

# MD-900 EXPLORER UTILITY HELICOPTER (NOTAR)

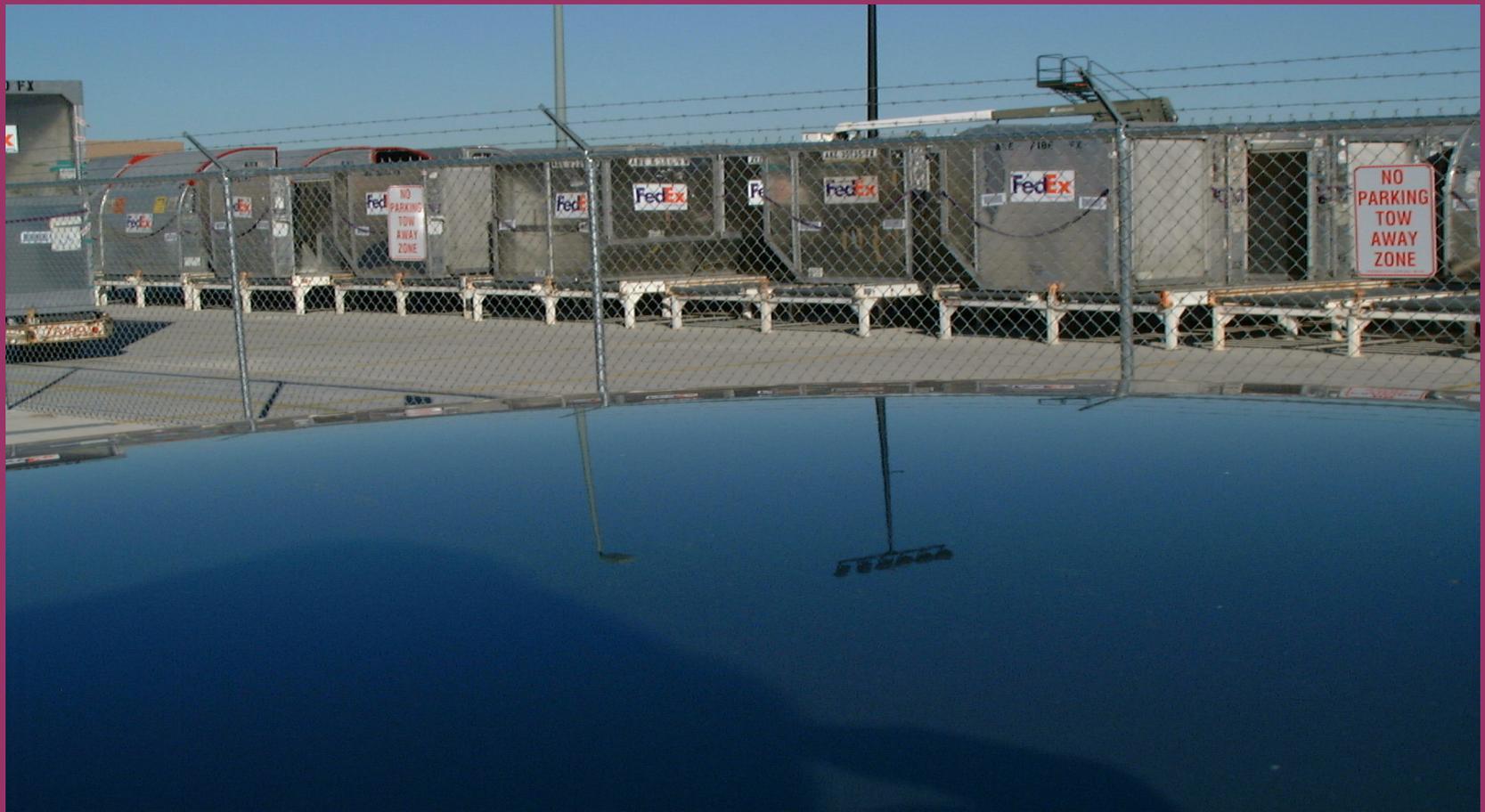
- . CARGO DELIVERY  
TO OIL RIGS, REMOTE  
DRILLING SITES
- . CORPORATE DELIVERY  
OF HIGH PRIORITY  
DATA, PACKAGES,  
PARTS
- . SMALL PACKAGE  
DELIVERY WAS A  
DESIGN CONSIDER-  
ATION



# MD-900 CARGO CAPACITY



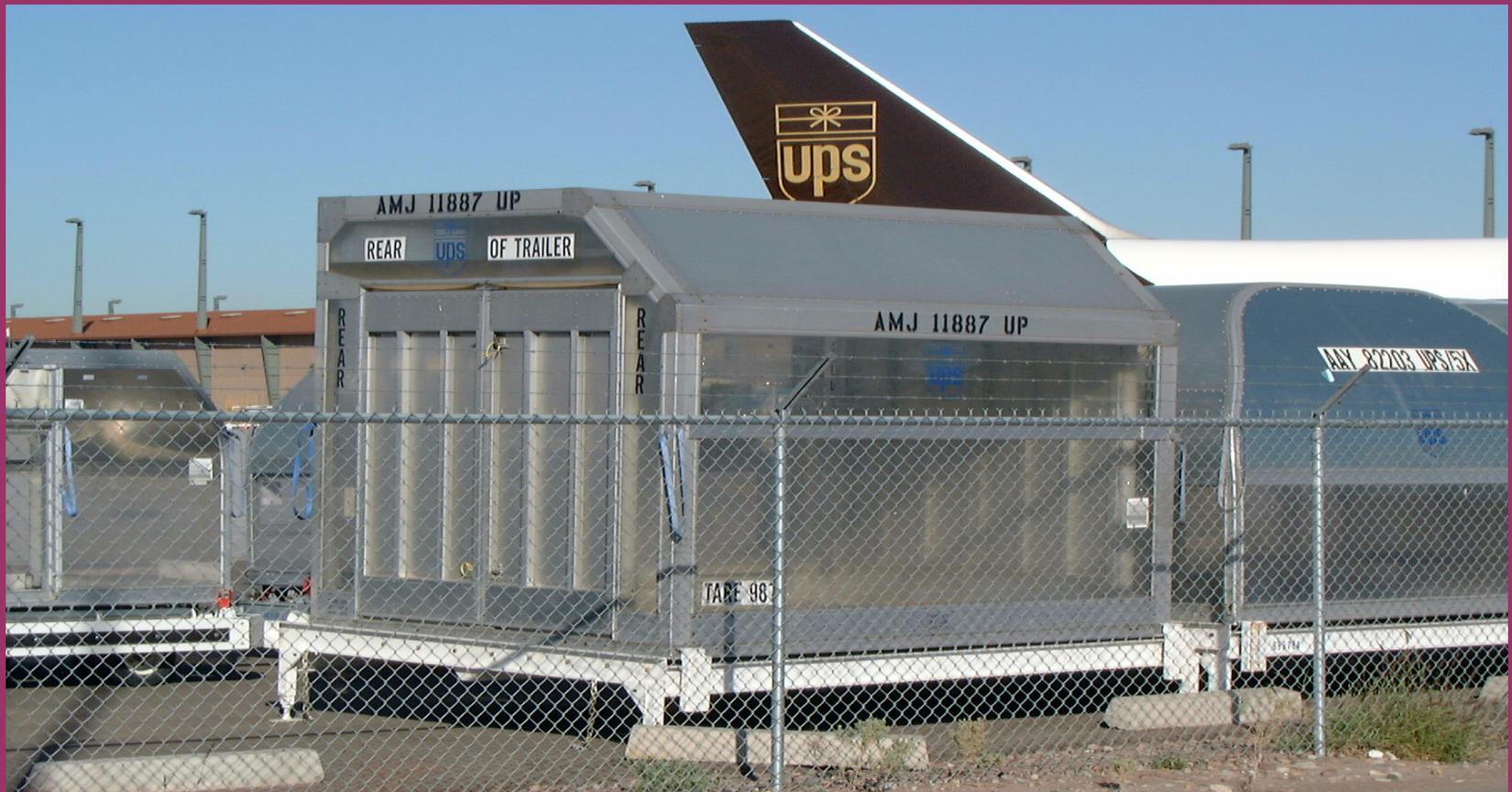
# FEDEX LD-3s AWAITING LOADING



# FEDEX PARETO ANALYSIS OF “DELIVERY FAILURES”

- PERCENT OF PACKAGES NOT BEING DELIVERED BY “10 AM NEXT DAY” WAS ANALYZED (e.g. 1 1/2% )
- EACH FACTOR ANALYZED ( WRONG ZIPCODE, ROUTING MISTAKES, LOST PACKAGES, ETC.
- A FEDEX V.P. WAS ASSIGNED TO **ELIMINATE EACH FAILURE CAUSE**
- THE “SEE THROUGH” CONTAINER WAS THE SOLUTION TO SMALL PACKAGES “LOST” IN THE BOTTOM OF CONTAINERS!!

# “SEE-THROUGH” CONTAINERS



# FEDEX “VIRTUAL INVENTORY SYSTEM”

- PIONEERED SOFTWARE TO PROVIDE “SEAMLESS” INTERFACE FROM:
  - PRODUCT DESIGN
  - ORDER PLACEMENT
  - RAW MATERIAL P/U & DELIVERY
  - FINISHED PRODUCT PICK-UP &
  - DELIVERY TO END CUSTOMER

FEDEX PROVIDES ALL PICK-UPS AND DELIVERIES WORLD-WIDE

COMPANY CAN OPERATE WITH ZERO INVENTORY!!!

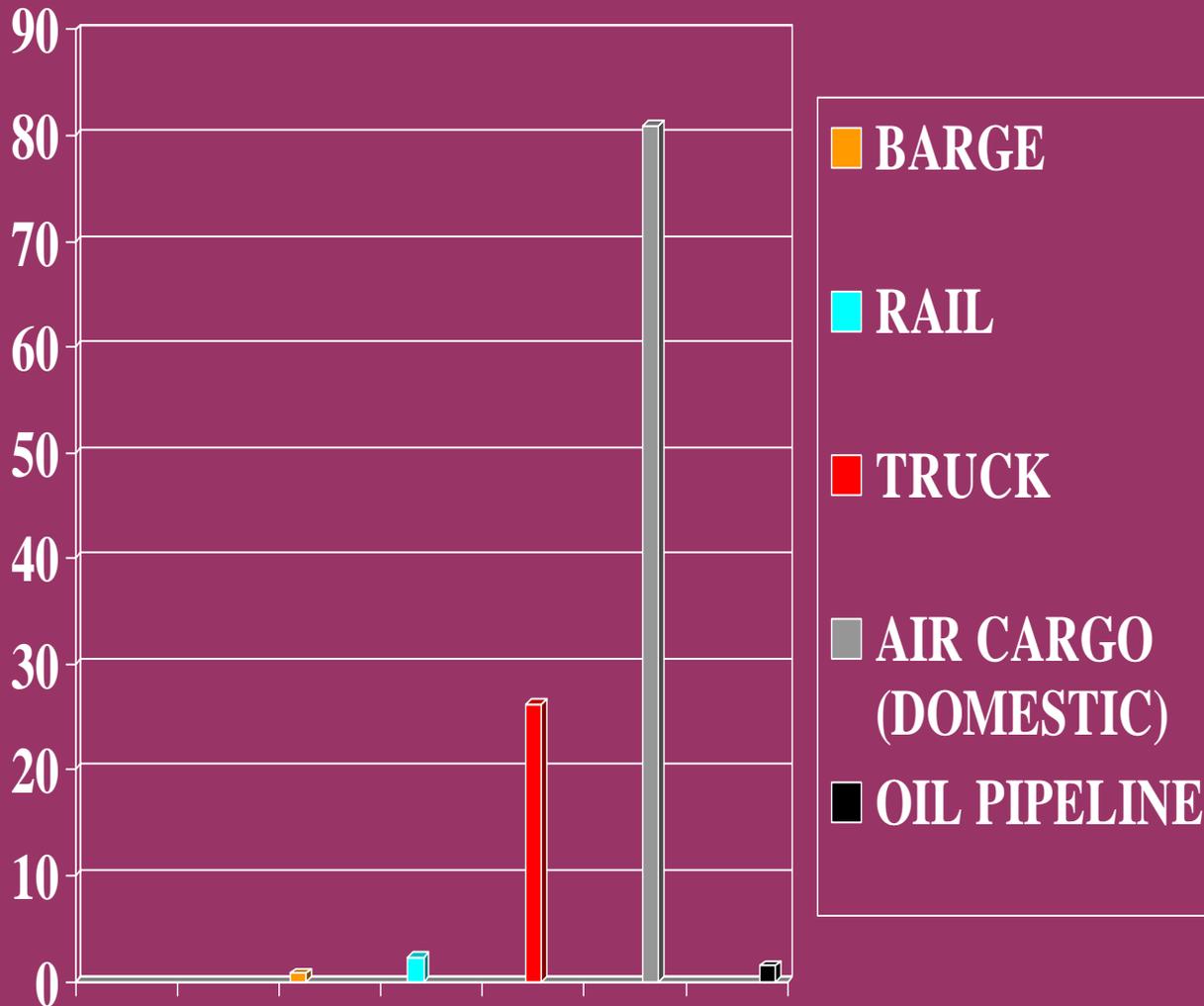
# FEDEX: SUPPLY CHAIN SOLUTIONS

- PROVIDE WAREHOUSING AT MEMPHIS FOR CUSTOMERS WANTING TO OFFER 1 or 2 DAY DELIVERY OF CRITICAL ITEMS WORLD-WIDE (CATERPILLER TRACTOR)
- OFFER CUSTOMS BROKERAGE, INTERNATIONAL OCEAN FREIGHT FORWARDING, TRADE FACILITATION

**WHERE IS THE MARKET**  
**FOR AIR CARGO**  
**EXPECTED TO GO?**

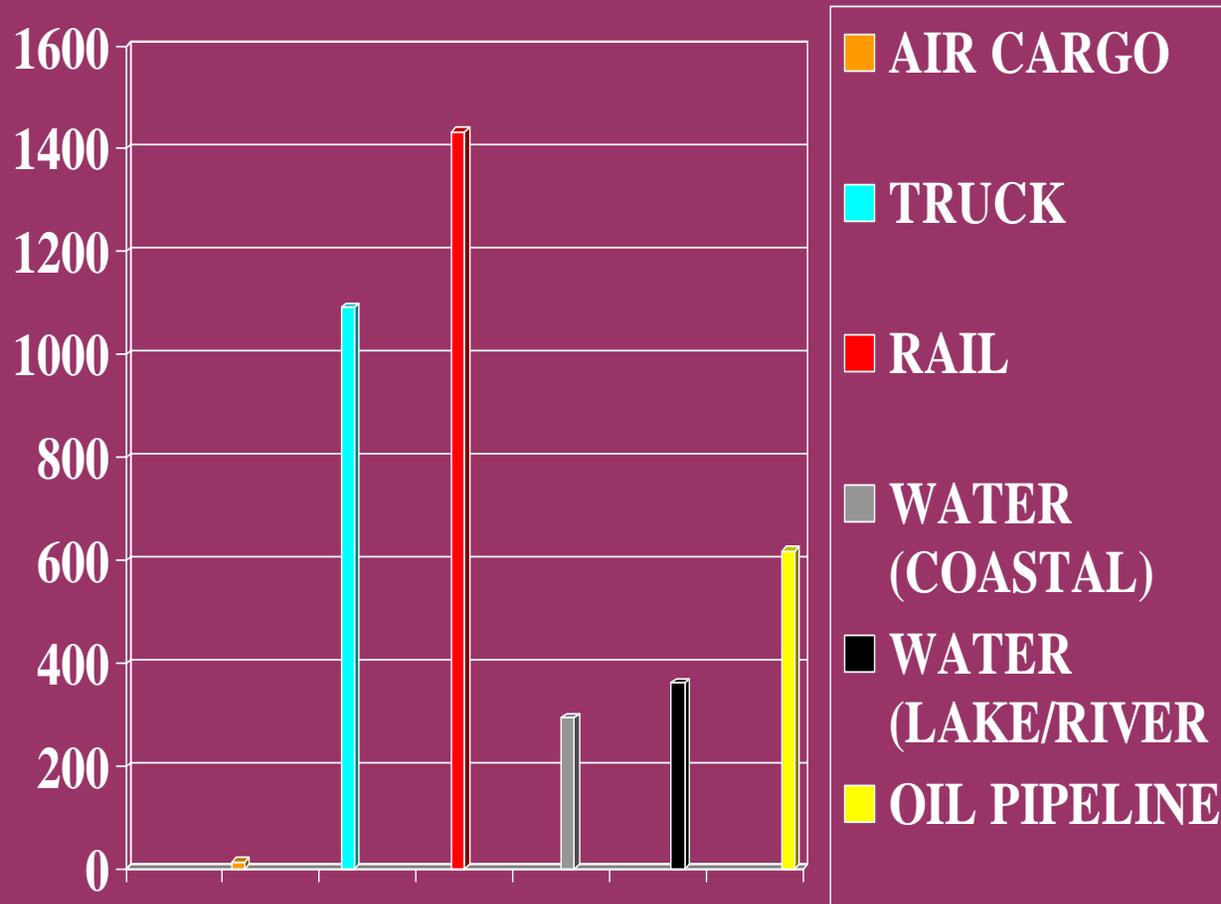
# AVERAGE FREIGHT REVENUE PER TON MILE

CENTS  
PER  
TON-MILE

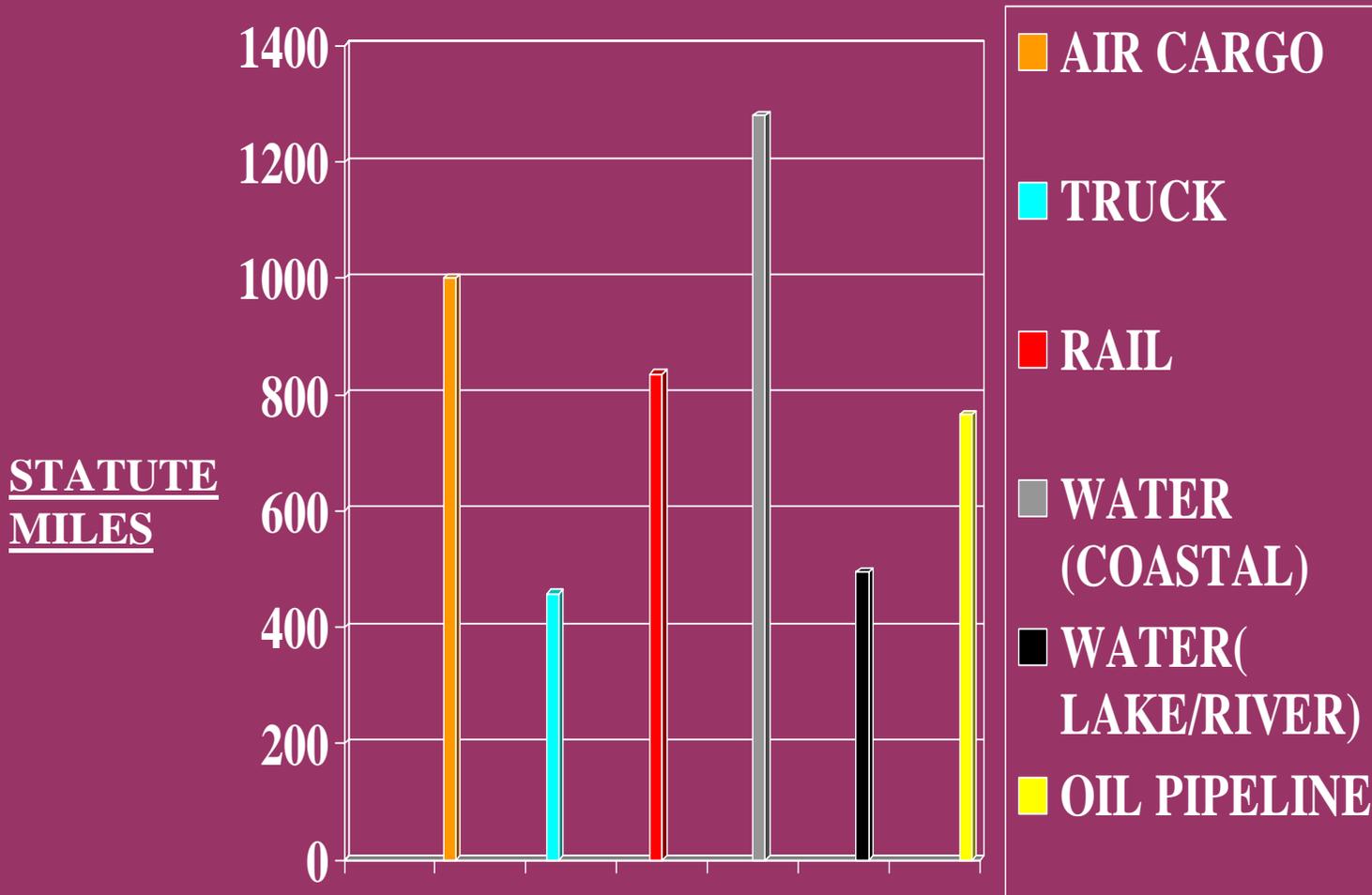


# U.S. TON-MILES OF FREIGHT

**BILLIONS  
OF  
TON-MILES**

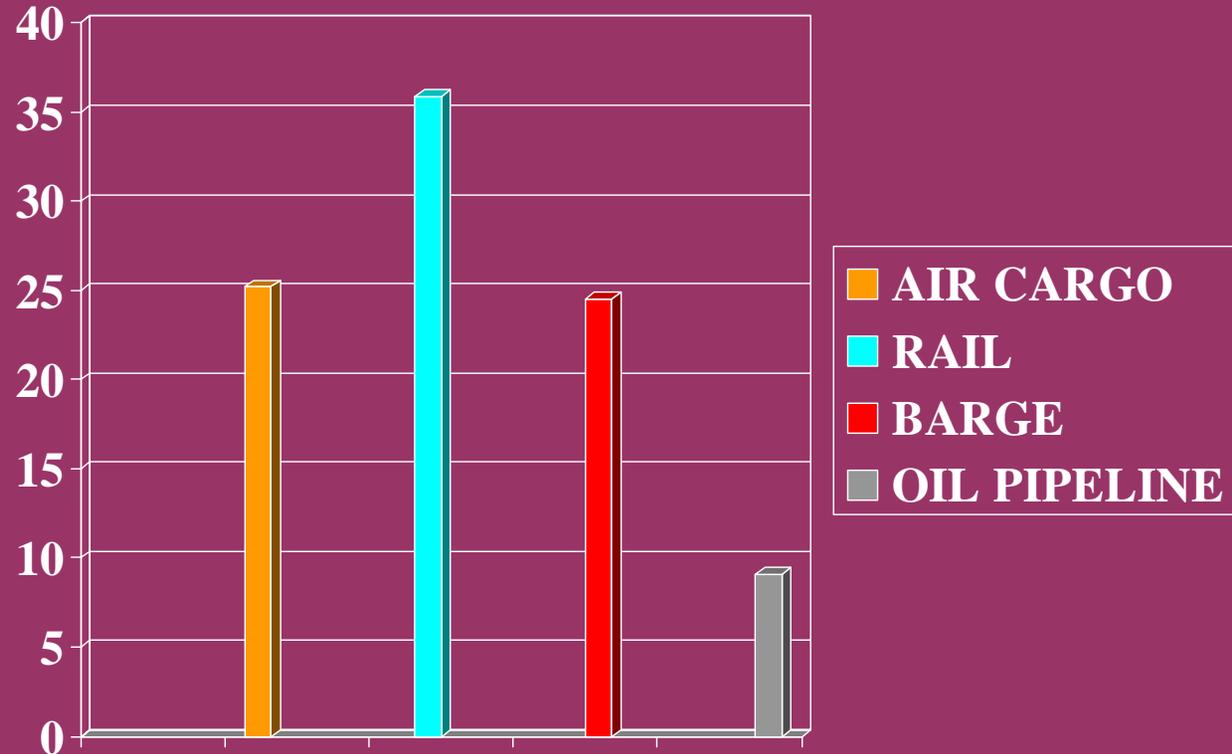


# AVERAGE LENGTH OF HAUL DOMESTIC FREIGHT



# TOTAL U.S. FREIGHT EXPENDITURES

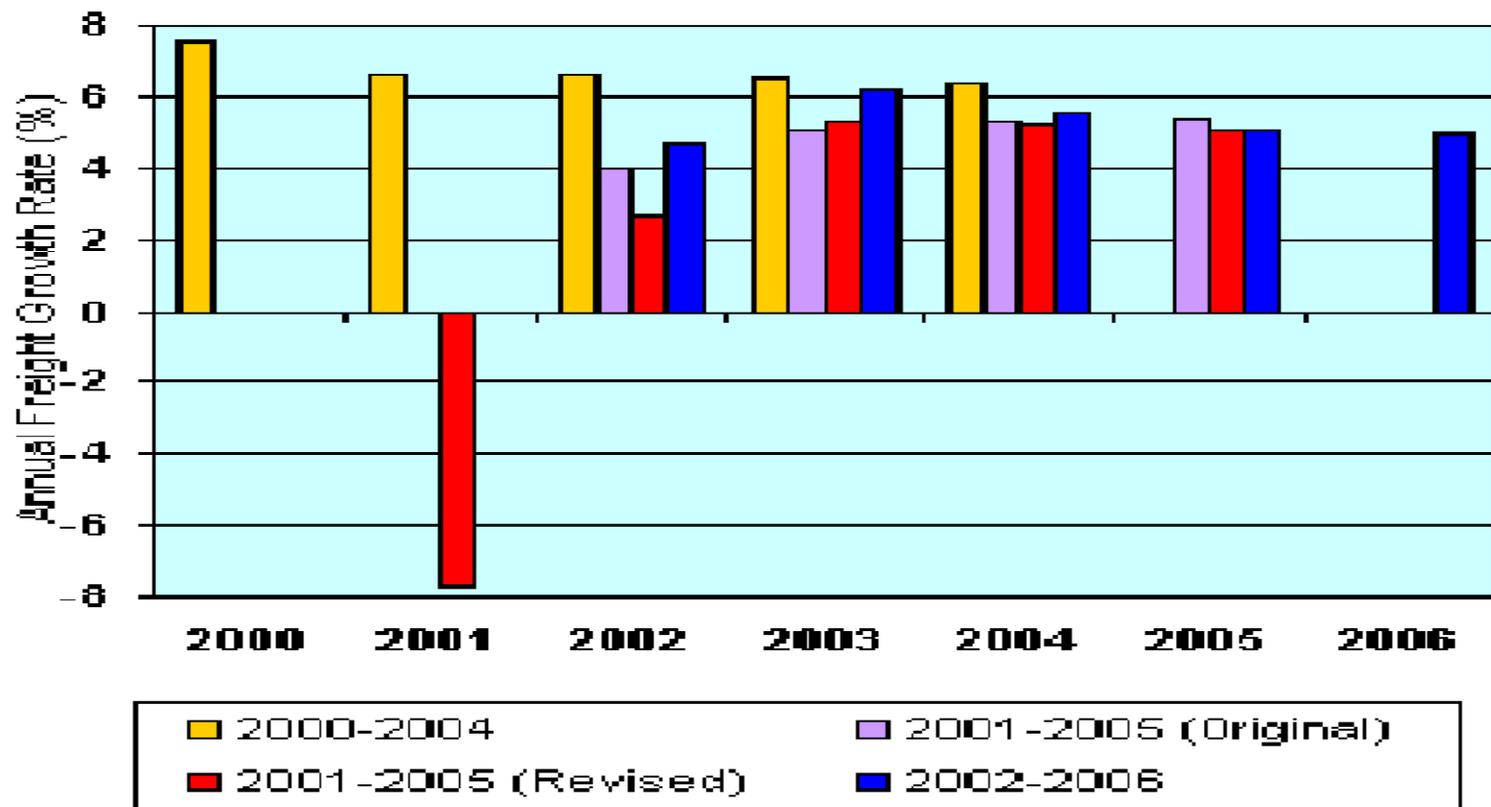
DOLLARS  
(BILLIONS)



NOTES: 1. INCLUDES INFRASTRUCTURE COSTS, TAXES, SUBSIDIES, AMTRAK  
SOURCE: "TRANSPORTATION IN AMERICA-2000", 2001

# IATA INTERNATIONAL AIR FREIGHT FORECASTS

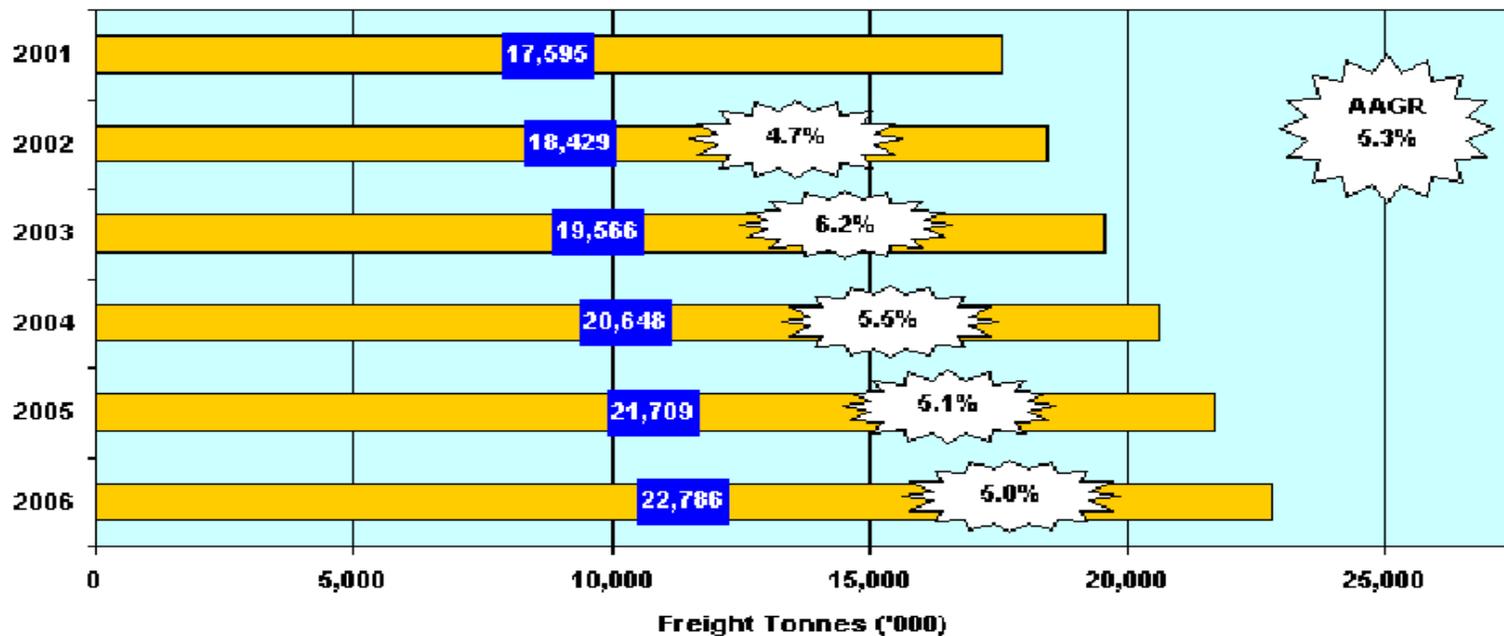
**Comparison of IATA International Air  
Freight Traffic Forecasts**



# INTERNATIONAL AIR CARGO FORECAST

## Forecast International Air Freight Traffic

Forecast Growth Rates & Freight Tonnes



# ICAO AIR CARGO FORECAST FOR THE YEAR 2010

## WORLDWIDE

	<u>ACTUAL</u>	<u>ACTUAL</u>	<u>FORECAST</u>	<u>AVERAGE</u> <u>GROWTH</u> <u>RATE</u>	
	<u>1989</u>	<u>1999</u>	<u>2010</u>	<u>1989-</u> <u>1999</u>	<u>1999-</u> <u>2010</u>
<u>FREIGHT</u> <u>TONNE -</u> <u>KM -</u> <u>MILLIONS</u>	57,215	108,043	202,650	6.6%	6.0%
NOTE: EXCLUDES CIS SOURCE: ICAO FORECAST (2002)					

# ICAO REGIONAL FORECAST OF AIR CARGO FOR 2010 (FREIGHT TONNE –KILOMETRES IN MILLIONS)

	<u>1989</u>	<u>1999</u>	<u>FORECAST</u> <u>2010</u>	<u>RATE OF</u> <u>GROWTH</u> <u>1989-1999</u>	<u>RATE OF</u> <u>GROWTH</u> <u>1999-2010</u>
AFRICA	1,176	19,693	3440	5.3%	5.0%
ASIA- PACIFIC	15,634	37,564	83,000	9.2%	7.5%
EUROPE	19,246	31,193	52,120	4.9%	4.5%
LATIN AMERICA	2626	4221	6950	4.9%	4.5%
NORTH AMERICA	15,962	29,028	51,000	6.2%	5.0%

SOURCE:  
ICAO 2010 FORECAST

# OUTLOOK FOR AIR CARGO

- WORLD AIRLINE PAX TRAFFIC FORECAST TO GROW 1999-2010 @ 4.5%
- WORLD AIR FREIGHT GROWTH 1999-2010 FORECAST @ 6.0%
- ASIA-PACIFIC REGION EXPECTED TO DOMINATE AIR FREIGHT GROWTH MARKET
- UNIT COSTS ( OPERATING COST PER AVAILABLE TONNE-KILOMETERS) (ATK) DECLINED AT AN AVERAGE ANNUAL RATE OF 3.0% FOR PERIOD 1960-1999)

LARGER, MORE EFFICIENT FREIGHTERS ARE MAKING AIR FREIGHT MORE COMPETITIVE!

# CONCLUSIONS

- AIR CARGO MARKET IS TIED TO WORLD GDP; ALMOST A LEADING ECONOMIC INDICATOR
- USED PAX AIRCRAFT CONVERTED TO FREIGHTERS ARE COST-EFFECTIVE!
- CORPORATE FOCUS ON “LEAN” HAS DRIVEN INTERNATIONAL AIR CARGO GROWTH
- **AIR CARGO** IS RAPIDLY GROWING NICHE IN TOTAL CARGO MARKET!!!