From Sacramento to Dubai

A Magic Carpet Ride?

2006 Railvolution Conference
Taiwo Jaiyeoba, Sacramento Regional Transit
Fast Facts

Sacramento

- Population: 1.4 million
- Land Area: 966 Square miles
- 97 bus routes & 37 miles of light rail covering 418 square miles area
- 76 light rail vehicles, 256 buses, 17 shuttles, 43 stations
- 30 million passengers in FY2005
- 43,600 daily LRT ridership & 67,000 daily bus ridership (weekday)
- 6 current TOD proposals and 7 TOD opportunity sites

Dubai

- One of 7 Emirates that make up the United Arab Emirates (UAE)
- Population: 1.4 million
- Land Area: 1,000 square miles
- 62 bus routes and 516 bus fleet
- 240,000 passengers daily
- Dubai LRT (Metro): 43.4 miles & 43 stations
- Implementation: 2009
- 100 trains and 55 stations
- TOD activities in planning phase
Team of Experts

Henry Williamson
- Jones Lang LaSalle.
- National Director, Asia Capital Markets

Rajiv Batra
- PB PlaceMaking
- Senior Supervising Urban Designer
Dubai Metro Cities

Transit Oriented Development for the 21st Century and Beyond

Dubai Roads and Transport Authority RTA

RailVolution Nov. 2006
Overview

- Client
- Project
- Scope
- Dubai
- Principles
- Process
- Strategies
- TOD Concepts
- Conclusions
Dubai Roads and Transport Authority

- Fundamental Transformation
  - Dubai Vision + Metro connects important places
- End to end solution
  - Branding
- TOD is Key
  - Max. real estate value
  - Max. rail / transit ridership
- Cash

The Value Connection
Metro

- Red Line
  - 2009
- Green Line
  - 2010
- Purple Line
Scope

Findings

Critical Success Factors

Role of RTA

Divestment Strategy

Master Plans of Key Sites
Dubai scenes....
....and Dubai issues
Principles
Approach
Strategies
Issues
- Alignment
- Station
- Seamless Travel:
  - TOD to station
  - Intra TOD
- More GFA

“Solar City”

“Lakes of the Royals”
RTA Role

Specialist RTA Development Corporation: manage Divestment and Joint Development Program

Financial Return & Risk Exposure

Vendor
Master Developer
Joint Venture
Developer

Sale of whole sites
Sale of Super Lots / Precincts
Sale of parcelled and serviced land
RTA to play role of developer
Strategies
- 90% of value is held in 6 sites
- 60% of value is held in 2 sites
- Must get these RIGHT
Critical Success Factors

- Gain early momentum, sustain
- 99 year lease structures
  - Basis of RTA Proceeds
  - Global investment interest
- Improved quality of development
- Improves financing
- Clear rules, guidelines
- Branding and Image
  - “String of Pearls”
  - Market Leadership
## TOD Portfolio – 16 Sites

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Site Name</th>
<th>Site Area</th>
<th>Total GFA (sqm)</th>
<th>FAR</th>
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<tbody>
<tr>
<td>1</td>
<td>Al Rashidiya (West)</td>
<td>16,040</td>
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<td>3</td>
<td>Al Twar First</td>
<td>6,095</td>
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<td>Hor Al Anz</td>
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<td>110,370</td>
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<td>Al Kif Af</td>
<td>131,567</td>
<td>873,620</td>
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<td>13</td>
<td>Jumeirah Islands</td>
<td>310,792</td>
<td>1,293,673</td>
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<td>14</td>
<td>Jebel Ali Ind</td>
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<td>1,737,835</td>
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<tr>
<td>16</td>
<td>Port Saeed (U)</td>
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<td>19</td>
<td>Jebel Ali Village</td>
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<td>966,459</td>
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<td>Jebel Ali</td>
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<td>5,518,159</td>
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<td>62,911</td>
<td>349,962</td>
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<td>25</td>
<td>Al Jadaf</td>
<td>39,349</td>
<td>286,239</td>
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<td>26</td>
<td>Al Shindagha</td>
<td>30,614</td>
<td>134,526</td>
<td>4.4</td>
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<tr>
<td>27</td>
<td>Al Rashidiya (East)</td>
<td>32,320</td>
<td>85,634</td>
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<tr>
<td><strong>Portfolio</strong></td>
<td></td>
<td><strong>6,499,937 sqm</strong></td>
<td><strong>15,129,872 sqm</strong></td>
<td><strong>2.33 avg.</strong></td>
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<td><strong>1,600 acres</strong></td>
<td><strong>166,000,000sf</strong></td>
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TOD Uses

Distribution of Uses in Portfolio

- Residential: 62%
- Office: 29%
- Retail: 6%
- Hotels: 2%
- Other: 1%
Next Steps- RTA

- Vendor and sale of smaller “single phase” sites
- Master Developer of major sites
- Infrastructure provision and funding
- Land release & phasing strategy
- Define development & planning controls
- Tender assessment and evaluation
- Ongoing Estate Management
- Manage Development Agreements
- Public Relations & Communications
Land Use Plans

- Single – Phase Sites
Transportation Plans
Key Master Plans

Jebel Ali Village

Jumerirah Island

Al Ras/Al Shingdagha

Union Square

Al Kifaf
Union Square

- Heart of the system
- Interchange Station
- Iconic Urban Room
- Vibrancy and Vitality

Sense of arrival
Union Square

- Capture & Spread Value
  Knock out panels

- Major retail concourse
  Asian examples

- Channel Pedestrians
  Move Parking Off-site

Development Oriented Transit
Union Square

Site Acquisition to alleviate parking and improve connectivity

Future DM building
Al Ras & Al Shindaga
Al Ras / Al Shindaga

- Heritage-Dubai’s roots
- Old meets new
- Tourist catchment
- Creek views
- Synergy

Ordinary to Extraordinary
Development Content

- Major tourist destination
  - Tourist related retail
  - Major transit location with inter-modal facilities
- Opportunity to bridge creek
  - Iconic pedestrian bridge
Masterplans

Al Shindaga
- Respect to the historic / heritage area
- Pedestrian path with creek views
  - International Bus terminal - below grade
- Surrounding area
  - Very congested
  - Carrefour
  - Generally viewed
  - Development can uplift to the area
Master Plans - Al Ras

- Re-location of the road
- Requires coordination with DM
- In accordance with DM scheme
Master Plans - Al Ras
Al Kifaf
Al Kif Af

- Gateway to Sheikh Zayed Road
- Optimal mix-use plan and theme
- Very intensive development
- Exploit station interface - maximize linkage w/ development

- Residential: 229,424 sqm
  - 26.26%
  - 1,806 units

- Retail: 80,101 sqm
  - 9.17%

- Hotel: 75,838 sqm
  - 8.68%
  - 1,264 rooms

- Office: 488,257 sqm
  - 55.89%

Total GFA: 873,620 sqm
Al Kifaf

Land Use Plans
- Acquire petrol station area
- 28 m service corridor requirement
- Two 50 storey towers
- 1000 park and ride

Transportation
- Great accessibility from Sheikh Khalifa Bin Zayed
- Plan for primary artery to turn into the site
- Roundabout to disperse the traffic
Al Kifaf

Activity
- 24-hour living
- Live, Work, Play
- Air-conditioned walkways
- Corporate Address

Convenience
- Public Space
- Building connectivity
- Open piazza - main meeting place
Al Kifaf
Jumeirah Islands
Jumeirah Islands

- Station design/access issues
  - Linkage across DEWA corridor and access road diminishes TOD opportunity
  - Proposed building on airspace over DEWA corridor to create elevated station plaza
- Freestanding Park and Ride Facility
  - To be provided by developer
  - Opportunity for entertainment uses on top (shared parking as predominantly evening use)

<table>
<thead>
<tr>
<th>Use</th>
<th>GFA</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>HOTEL</td>
<td>48,019 sqm</td>
<td>3.71%</td>
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<tr>
<td>OFFICE</td>
<td>433,967 sqm</td>
<td>33.55%</td>
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<tr>
<td>RETAIL</td>
<td>24,849 sqm</td>
<td>1.92%</td>
</tr>
<tr>
<td>RESIDENTIAL</td>
<td>786,838 sqm</td>
<td>60.82%</td>
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<tr>
<td>Total GFA:</td>
<td>1,293,673 sqm</td>
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</tbody>
</table>
Jumeirah Islands
Jumeirah Islands
Jebel Ali Village – Solar City
Jebel Ali Village
Solar City

Vision

- Healthy Urban Living
- Resource Efficiency
- Long Term Cost Savings
- Cutting Edge, Sustainable Technologies

Community Identity - Architecture

Integration of Buildings w/ Sustainable Infrastructure Elements (Overall)
Solar City
Solar City

Impact of East-West road
- Clarification of costs of lowering road into cutting
- Finalisation of route

Station access issues
- Height of concourse
- Need to access/egress station at ground
- Crossing DEWA corridor, access road to get to/from site reduced TOD potential
- Assumed that a traffic free covered public plaza can be created over DEWA corridor to provide station connection

Total GFA: 3,455,345 sqm
Al Rashidiya-2
Hor Al Anz
Jebel Ali Industrial
Jebel Ali – The Crossroads
PlaceMaking
Dubai Metro Cities
Transit Oriented Development for the 21st Century and Beyond
Conclusions

- TOD plans accommodate over 166M sq ft GFA
- Existing planning controls (zoning) suitable for most sites
  - Some sites need zoning amendments
- Existing planning rules (design standards) car focused
  - For TOD - bend rules and respect community
- Sites should be viewed as a network
- Quick wins and longer term value enhancement strategies
  - RTA and Dubai Municipality interface / communication vital
- Value creation through brand and TOD synergies
Discussion

Moderator: Taiwo Jaiyeoba