815 155	4.3
12	MIAMI (MIA)	1 754 633	(1.4)
13	TAIPEI (TPE)	1 705 318	0.3

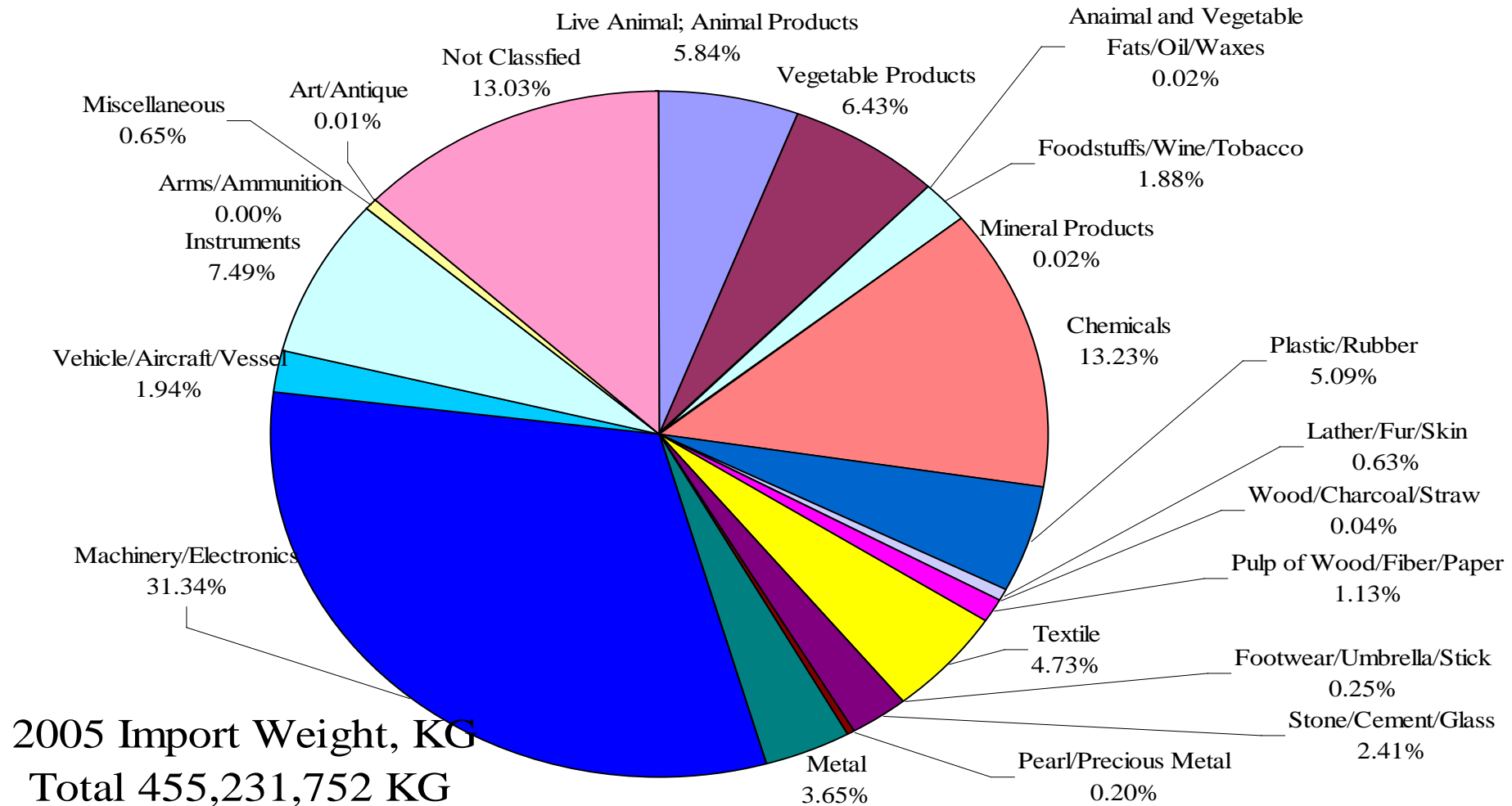
# 2005 Import Cargo Values in the Taoyuan Airport



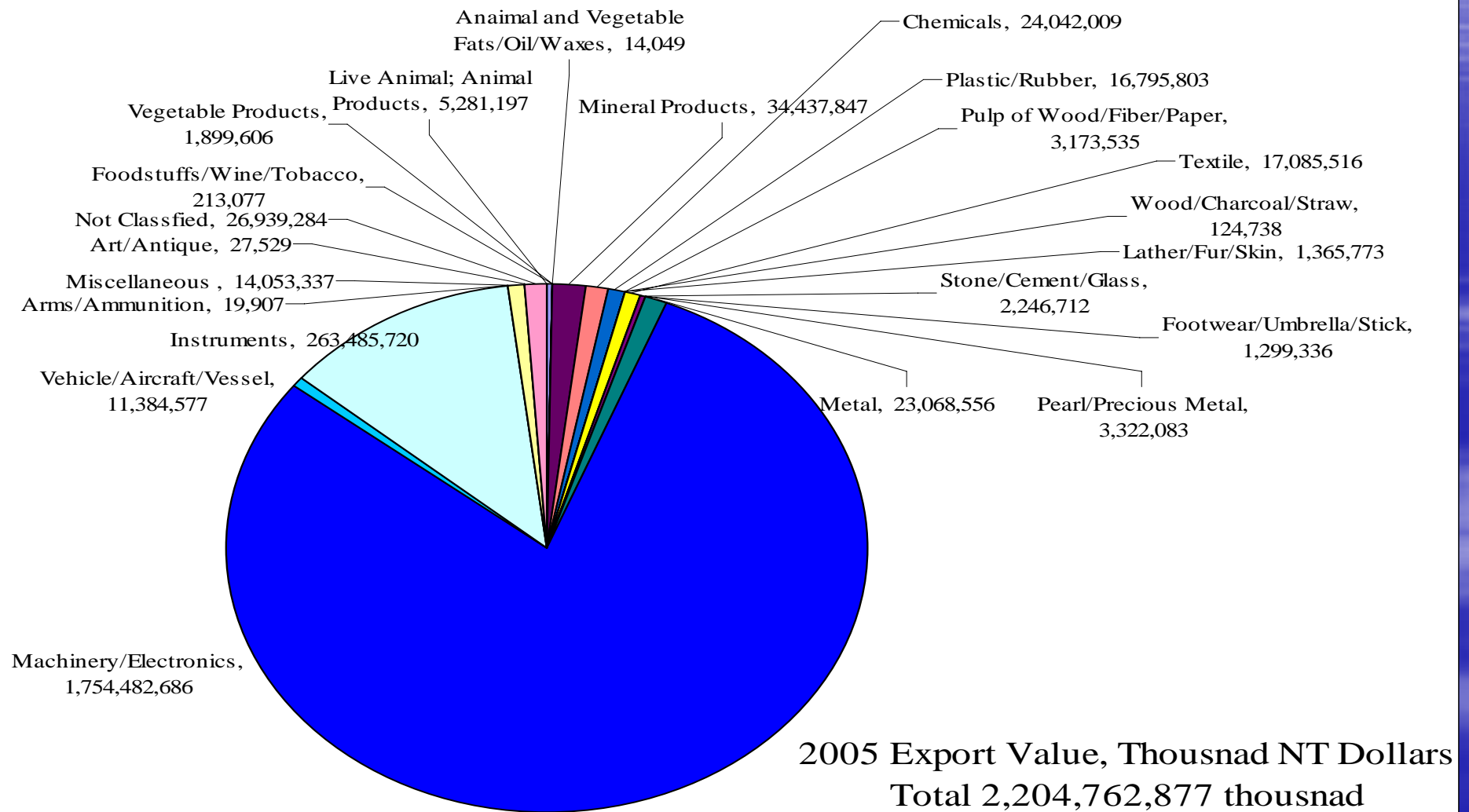
2005 Import Value, thousand NT Dollars  
Total Value 2,080,784,969 thousand



# 2005 Import Cargo Weight in the Taoyuan Airport

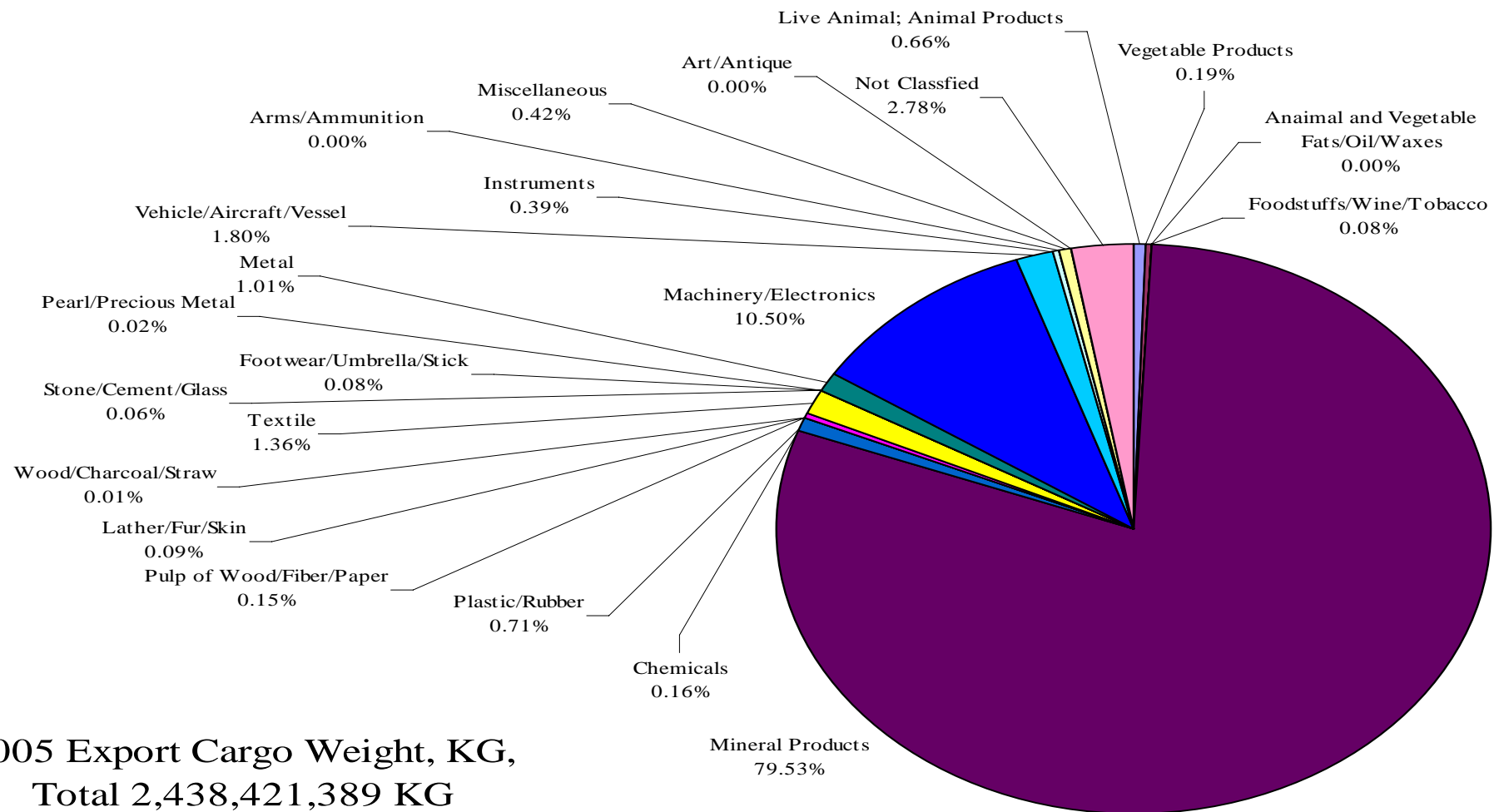


# 2005 Export Cargo Value in the Taoyuan Airport



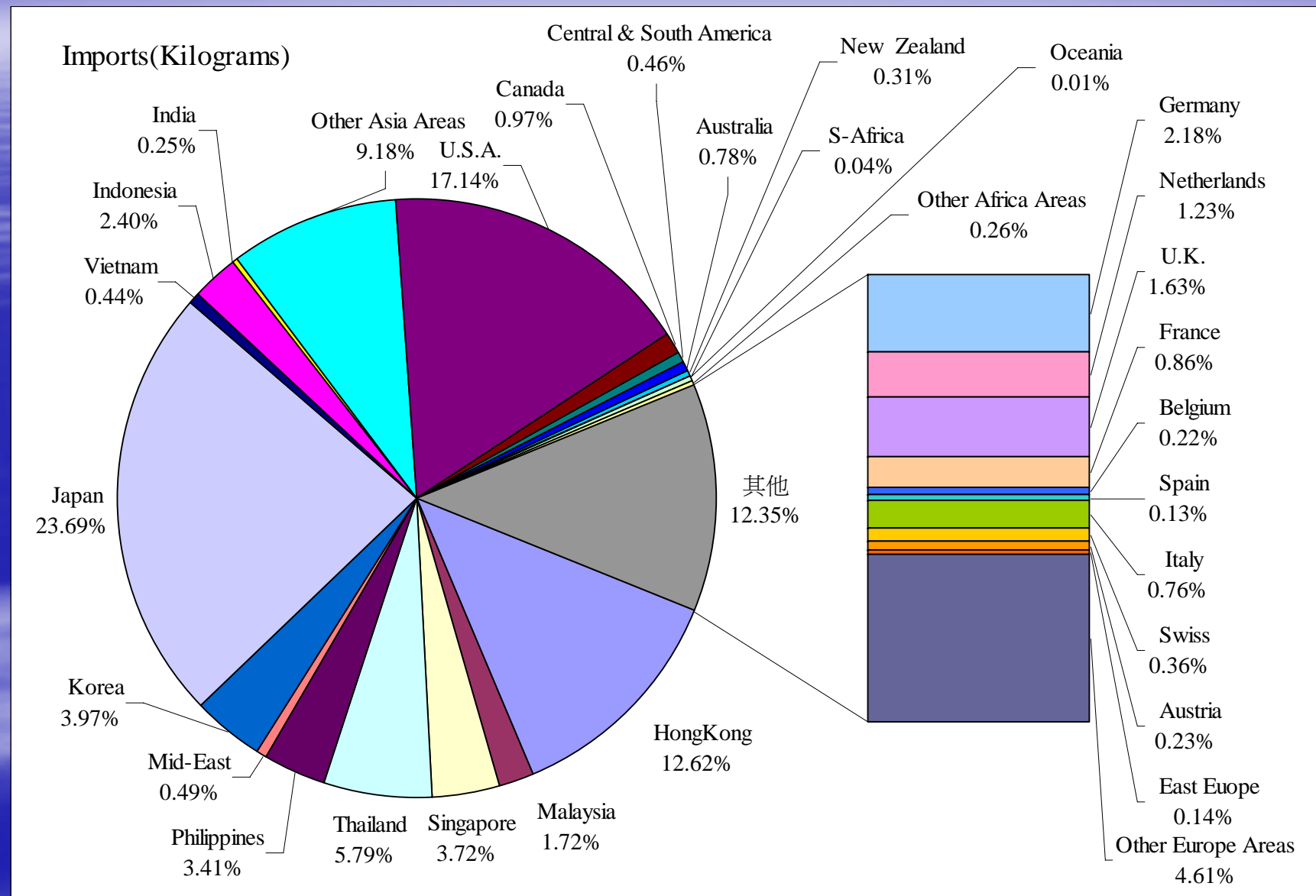


# 2005 Export Cargo Weight in the Taoyuan Airport

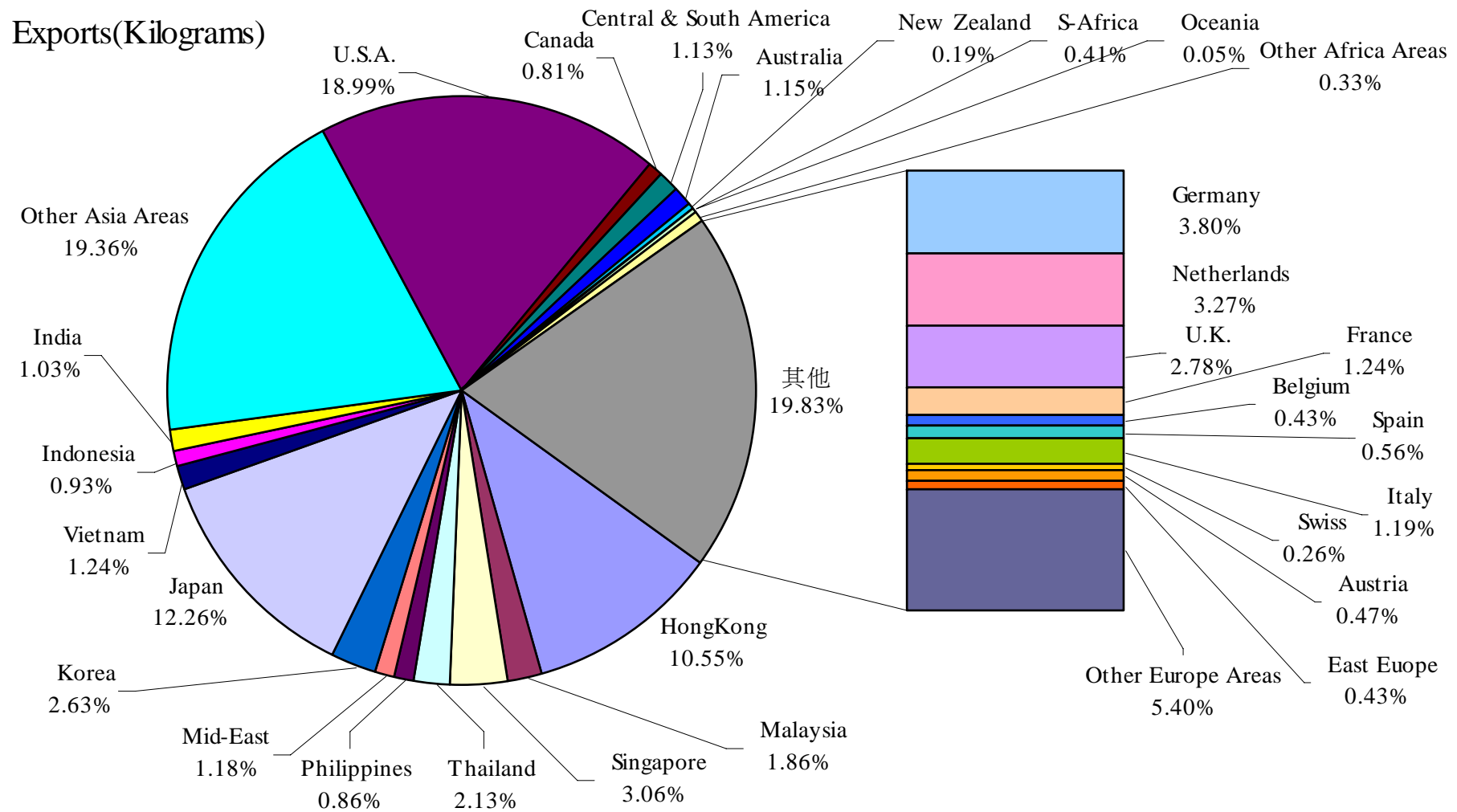


2005 Export Cargo Weight, KG,  
Total 2,438,421,389 KG

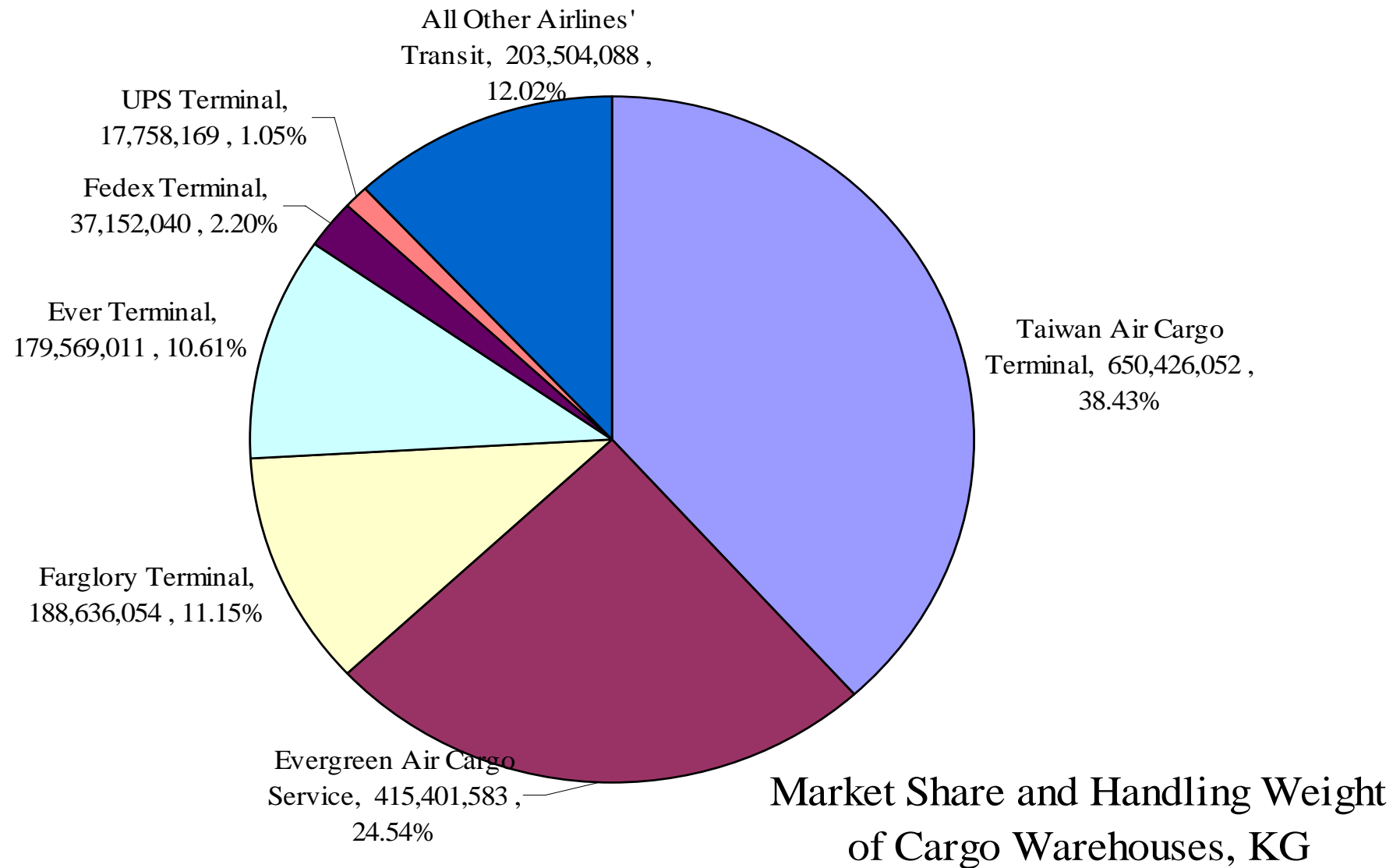
# The Cargo Flows – 2005 Import



# The Cargo Flows – 2005 Export



# The Cargo Terminal and Warehouse



# Business Environment Limitations

- Direct flights to China is the most critical
- Bilateral Agreement as a sovereign state
- Demand Collapse
- Competition coming from other Asian Nations, traditionally northeast Asia, now fast growing China, potentially Southeast Asia and India in the future
- Out of date government Laws and Regulations

# Airline Strategies- Strategic Alliances: China Airlines

- China Airline is now owning the biggest 747F fleet in the world, with 8 more to deliver in the coming 3 years – what to do with them since the Taiwan market is likely to stay the same in the coming years?
- Trying to acquire 25% of China Cargo Airlines in the late 1990s: Approved by CAAC, technically rejected by China Eastern Airlines
- Finally purchase 49% of Yangtze River Express, a domestic third party carrier of UPS in China; Dedicated cargo airline of Hainan Airline Group



# Airline Strategies- Strategic Alliances: Eva Airways

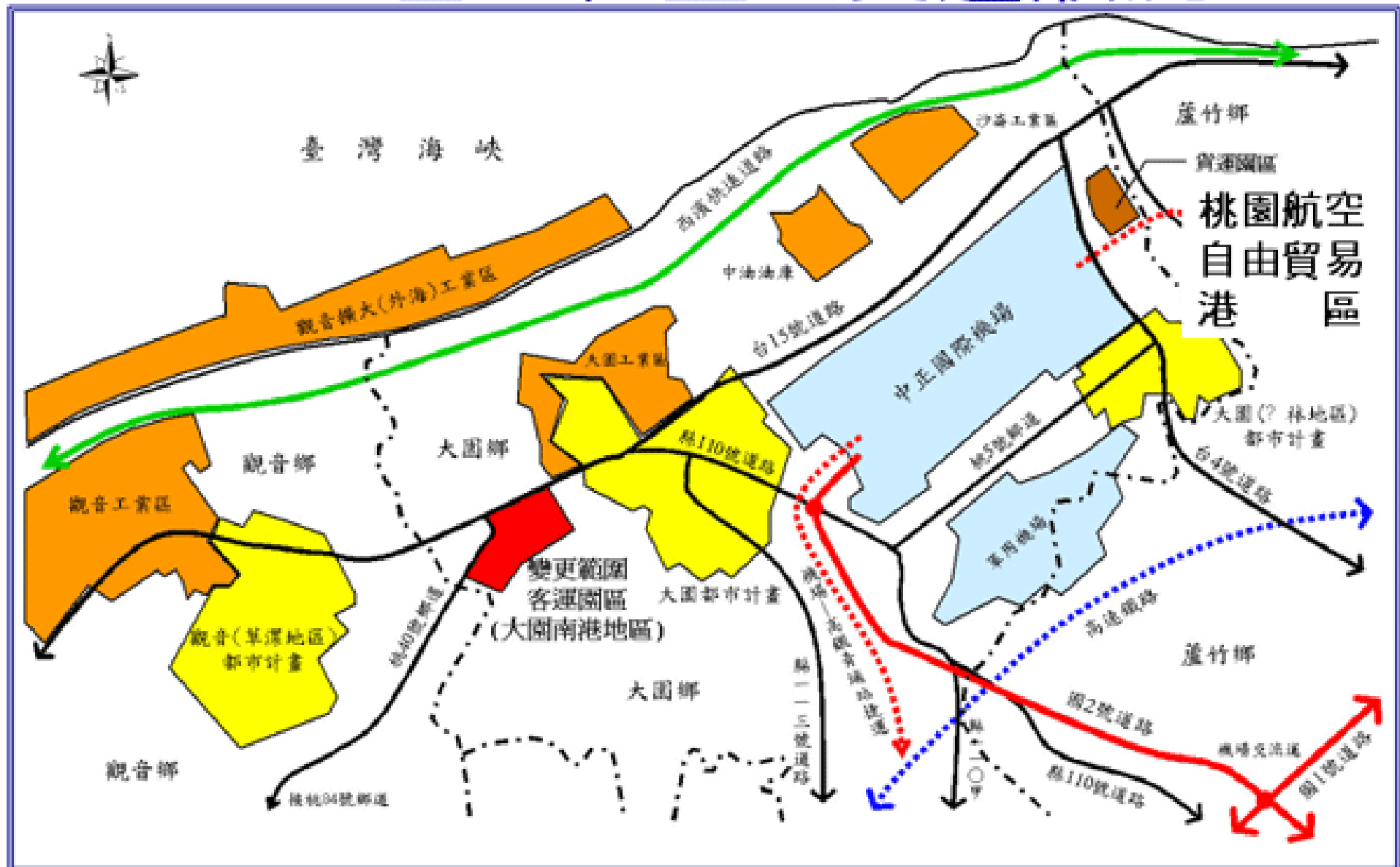
- Eva has already Owned 10% of the shares of Air Macau
- Establishing Shanghai Cargo Airlines in 2006, a Joint Venture with Shanghai Airlines (51:49)
- The game both airlines' are playing:



# Airport Strategies – Free Trade Zone Project

- Taoyuan airport and the government is now releasing the land next to the airport to investors
- Cargo Terminal + Logistic Center + Value Added Industrial Park + Business Operating Center + Tax Free
- The first FTZ has launched service in 2006, which is planned to handle 1 million tons cargo, create 80 billion revenue with 25,000 employment
- Trying to Integrate custom, airlines, forwarders, and shippers for the seamless service from logistic, business, warehouse, shipping, manufacturing

## 五、基地位置及交通狀況



# Detail Layout of the Free Port Plan



本港區配合貨運園區分期分區計畫，採二階段三期開發

第一階段：第一期 92年～ 94年12月31日前完成第一階段開發範圍並開始營運。

第二階段：第二期102年～104年底完成第二階段第二期開發範圍並開始營運。

第三期 105年～107年12月31日前全區開發完成並開始營運。





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# Conclusion – Where is the future of Taoyuan?

- We are worrying about the future of Taiwan Taoyuan airport – market positioning is embarrassing
- For an O/D airport, you must have strong demand or supply, for an transit airport, you must have good connectivity
- Direct flights with China could help, but not much, all too late – Charter Cargo and Convenient Cargo Arrangement is on-going



# Thank you for your attention

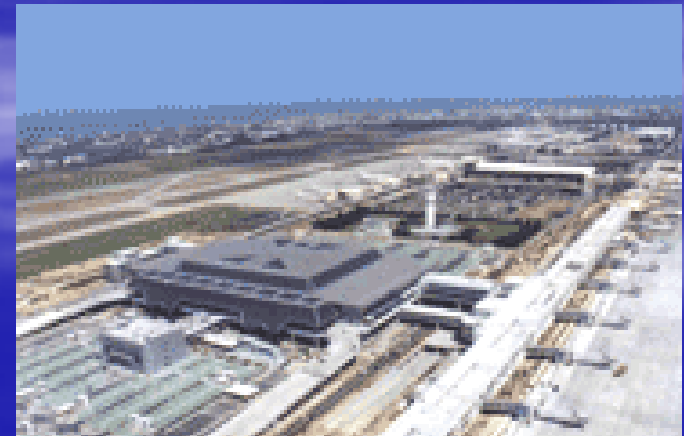
## Discussions and Comments

# Appendix

## Detail Specifications, Layouts, and Future Expansions of Taoyuan Airport

# The Taoyuan Airport

- **Built in 1979**
- **One of the “10 huge constructions project” led by late president C.K. Chiang in 1970s**
- **Great contribution to Taiwan economy during 1980 - 2000**



# Airport Airside/Landside Data

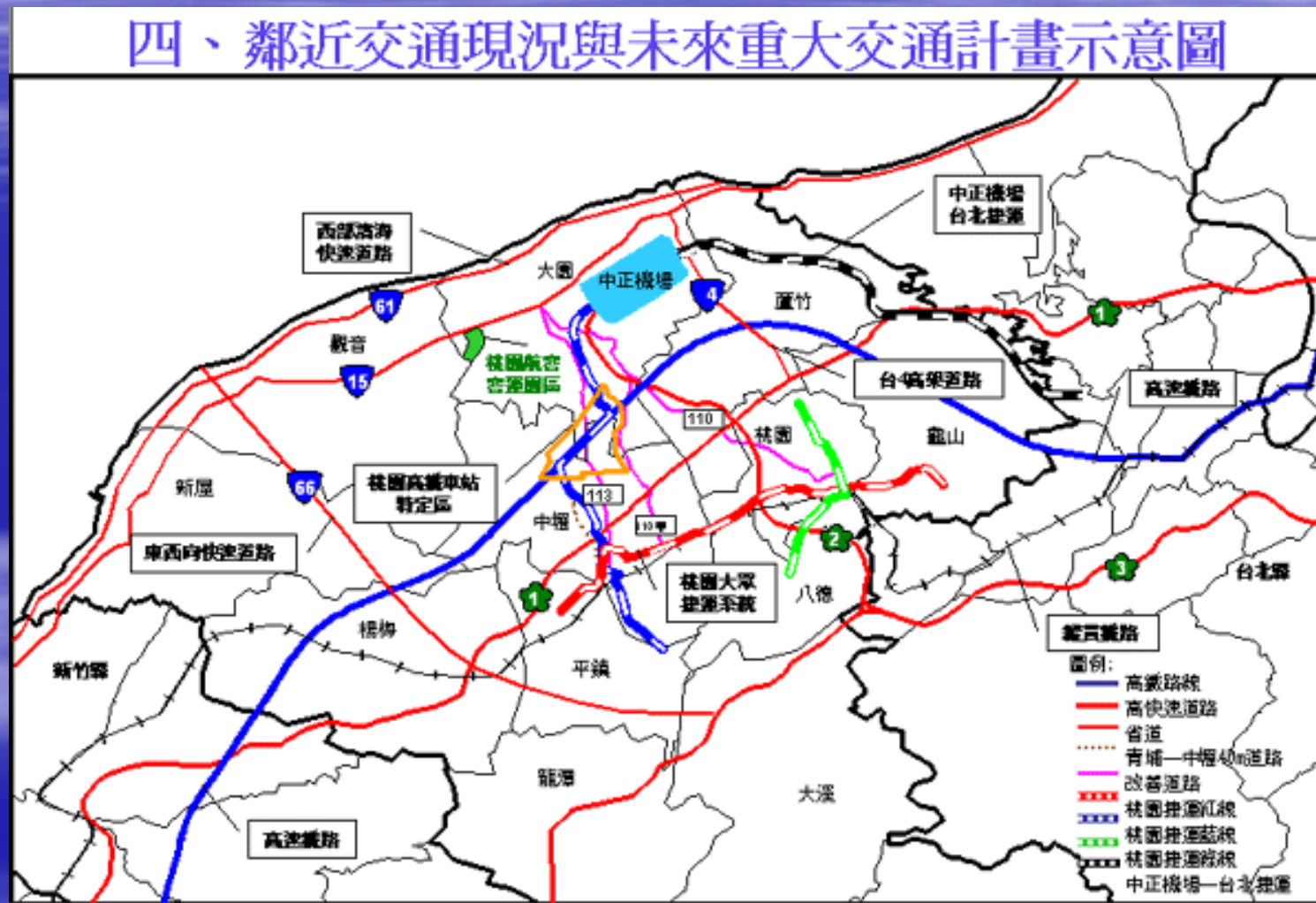
- Terminal I Opened:2/26/1979
- Terminal II Opened:7/29/2000
- Total Area:1,223 Hectares
- Elevation:33 meters above sea level
- Traffic: about 50 minutes by car or bus from downtown Taipei
- North Runway: 05/23 CAT II,3,660 m X 60 m
- South Runway: 06/24 CAT I 3,350m X 60 m
- Taxiways: 15 Paths along the north runway, 11 Paths along the south runway
- 2 interconnecting paths between north and south, total 28

# Airport Airside/Landside Data

- Aprons:
  - 1.Passenger Apron:486,236 square meters, 40 positions (including domestic)
  - 2.Cargo Aprons:361,643 square meters, 10 positions
  - 3.Remote Aprons:233,585 square meters, 15 positions
  - 4.Maintenance Aprons:315,270 square meters, 27 positions
- Boarding Gates:
  - 1.Terminal I,A Apron Boarding Gates:9
  - 2.Terminal I,B Apron Boarding Gates:9
  - 3.Terminal II,C Apron Boarding Gates:10
  - 4.Terminal II,D Apron Boarding Gates:10
  - 5.Domestic Apron:2
  - 6.Remote Apron:15



# Airport Location and Connectivity

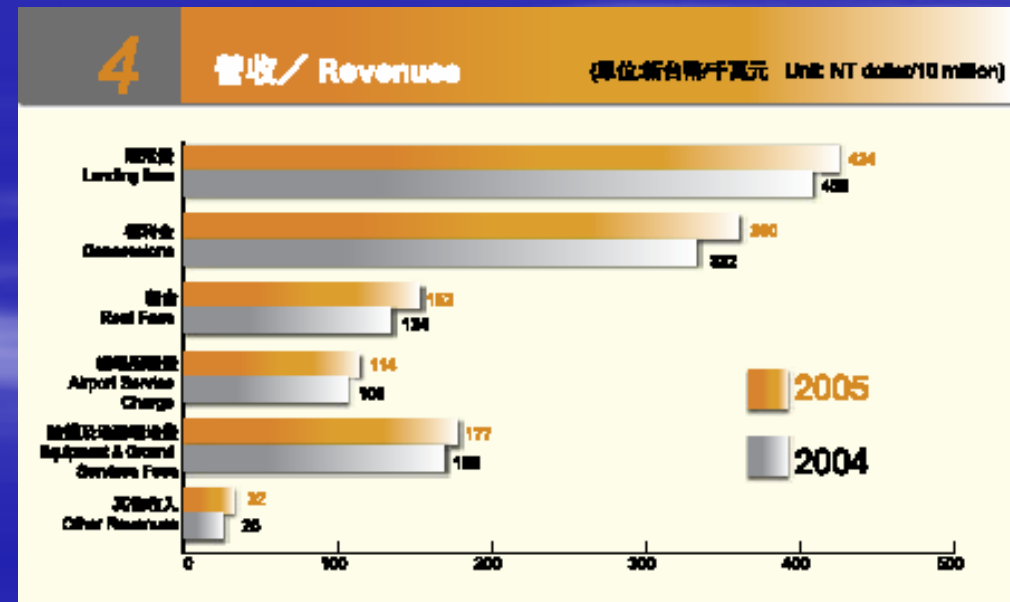




# Airport Financial Data

Revenue Analysis	2004	2005	Growth Rate
Landing fees	408	424	3.92%
Concessions	332	360	8.43%
Rent Fees	134	152	13.43%
Airport Service Charge	106	114	7.55%
Equipment & Ground Services Fees	169	177	4.73%
Other Revenues	25	32	28%
Total	1,174	1,259	7.24%

(Unit: NT dollar/10 million)



# Terminal 1 Data

Items	Design States for Terminal I
Levels	4 above ground 1 underground
Terminal Building	169,500 square meters
Height of Building (above ground)	25.7 m
Annual Passenger Flow	12,000,000 pax
Third Floor Departure Lobby	48 immigration counters 2 departure security check points (collective security check) with one in the north end and one in the south end. 18 boarding gates 1 transit waiting room 4 remote boarding gates stations

# Terminal 1 Data

First Floor Departure Lounge	10 check-in counters,240 windows 10 baggage check-in conveyers
First Floor Arrivals Lounge	1 Bureau of Tourism service counter 1 bus station 2 restaurants 1 telecom service counter
North and South Departure Concourses	21 waiting lounges 8 boarding gates
North and South Arrival Concourses	2 transit lounges
Third Floor Arrival Lounges	36 immigration counters 1 quarantine 1 immigration service counter 2 currency exchange service counters Airport Police Division 2 4 duty free shops

# Terminal 1 Data

Baggage and Customs Hall, 1st floor	6 baggage carousels 23 customs inspection stations
Fourth Floor	VIP rooms / restaurants
Basemen	Baggage handing area (including arrivals and departures conveyer facilities)
Parking Lots	Total area: 95,537 square meters Capacity: 2,310 vehicles

# Terminal 2 Data

Items	Design States for Terminal II
Levels	4 above ground 2 underground
Terminal Building	318,00 square meters
Height of Building	47.6 meters
Annual Passenger Flow	17,000,000 pax
peak Flow	About 5,000 passengers per hour
Third Floor Departures Lounge	8 check-in counters 158 windows / 8 baggage conveyers 42 lanes for immigration counters 20 waiting and boarding gates 1 remote transit room / 6 remote transit gates
Satellite Aprons (south)	7

# Terminal 2 Data

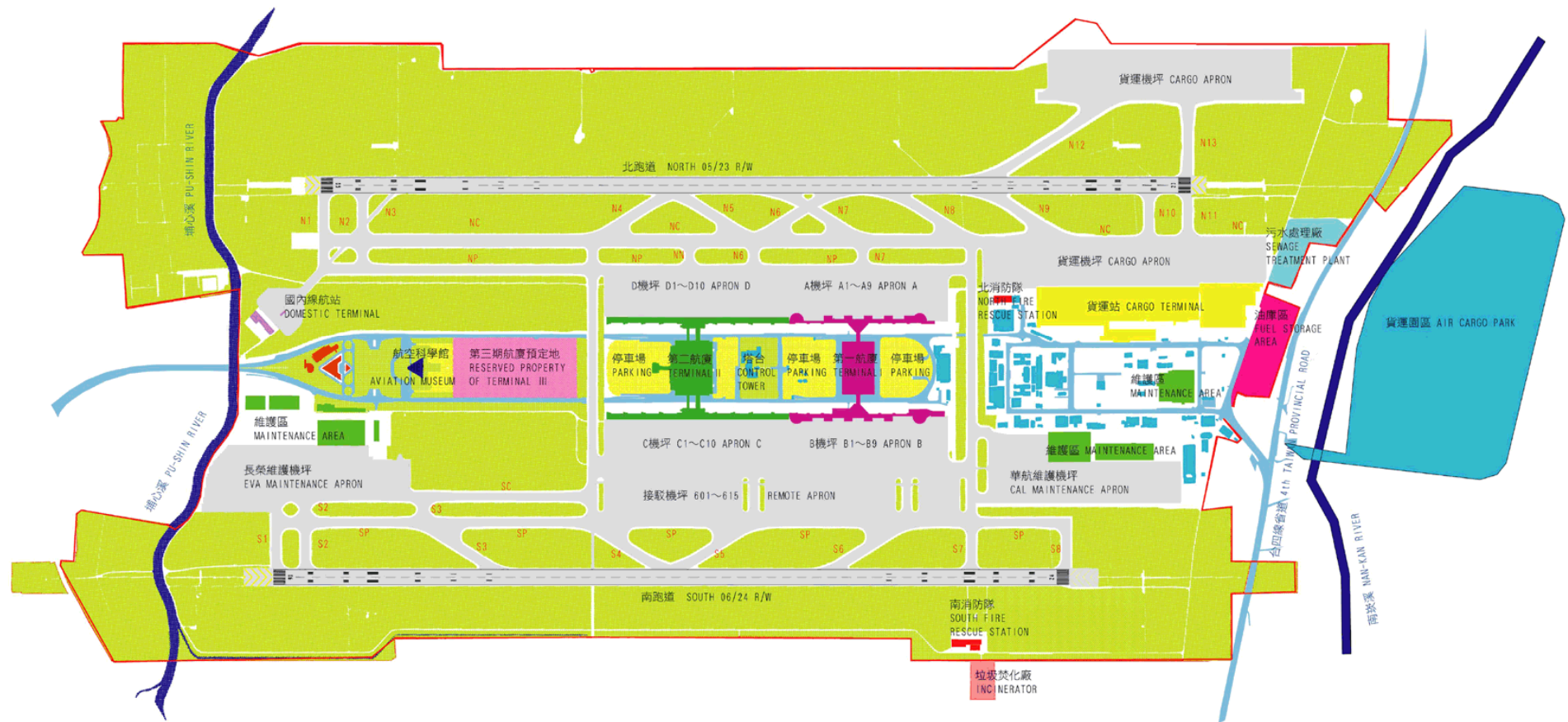
Second Floor Arrival Lounge	58 immigration counters 1 transit wait room on the north and south sides
First Floor Arrivals baggage Lounge	6 baggage conveyers (4 conveyers reserved) 34 lanes for baggage inspection counters
First Floor Arrivals Lounge	
Fourth Floor	VIP rooms / restaurants
Basemen 1	Baggage handing area (2 automated baggage inspection system)
Basemen 2	Reserved to future MRT Station



# Terminal 2 Data

Parking Lot	Total 212,916 square meters capacity for vehicles: 4,131 automobiles and 102 buses
Traffic Airport Access	To Outside the Airport: Buses, Taxi, Car Rentals. Within the Airport: PMS, under construction
MRT	To link Downtown Taipei with TTY Airport (estimated date of completion, 2006).
PMS (People Moving System)	Scheduled for completion before the end of June, 2002 in both the controlled and non-controlled areas of TI and TII.

# Airside/Landside Facilities



# Landside Layout Detail

