

Integrating Public Transport for the Next Generation

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Essa Abdul Rahman Al Dossari,
Roads & Transport Authority, Dubai UAE
CEO



Content:

COUREUR:

- **Background about Dubai**
- **Initiatives**
- **Key Performance Indicators**



Background and about Dubai

- The **second** largest emirate out of seven emirates in area in the United Arab Emirates.
- Dubai is **one** of the fastest growing cities in the region.
- Dubai Emirate has a population of **2** million, and a total area of **4114** sq. Km, with **3.4%** GDP Growth



Background and about Dubai

- The quality of roads in UAE is ranked **2nd** from the cities around the world and **8th** in quality of overall infrastructure (World Economic Forum report, 2012).
- The Government of Dubai has invested more than AED **75** billion in transport infrastructure to become a role model for the MENA region (since 2006 through RTA).
- City Mayors International has awarded Dubai the **35th** rank worldwide considering the quality and integrity of its infrastructure.



Roads & Transport Authority, Dubai UAE

The Roads & Transport Authority was established in November 2005 by the Government of Dubai.

RTA's Vision

“Safe and smooth transport for all”

RTA's Mission

“To prepare legislation and develop integrated solutions of road systems and land/marine transportation networks that are safe and in line with Dubai's economic development plans and the highest international standards”.



RTA Strategic Plan 2015

Dubai Strategic Plan 2015

RTA Corporate Plan

Roads and Transport Strategic Plan



RTA Strategic goals

1 Integrated Dubai

- Integrate transport planning with economic and urban planning
- Improve coordination with strategic partners
- Improve legal framework for roads and public transport sector

2

Dubai for People

- Make roads and public transport more people-friendly
- Preserve Dubai heritage

3

Customer First

- Improve customer service and interface
- Listen to customers

4 From Cars to Public Transport

- Shift demand to public transport
- Provide effective and convenient road access to all Dubai
- Manage congestion
- Increase Bus/Metro Ridership

5 Safety and Environmental Sustainability

- Reduce number of accidents and fatalities
- Minimize adverse environmental impact of public and private transport
- Effective measures for employee health & safety sustainability

6 Financial Sustainability

- Increase revenues
- Increase private sector participation
- Efficiently deploy financial resources
- Reduce operating costs

7 Advance RTA

- Develop human resources
- Improve organizational efficiency
- Improve processes and systems

8 Asset Sustainability

- Effective & Efficient AM Operations
- High Performing Assets
- Optimal Asset Value

Car Culture



- Dubai is predominantly a “car city” with deep rooted car culture.
- Nationals prefer personal automobiles as a symbol of possession.
- Women prefer cars and taxis for reasons of privacy.
- Affluent expatriates view car as a symbol of status.
- Cars are preferred to bus transport because of hot weather conditions most of the year.



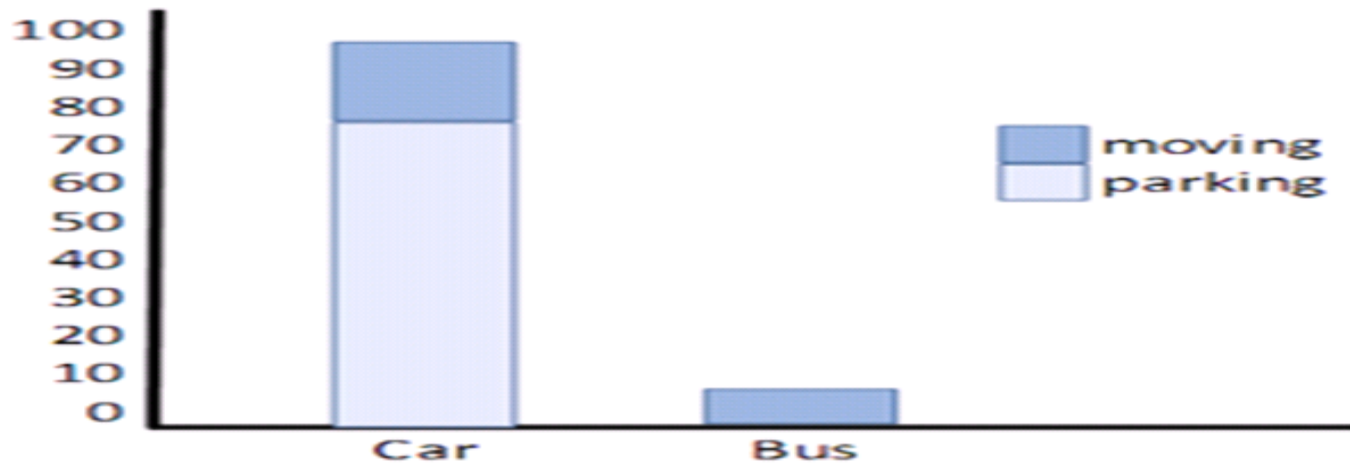
Current Situation & Challenges

- High car ownership rate – **541** cars/1000 population. More than a million registered cars.
- Buying car is easy and Fuel is cheap.
- Transport policies are ‘soft’.
- Heavy traffic congestion on CBD and other major roads.
- Congestion cost estimated at AED **4.6** billions per year.
- Road accidents and fatality rates on a high level **200** accidents & **12** deaths every month.

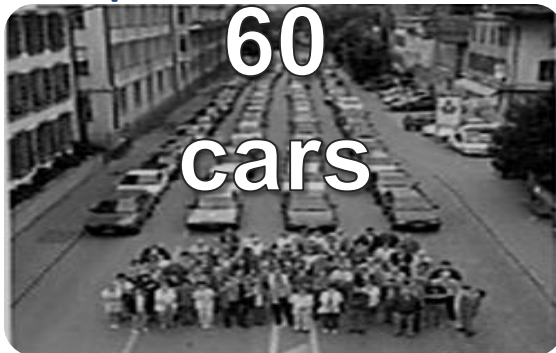


Current Situation & Challenges

Space consumption expressed in m² X hours (10 Km return home-work journey)



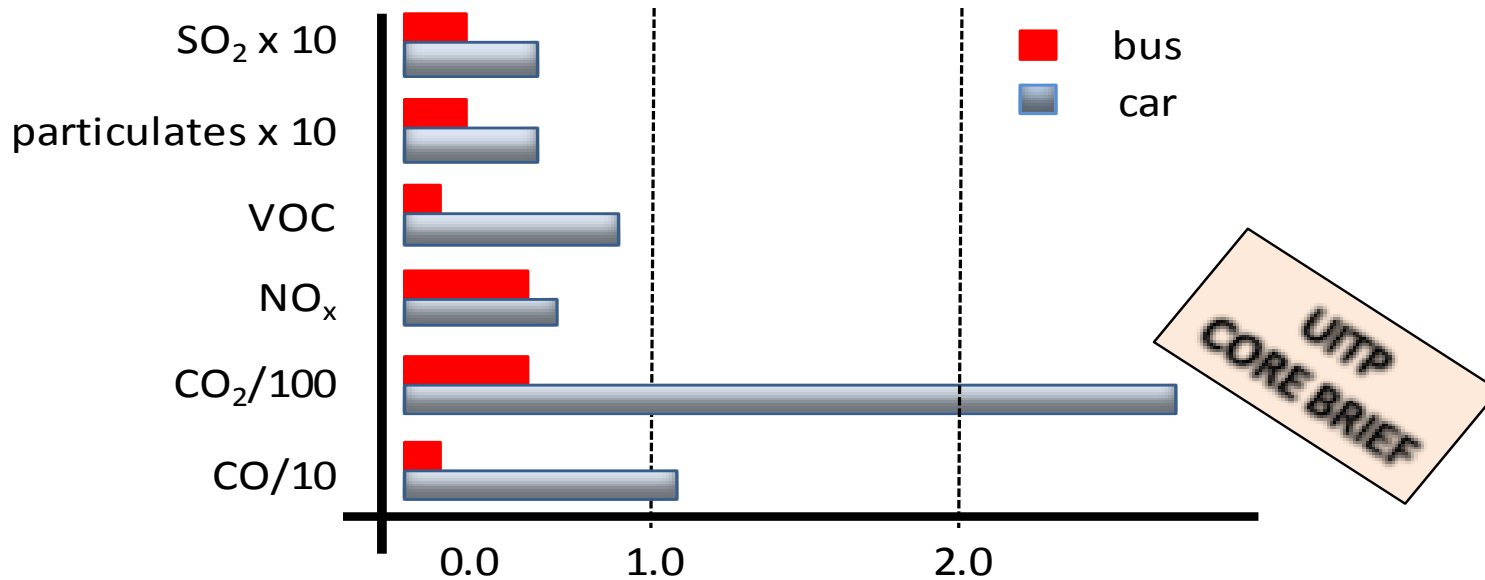
- Cars take up too much of valuable urban space.





Current Situation & Challenges

Comparison of specific average emissions
(grams/passenger km)



- Cars emit high level of hazardous pollutants.

Integrating Public Transport for the Next Generation

Initiatives



PT enhancement

- RTA targeting to alleviate the PT share from **11 %** in 2011 to **20%** by 2020, by investing **47 AED billion**.

Metro Network
(320 km)
(34 AED Billion)



Tram Network
(270 km)
(9 AED Billion)



Bus Network
(2500 Km)
(2.5 AED Billion)



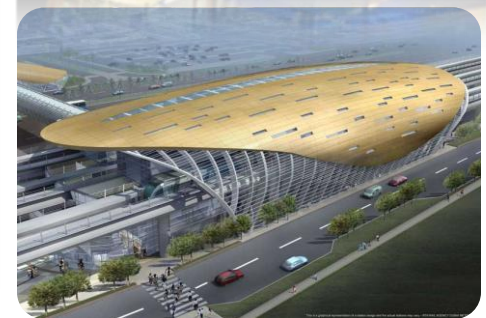
Marine Transport Network
(450 Km)
(1.5 AED Billion)





Transit Systems Metro

- 2 lines.
- 74.6 km.
- 13 km underground.
- 47 stations.
- Fully automated.





Transit Systems Buses

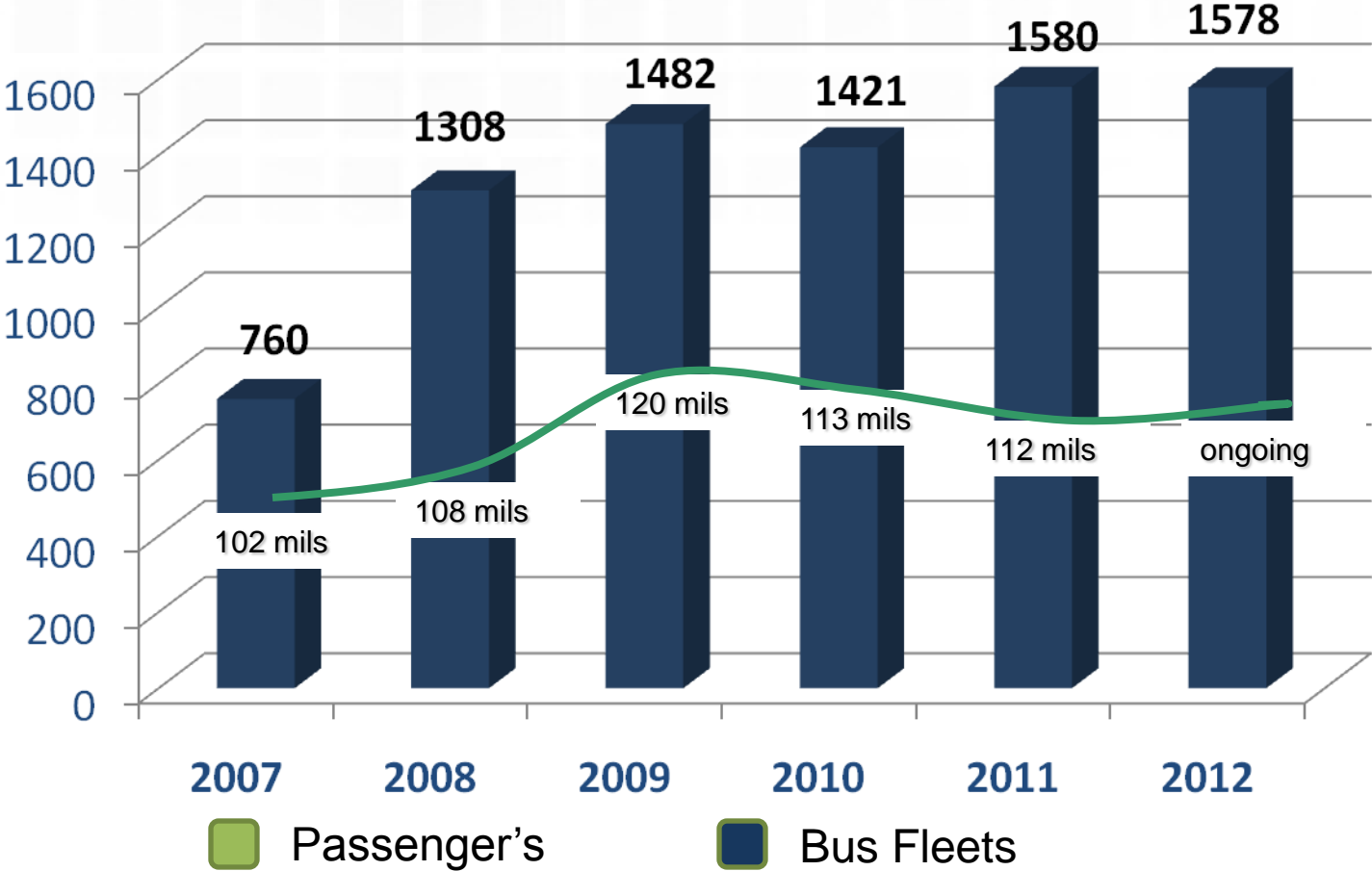
- Low floor.
- Automatic Multiple doors.
- Fully Air-conditioned.
- Euro **4/5** engines.
- Eco-friendly Fuel.



Transit Systems Buses



Bus Fleet





Transit Systems Water Transport

- **10** Water taxi / **25** stations.
- **149** Abras / **7** stations.
- **9** Water Bus / **8** stations.
- **10** Ferry / **2** stations.



TOD Strategies

- TOD concept is adopted in “Dubai 2020 Urban Development Plan” as one of the fundamental bases for future urban development in Dubai.



Key

- Red Line
- Green Line - Under Construction
- Metro Station - Opened
- Metro Station - Unopened
- Proposed Transit Oriented Development



TOD Strategies

■ Case Study: Union Square Station

The project includes developing a vacant plot next Union station as mix used development to generate increase ridership.



Project Design Masses



Environmental Canopy

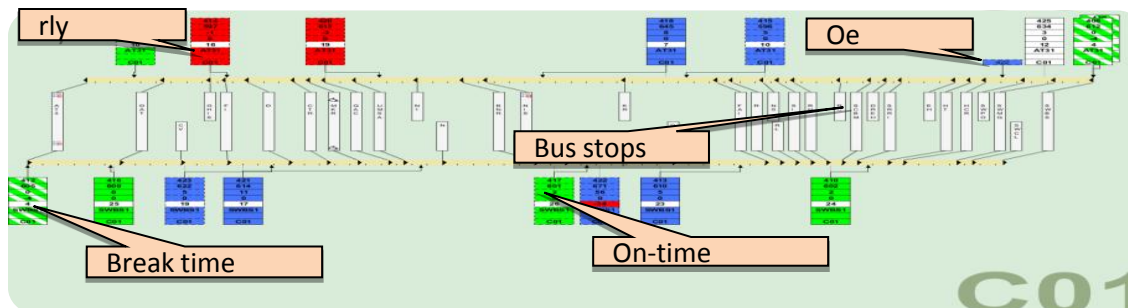
Transit Initiatives Automated Fare Collection (AFC)

- Electronic fare collection system based on Check-In-Check-Out (CICO).
- Reduced dwell time
- Reduced the burden on drivers and increase productivity.
- **Nol** fare card is applicable for all PT, car parking and Taxi fare (ongoing).



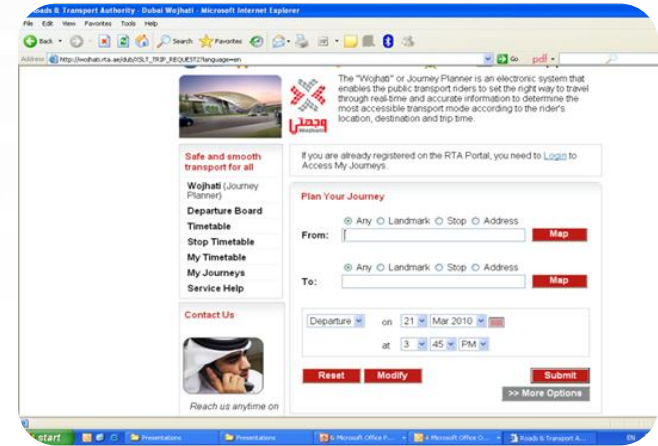
Transit Initiatives OCC, AVM

- Control & Monitor the schedule adherence (Route and Time) of buses through satellite tracking.
- Facilitate Real Time passenger information .
- Guide the drivers in case of road blocks and accidents.
- Produce Management report.
- Since system commissioned, the On-Time-Performance of buses has improved from **17.2%** to **76.4%** adherence.



Passenger Amenities

- Journey Planner (Wojhati).
- **348,000** visitors Annually.



- **636** wayside air-conditioned passenger shelters; more under evaluation.



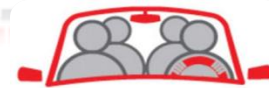
Bus Priority

- First Phase (5 km)
 - Al Khaleej Road.
 - Al Ghubaiba Road.
 - Khaled bin Walled Road.
 - Al Mina Road.
- Second Phase (3.2 km)
 - Al Ittihad Road.
 - Al Mussala Road.



Mobility Management

- Encourage shared trips to increase vehicle utilization
- Public Transport Journey planner
- Regularize the School Transport service to reduce accidents and sustain the service
- Encouraging Private and Public Sector staff to use staff and public transport modes



شاركني
Sharekni





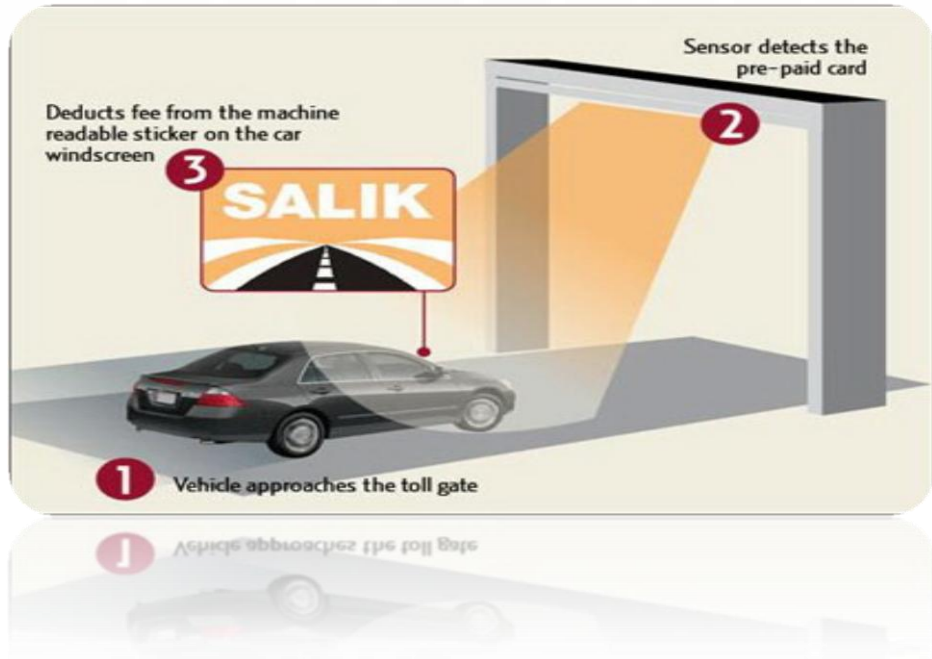
Pedestrian & Cycling Network

- Comprehensive Bicycle Network Master Plan of more than **580** km.
- Plans for climate controlled pedestrian connections to facilities near the metro stations.
- Implementation of the plan has started in phases.
- By the end of 2012, **88** km of tracks completed, **400** racks installed.



Road pricing (Salik)

- 4 toll gates located on major roads.



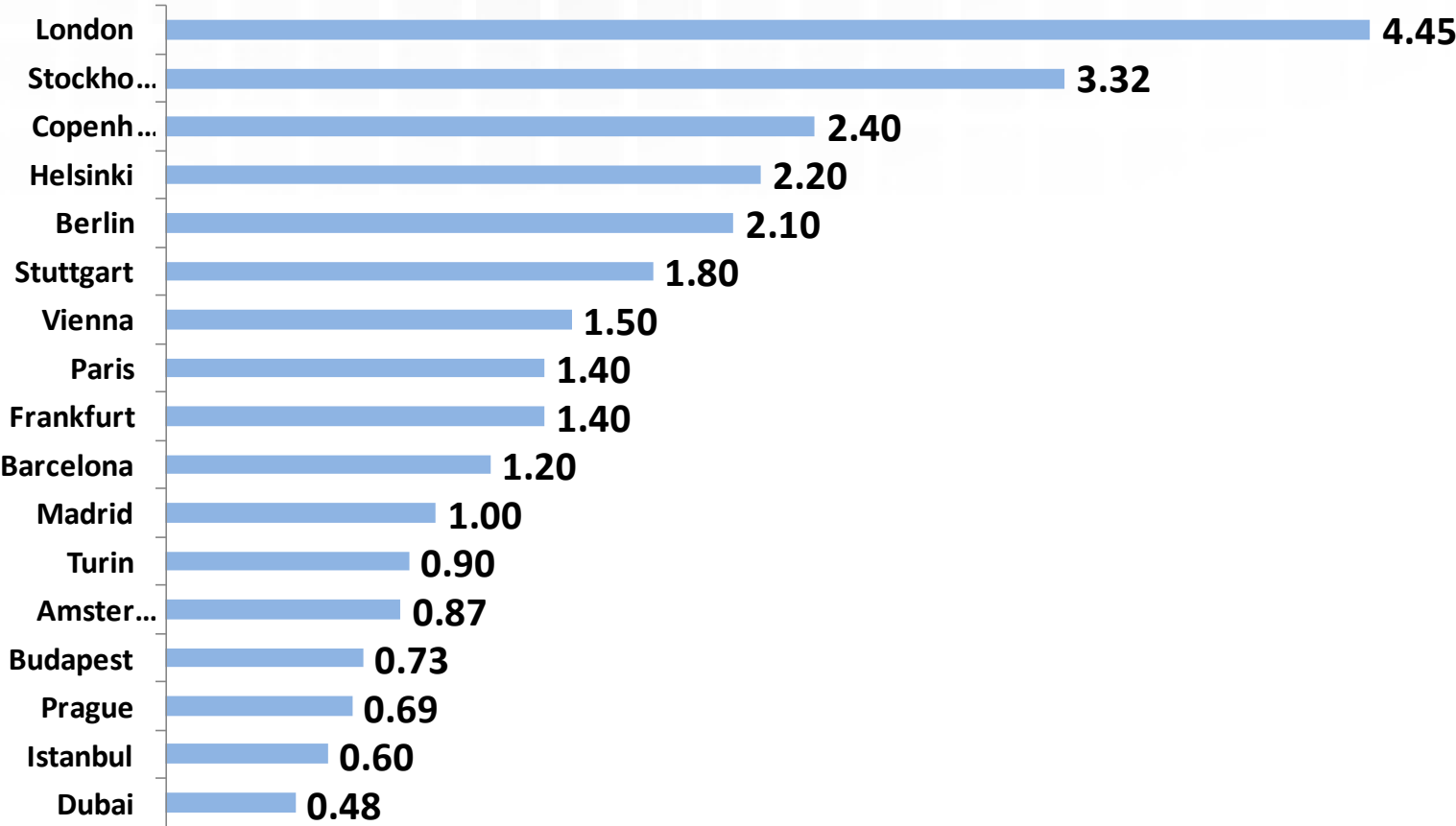
Car Parking

- Park and Ride are provided at metro stations.
- **3** mega car park buildings with **2700** to **3000** parking space in each building are built next to the stations.



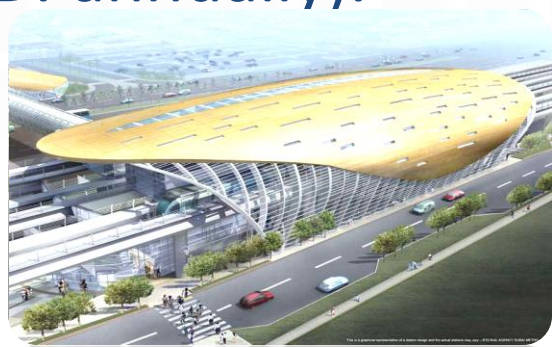
Comparison of fare

Comparison of single ticket price €



Sustainability

- Naming right to metro stations eg. Burj Khalif Station, (82 million AED. annually).



- Advertisement on AC bus shelter.

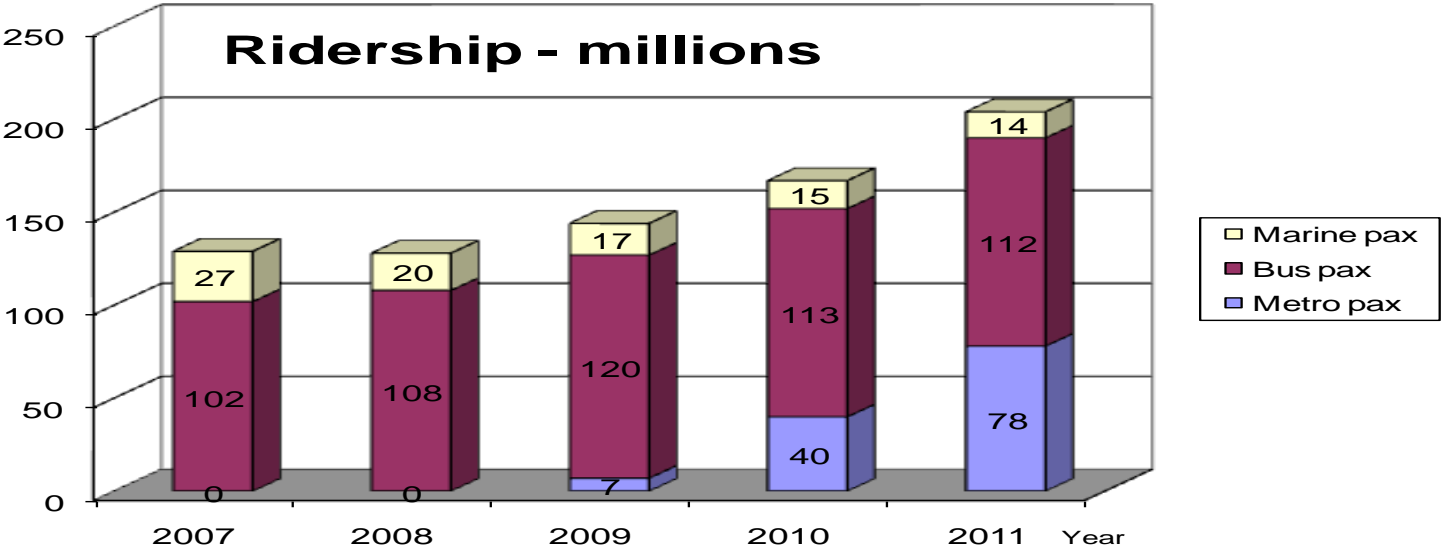
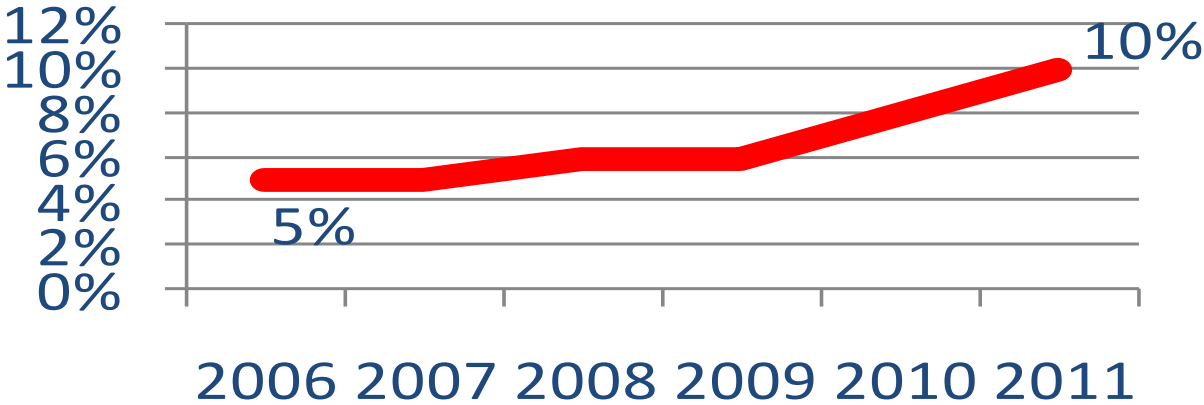


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Key Performance Indicators

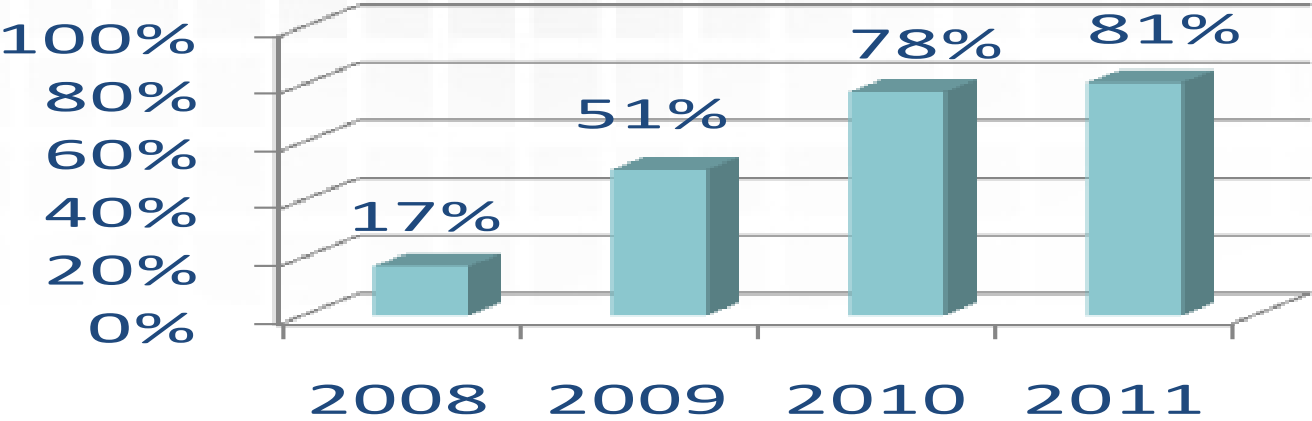


Key Performance Indicators



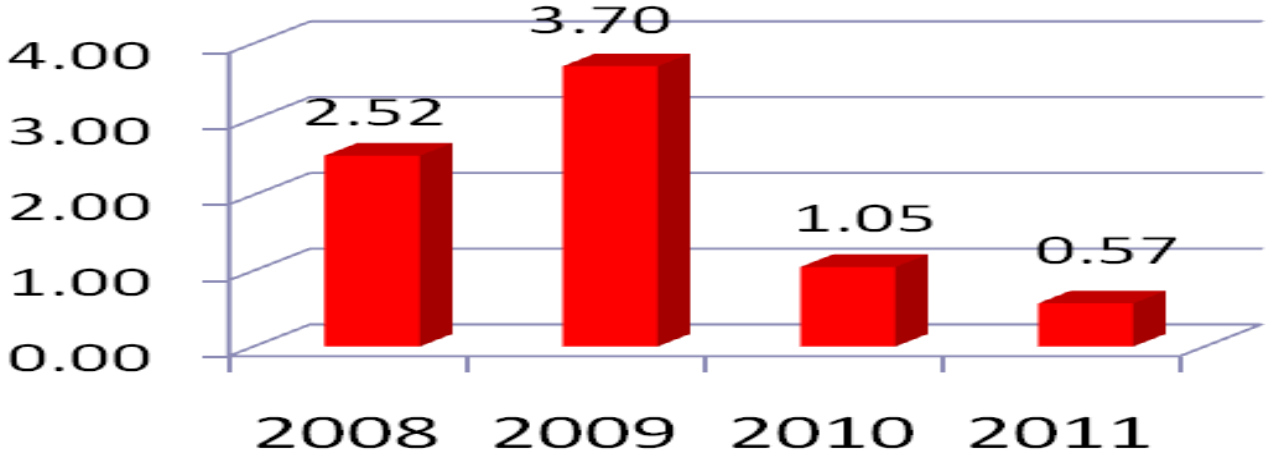


Key Performance Indicators



OTP

Accidents/100,000 kms





Mobility Management

- Decrease in passenger smuggling from **16764** in 2007 to **2536** in 2011.
- Increase public transport modal share to **10%**.
- Decrease in school transport accident rate by **63%** .
- Reduction of more than **21** million car trips after implementing Awselni & Sharekni in RTA & among Strategic Partners .



Thank you

www.rta.ae

Essa.AIDossari@rta.ae