



# Public Transport in Dubai

## Innovation and Integration

International Trade Fair for Transport Technology  
Innovative Components · Vehicles · Systems  
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# Introduction to public transport in Dubai

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# Background Information 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.

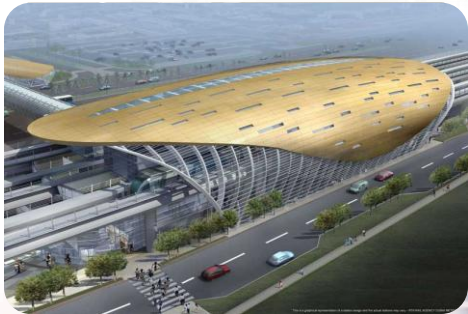




# Transit Systems Metro



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





## Transit Systems Buses

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

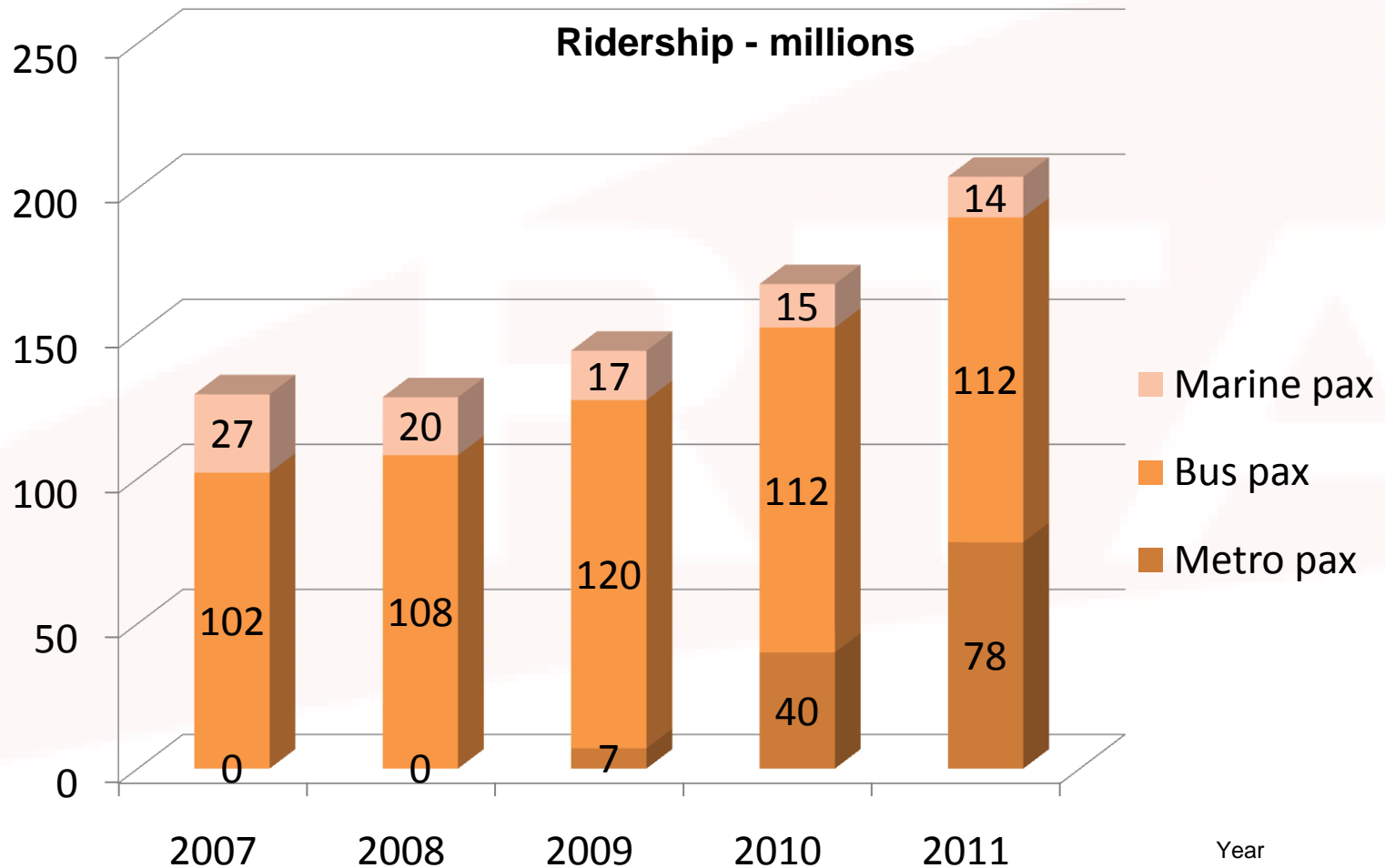


# Transit Systems Water Transport

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



# PT ridership in Dubai (metro, bus, & marine):

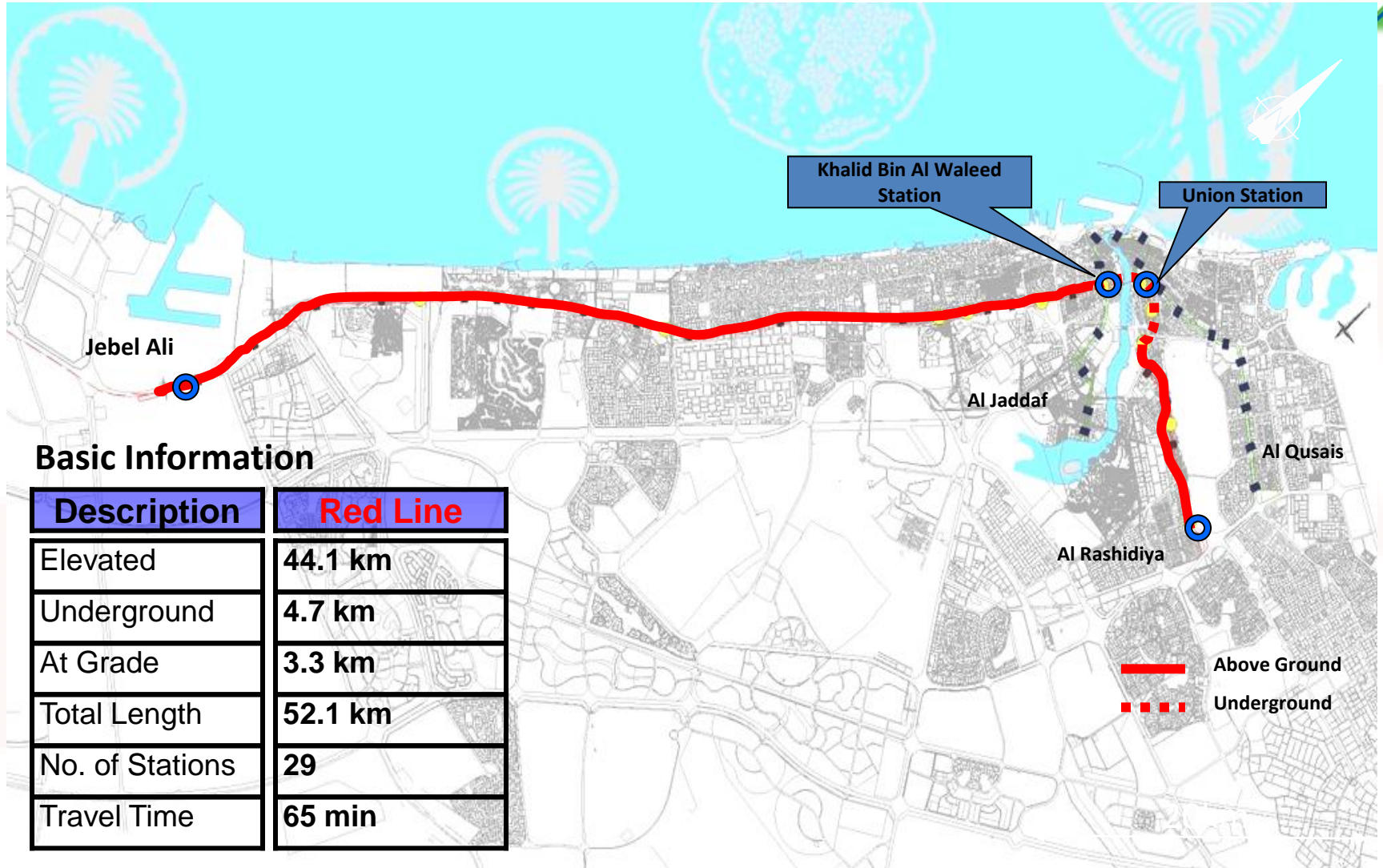


# Dubai metro systems and operation





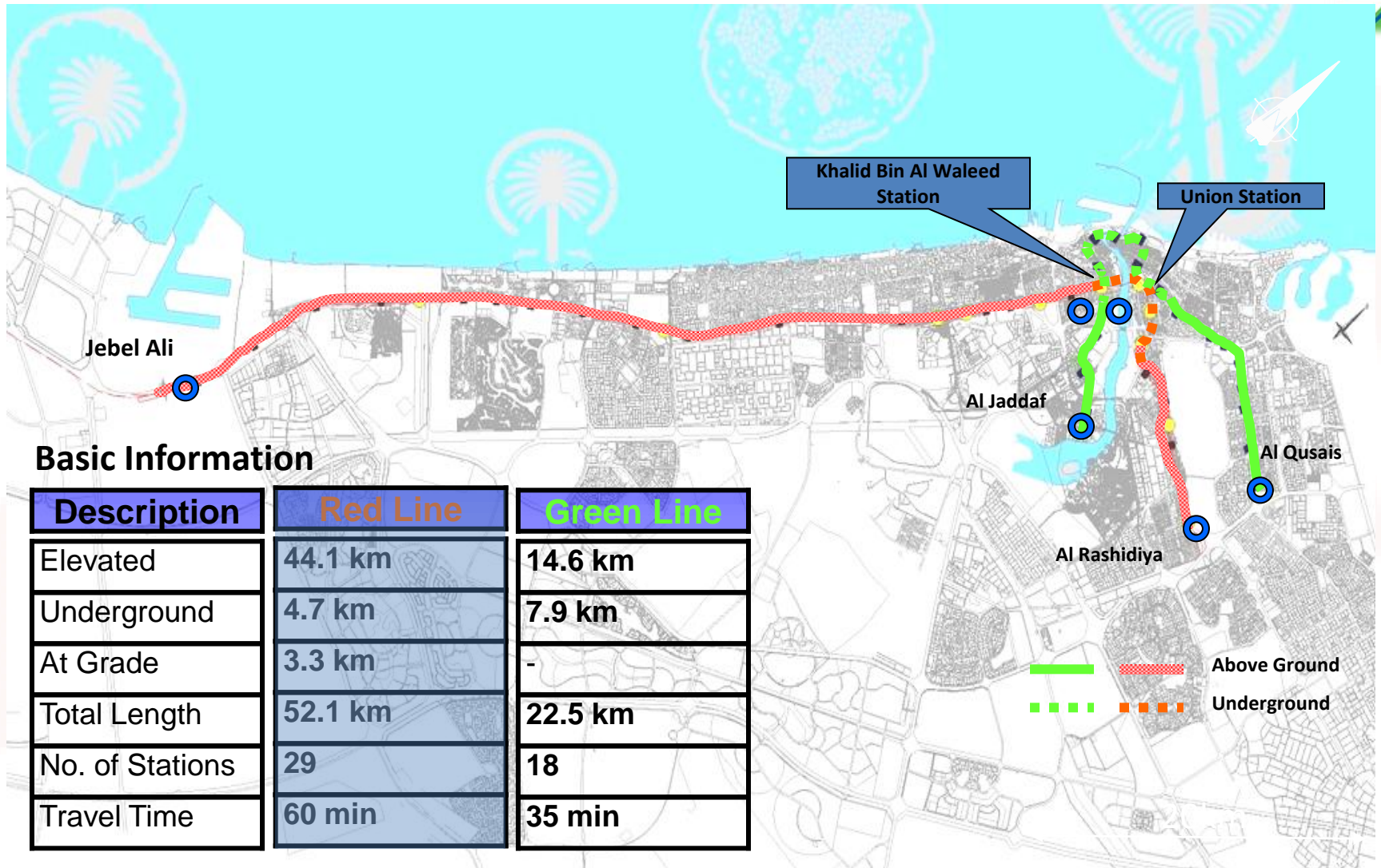
# Dubai Metro Red & Green Lines Alignment:



## Basic Information

Description	Red Line
Elevated	44.1 km
Underground	4.7 km
At Grade	3.3 km
Total Length	52.1 km
No. of Stations	29
Travel Time	65 min

# Dubai Metro Red & Green Lines Alignment :

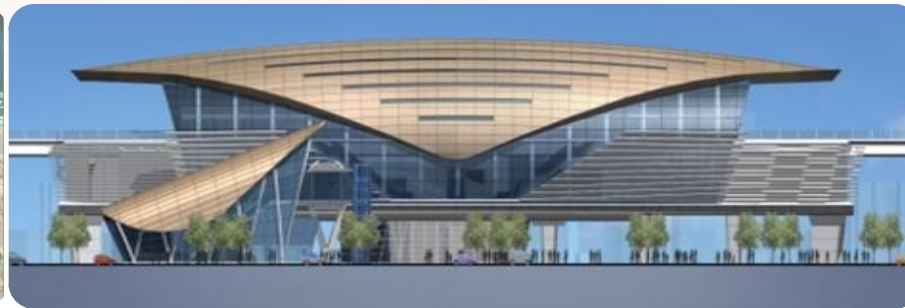


## Basic Information

Description	Red Line	Green Line
Elevated	44.1 km	14.6 km
Underground	4.7 km	7.9 km
At Grade	3.3 km	-
Total Length	52.1 km	22.5 km
No. of Stations	29	18
Travel Time	60 min	35 min

# Main Features of Dubai Metro:

- Driverless System.
- Train capacity is about 643 passengers.
- Train seating includes 3 classes (Gold, Silver and Women and Children dedicated class).
- Fully A/C stations and footbridges.
- 4 different themes for stations interior design.
- Platform screen doors.



# Dubai Metro Stations Interior Design Themes:

Water Scheme



Earth Scheme



Air Scheme



Fire Scheme

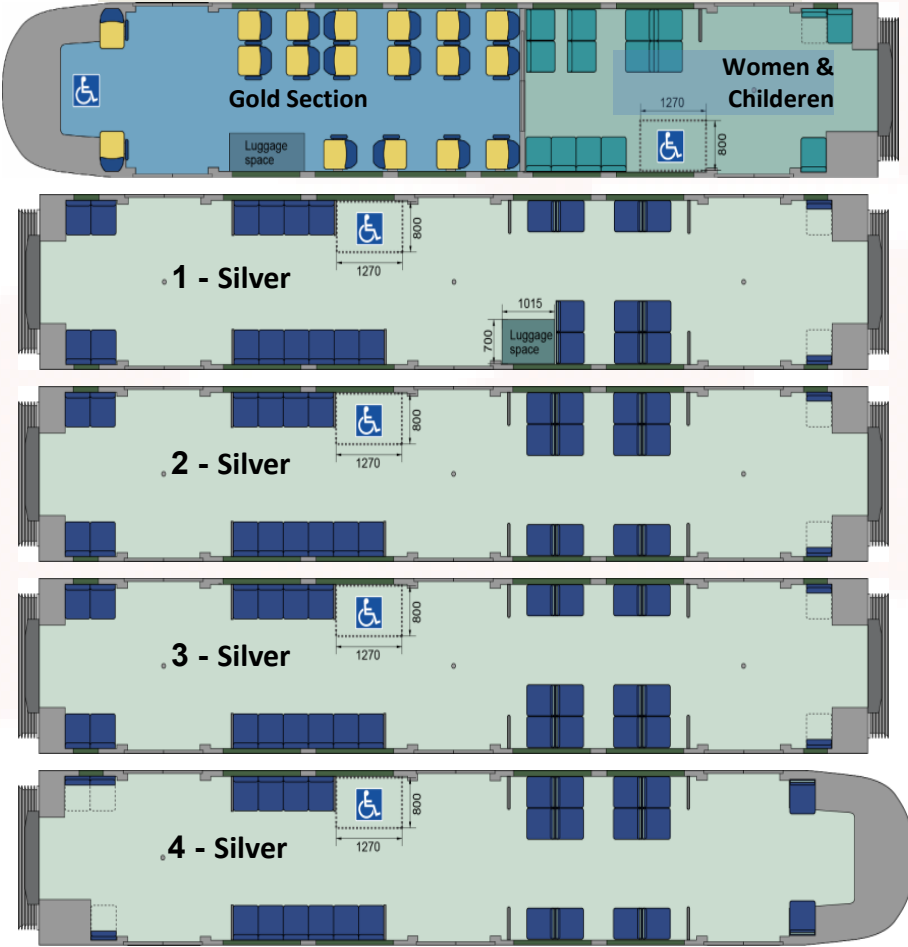


# Dubai Metro Train Layout and Design Themes:

## Interior



## Seating Arrangement



## Exterior



# Dubai Metro System includes Park-and-Ride facilities :

- **Rashidiya Park-and-Ride (2700 cars)**
  - Serves mainly the traffic coming from Emirates Road and the Eastern areas of Dubai.
- **Nakheel Harbor & Towers Park-and-Ride (3000 cars)**
  - Serves mainly the traffic coming from Abu Dhabi and the Southern areas.
- **Al Qusais Depot (2400 cars)**
  - Serves mainly the traffic coming from Sharjah and the Northern Emirates.





# Dubai Metro Operation Control Centers (OCC):

- System includes 2 OCC facilities:
  - Main OCC located within Rashidiya Depot
  - Back-up (BOCC) located within Jebel Ali Depot.
- The OCC controls/monitors the operation of trains, as well as stations, tracks and tunnels.
- The OCC monitors all secondary systems:
  - (Tunnel ventilation, fire alarm, communication, lighting, air conditioning, environmental control and public address systems).



## Dubai Metro Maintenance Depots:

- Main duty of depots is to provide storage and maintenance services (Light and Heavy) for trains.
- Dubai Metro has 3 depots.
- Rashidiya Depot – Red Line Main Depot.
- Jebel Ali Depot – Red Line Auxiliary Depot.
- Al Qusais Depot – Green Line Main Depot.





## Dubai Metro Current Operation Status:

- Currently, 50 trains are used for daily commuting services.
- Current service frequency is about 4-6 min. during peak hours, and 6-8 min. during off-peak hours.
- Design capacity of Dubai Metro is 26000 pphpd, with a frequency of 90 seconds.
- Current service capacity is about 9645 pphpd (around 37% of design capacity).



# Other operational innovations



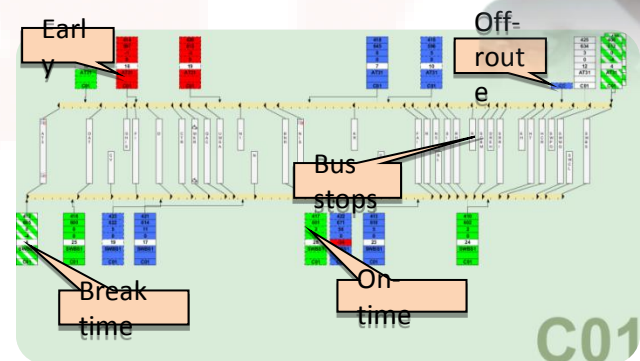
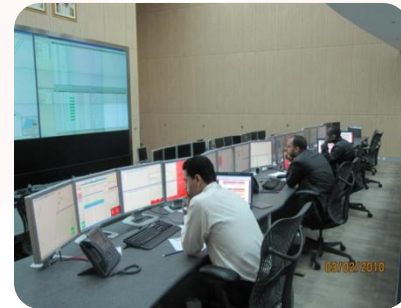
## Unified integration fare system :

- **Nol** can be used for traveling in Metro, Buses, water transport, and parking and Taxi fare (ongoing) Payments.
- If the transfer time between modes is 30 mins or less then it is considered as 1 trip only.
- **Nol** card has a fare cap of AED 14 only for unlimited use in a day.
- Discounted fares for students, seniors and people with special needs.



## Bus 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.



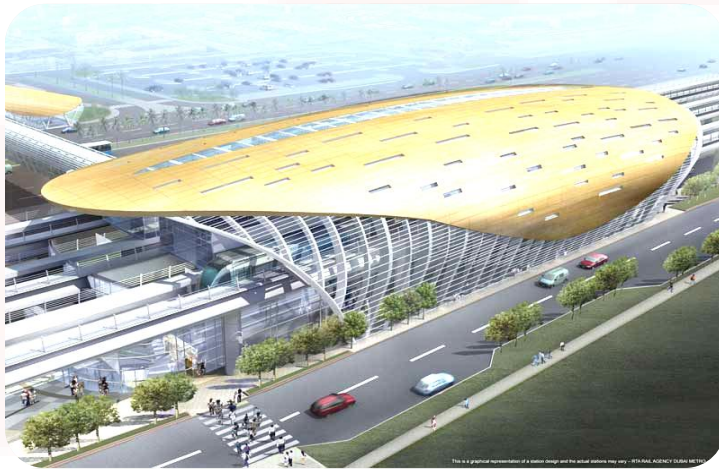
## Other operation innovations:

- Providing AC bus shelter .
- Comfortable environment to passenger.
- Create higher bus ridership .
- 636 AC bus shelter among Dubai.

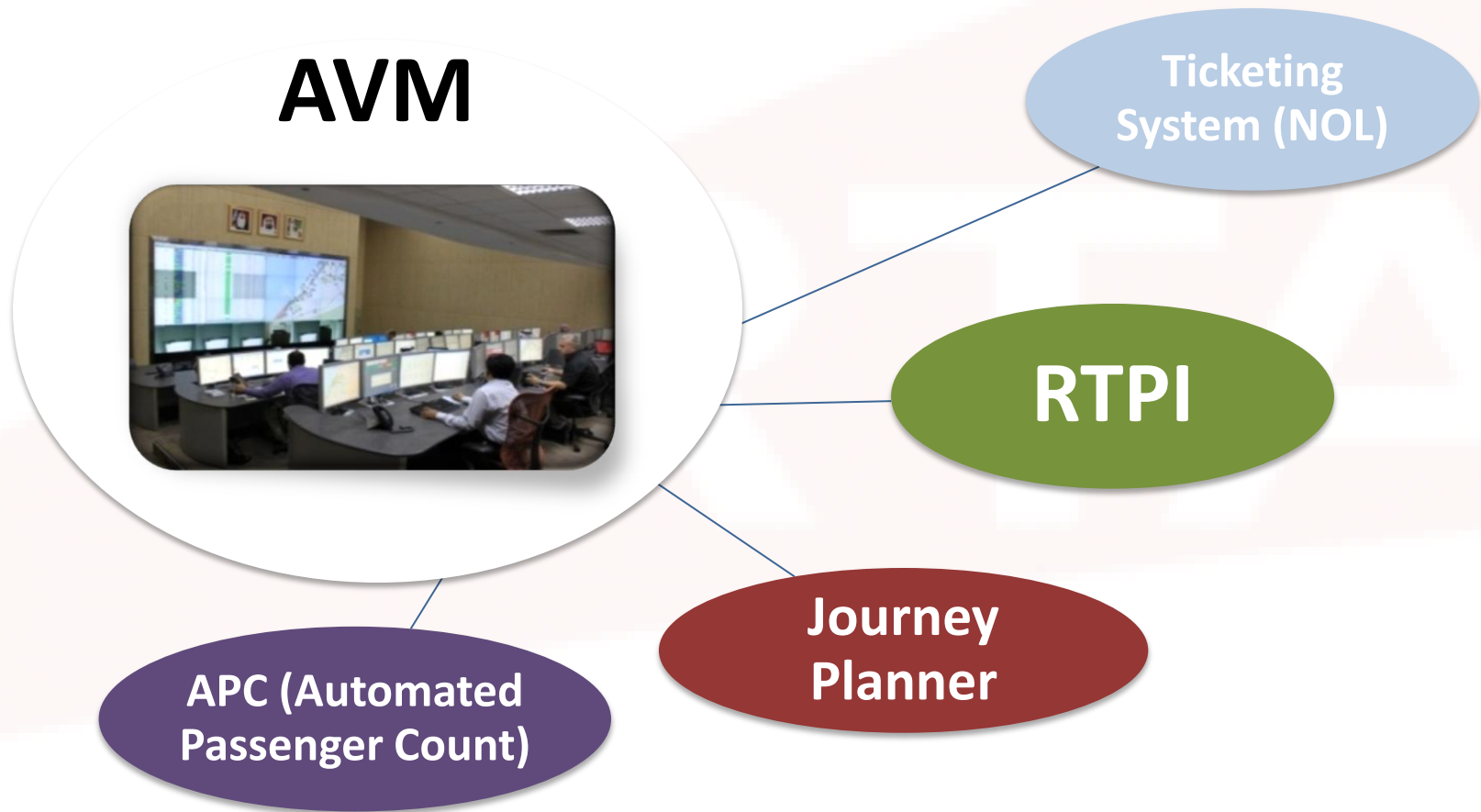


## Other operation innovations:

- Naming right to metro stations.
- Advertisement revenue to RTA (82 million AED. annually).
- Memorable land mark to the passenger.



## Integration with others systems:



# Thank you

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