Amman Transportation Strategy
from Planning to Implementation

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Outline

• Background and introduction
• Current conditions
• Policy response
• Action plan
• Challenges
• Conclusions and lessons learned
Amman – The Capital City

• Leading role
• Business and commerce center
  – Major commuter traffic
• Cultural center
• Population: 2.4 million (2007)
• Land area: 1,680 km²
• Thriving economic climate
Current Conditions

- High population growth rate
  - Youthful population (53% below the age of 25)
- Large land area (1,680 sq. km)
  - Low population density
  - Urban sprawl
- Limited public transport
- Great dependence on private vehicles
Response: Amman Master Plan

• A livable city
  – Society, Economy, Infrastructure, Services, and Environment
• Land use policies
  – Intensification and densification
• A balanced and multimodal transport system
  – Focus on public transport
• Smart growth
  – Target development along major public transport corridors
Public Transport in Amman

- Digressed over the years
  - Did not meet changing needs of distinct market segments
- Poor service quality (use only by captive riders)
- Many journeys require multiple changes and take too long
- Fragmented structure (individual operators)
- Poorly funded (both public and private)
- Lack characteristics of modern systems
  - Timetables, reliability, route coverage, safety, comfort...
Public Transport – Functions

- Regulator – license/permit issuer
- Integrator and developer – design the network
- Branding/marketing/promotion
- Financial support
  - operations and concessionary fares
- Provision of infrastructure (road-based as in BRT, terminals)
- Support through prioritization within traffic
- Operator
GAM has always held several responsibilities that are relevant to public transport planning and operations:

- Land use / urban planning
- Traffic control and management
- Parking management
- Design and operations of road and transport infrastructure
Response: GAM Public Transport Law

• Developing and implementing public transport strategies and plans
• Regulating, licensing, pricing, and monitoring public transport services
• Ability to operate and own public transport services or facilities
• Implementing traffic management measures, such as tolling and congestion pricing
• Establishing a Public Transport Fund
  – supporting projects that enhance public transport services and facilities
  – subsidizing services
Baseline Conditions

- 14% public transport mode share
- Increase in number of cars at alarming rates
  - 10% per annum vehicular registrations
- $850 million annual cost of traffic congestion
- $750 million cost of fuel for transport in Amman
- 600 kg of CO2 per capita
- Imbalanced fleet mix
Where should we be?

- Rail-based rapid transit
- Comprehensive bus network
  - More buses (current is 3 buses/10,000)
  - Bus priority corridors
- Integrated network
  - Interchange points with intercity
  - Integrated tariffing and ticketing
- Commuter rail network
- Effective contracting mechanism
  - Service management contracts
  - Quality standards and incentives
  - Subsidy to ensure affordable fares
- Comprehensive travel information and customer support
Action Plan

- Create work teams and establish specialized departments
- Develop effective regulations and policies
- Assess problems and needs, and measure demand levels
  - Transport and Mobility Master Plan
- Improve quality of service
- Develop modern system using the latest technologies (metro/LRT, and BRT)
  - Restructure feeder services and routes
Transport and Mobility Master Plan

- Funded with aid from AFD
- Comprehensive study to determine transport needs in Amman
  - Household survey covering about 10,000 families
  - Transport demand model (multimodal)
- Hierarchy of public transport services
  - High-order services (rail and BRT)
  - Large bus services
  - Feeder services
- Parking management and policy
  - EOI for 4 pilot areas on the market
TMMP – 2025 Targets

- Vehicle Kilometers constrained to current levels
- Public Transport Mode Share of 40% (from 14%)
- Reduce journey time by public transport to 30 min
- Reduce CO2 emissions
- Accessibility to public transport network
  - Increase no. HHs from 40% to 60%
- Accessibility to jobs
  - Achieve 40% of jobs within 2 km of a major transport node
- Reduce accidents by 10%
- Maintain the existing walk share mode
Response: Improving Bus Services

• More and better buses
  – 160 new buses
  – Update old fleet
  – High-quality (city bus)
• Financial support for bus services
  – $24 million over 4 years
  – Performance standards
• Electronic fare payment (smartcard)
Terminals, Stations, and Stops

• Rehabilitate existing terminals
• Establish stations and terminals to facilitate interchanges
  - Park-n-Ride
• Coordinated street furniture
  - 700 modern bus shelters
Response: Rapid Transit Network

Phase 1 2009–2015

Phase 2 2015–2025

BRT
30 km
20 km

LRT/Metro
20 km
20 km

Investment
$1.5 Billion
$1.1 Billion
Bus Rapid Transit (BRT) Phase -1

- Three routes (30km)
- Detailed engineering design completed
  - Construction tendered
- Service plan being finalized
- Business model
  - Publicly financed infrastructure
  - Operations by private sector
  - Revenue risk retained by GAM
  - Pay per km
  - Set of KPIs
Rail Rapid Transit Project

- 40 KM
  - Mostly underground
- Project awarded to Egis Rail
  - Preliminary design
  - Feasibility study
  - Environmental impact assessment
  - Technology options
  - Financing options
Public Awareness - Branding
Challenges

• Institutional
  – Internal: adequate resources and processes
• External
  – Coordination with many stakeholders
  – How to influence national policy (i.e., fuel tax, car subsidy)?
• Technical
  – Terrain, insertion into built environment, etc
• Financial
  – Infrastructure cost
  – Subsidy for operations (especially during transition)
• Social/political
  – Bias against public transport from years of neglect
Conclusions

- Plans are good but they have to be practical in order to be implemented
- Adequate data and models can support decisions
  -- Must gain trust of decisions makers
  -- Time is of the essence
- Demonstrate improvements on the ground
  -- Start with early wins (and most noticeable by users)
- Partnerships can make it happen
- Communicate the right message to the right audience
- Review continuously
Thank You!