

India Infrastructure  
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Presented by:

John Tracy

[www.mohawkglobal.com](http://www.mohawkglobal.com)

Phone: (585) 426-0340

## Internal Infrastructure – Air

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- As part of the 1991 economic reforms, India opened up domestic air service to private airlines for competition with publicly owned Indian airlines which led to increased service.
- Mumbai, Delhi, Chennai and Calcutta all serviced by major international carriers.

## Internal Infrastructure - Rail

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- India has a network of railroad lines that covers the entire country. The network is the largest in Asia and one of the largest in the world.
- All railroad lines are publicly controlled.
- In 1998 the length of operated track was 62,809 km (39,028 mi).
- The system carried 3.9 billion passengers and 365 million metric tons of goods annually in the mid-1990s.

## Internal Infrastructure – Roads

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- By 1998 there were 3.3 million km (2.1 million mi) of roads in India, of which 46 percent were paved.
- National highways make up about 2 percent of the total road length and carry about 40 percent of road traffic.
- Each state operates a publicly owned bus company. India is adding 11 kms of six/eight lane highway per day.



# Mumbai



## Nhava Sheva



## Mumbai & Nhava Sheva

- **Mumbai:** Mumbai is an Island on West Coast of India below Rann of Kutch/ Gujarat. Mumbai is a Natural Harbor & hence became the Gateway Port for most of West , Central & Northern Parts of India. Being the Port city & the only major port on the west coast for several Decades, Mumbai is also the Financial Hub of the country.
- The Port complex constitutes several small berthing terminals used by passenger & cargo ships. Most of these terminals are in Southern Mumbai Area. Mumbai suffers greatly due to shallow seas, narrow pilot channels & congestion due to heavy shipping traffic.
- Most of the large vessels cannot enter the Old port of Mumbai & hence the Nhava Sheva port was developed. Now Mumbai handles Imports/Exports by direct feeders from Regional ports – Dubai, Colombo, Singapore, Port K'lang etc.
- Most of the traffic from Mumbai city is diverted to Nhava Sheva.
- The container freight stations in Old Port of Mumbai are now connected to Nhava Sheva either by Feeder vessels (Extremely expensive & Non Practical) or by surface transfers.

## Nhava Sheva

- **Nhava Sheva:** This Satellite port for Mumbai is about 100 kms away from South Mumbai District (by land)
- Nhava Sheva is a modern port with deeper draft. Several Main line vessels call only at Nhava Sheva instead of Mumbai. It is situated on the main land on North East Side of Mumbai Island. This port has several CFS in its complex & caters to approximately 50% or more of India's Total Container Traffic.
- To avail the services of Nhava Sheva, the consignee must mention Port of Loading as Nhava Sheva to the shipper in their orders. Even if the supplier has quoted FOB Mumbai, by default they will generally ship from Nhava Sheva port - but not always. It is safer that the Consignee agrees to correct INCO Terms.
- Mumbai port is very much operational but not preferred port of loading for the following reasons:
  - Mumbai is situated on an Island & the old port is a natural harbour located in heart of commercial district with congested roads, Traffic restrictions during day time for truck movements.
  - Also the city of Mumbai levies Octroi- Entry Tax on goods & hence the Exporters have to do extra paperwork to claim exemption from this tax for export cargo. In nutshell, it is difficult for factories outside the city to reach the old port of Mumbai.
  - The CFS at Nhava Sheva port complex are larger, easily accessible & offer faster transit into the port. Containers stuffed at old port may suffer delays & extra costs.
- Consignee should be aware that if any shipper does insist on using any Mumbai city CFS/Terminal due to their City location & because their terms are indeed FOB Mumbai, then they should add approx USD 350 per teu towards the transfer costs from Mumbai to Nhava Sheva.

## Other Ports in India

- **Pipavav** - West Coast of India, North of Mumbai  
Used Exclusively by Maersk & Safmarine for Shipments from North India.
- **Kandla** - West Coast of India, North of Mumbai  
Used mostly by Breakbulk ships & low value cargoes. This port has limited feeders with irregular frequency for container shipping. Was quite popular with some carriers earlier. An adjoining port- MUNDRA is stealing its sheen. Some movement of stone & guar gum to USA is still there from Kandla.
- **Haldia** - East Coast of India. South of Calcutta/Kolkatta  
Haldia is the main port for Eastern & North Eastern parts of India. Haldia is connected to Colombo, Singapore & Port Klang
- **Marmagoa** - West Coast of India. South of Mumbai/ Nhava Sheva  
This is a new & smaller port, gaining popularity. Again no Mother vessels call this port. Feeder vessels connect this port to Nhava Sheva & Colombo.
- **Mundra** - West Coast of India, North of Mumbai  
A couple of main line vessels are now regularly calling Mundra. Mundra is about 80 kms away from Kandla. Mundra is popular port for North India cargo as the train connections to Mundra are getting better from New Delhi, Ludhiana & Jaipur. Mundra is being developed as an alternate port for Nhava Sheva for all the cargoes that originate from North India.

## Other Ports in India (continued)

- **Vizag** - East Coast of India. South of Calcutta/Kolkatta; North of Chennai- This port is developing fast on the East Coast as an alternate Container handling terminal. A couple of feeders connect it to Singapore, Port K'lang & Colombo.
- **Paradip** - East Coast of India. South of Calcutta/Kolkatta; North of Chennai- This port is developing fast on the East Coast as an alternate Bulk handling terminal. A couple of feeders connect it to Singapore, Port K'lang & Colombo.
- **Tuticorin** - South India Tip.  
This is another port that is developing as a popular port for Mother Vessels. This is in North of India & Indamex vessels call direct to USA from Tuticorin.
- **Cochin** - South India Tip. This is another Major Port in South India & handles Feeders to Singapore, Port K'lang & Colombo.
- **Chennai** - East Coast South India. This another Major Port in South India & handles Feeders to Singapore, Port Klang & Colombo.

# 2004-2005 Data for India Ports



| Terminal  | Terminal/ Port Name                          | Operator / Owners                             | Port      | State       | Traffic<br>(Teus)                              | %<br>Share  |
|-----------|--|---|-----------|-------------|--|-------------|
| NSICT     | Nhava Sheva International Container Terminal | P&O Group, Australia                          | JNPT      | Maharashtra | 1,232,470                                      | 28.3        |
| NSPT      | Jawaharlal Nehru Port Container Terminal     | Government of India                           | JNPT      | Maharashtra | 1,138,868                                      | 26.2        |
|           | Third Container Terminal                     | Maersk & Concor                               | JNPT      | Maharashtra | 1.3 m teu-Under Construction                   |             |
|           | Forth Container Terminal                     | Government of India                           | JNPT      | Maharashtra | Feasibility Study Stage for 3.0 m teu terminal |             |
| Kandla    | Kandla Port                                  | Government of India                           | Kandla    | Gujarat     | Mostly Breakbulk                               |             |
| CT2       | Kandla Container Terminal                    | ABG Shipyards & Voltri Terminals              | Kandla    | Gujarat     | 4,00,00 teu- Under Construction                |             |
| New CT    | Hazira                                       | Royal Dutch & Shell                           | Hazira    | Gujarat     | Planning Stage                                 |             |
| Pipavav   | Gujarat Pipavav Port                         | APM Terminals, Maersk, Financial Institutions | Pipavav   | Gujarat     | <b>688,885</b>                                 | <b>15.8</b> |
| NB2       | Pipavav                                      | Pipavav port Co                               | Pipavav   | Gujarat     | Proposal Stage                                 |             |
| Chennai   | Chennai Container Terminal                   | P&O Group & Chettinad Group                   | Chennai   | Tamil Nadu  | <b>616,530</b>                                 | <b>14.2</b> |
| CT2       | Chennai                                      | Chennai Port Trust                            | Chennai   | Tamil Nadu  | Global Bidding Stage                           |             |
| Tuticorin | Tuticorin Container Terminal                 | Port Singapore Authority & Indian Companies   | Tuticorin | Tamil Nadu  | <b>307,000</b>                                 | <b>7.1</b>  |
| CT2       | Tuticorin Container Terminal                 | Tuticorin Port Trust                          | Tuticorin | Tamil Nadu  | 5,00,000 teu terminal approved                 |             |
| Ennore    | Ennore Port                                  | Ennore Port Co                                | Ennore    | Tamil Nadu  | Proposal Stage                                 |             |
| MPT       | Mumbai Port Trust                            | Government of India                           | Mumbai    | Maharashtra | <b>219,000</b>                                 | <b>5.0</b>  |