

# 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 km<sup>2</sup>
- Thriving economic climate

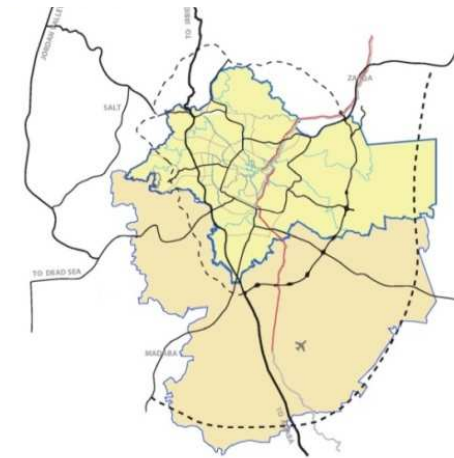
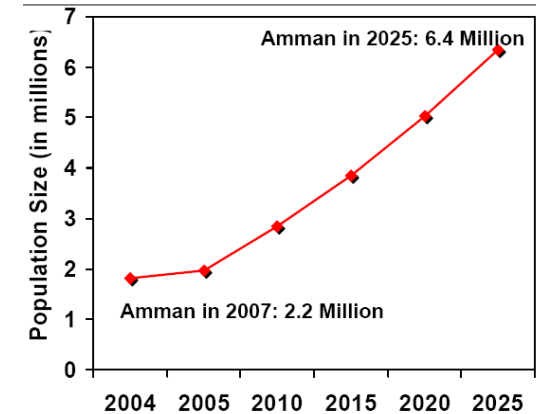


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# Current Conditions

- 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

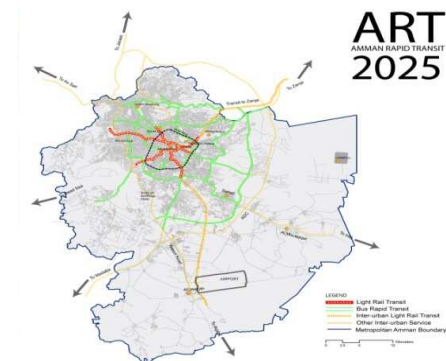


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# Response: Amman Master Plan

- 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



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# 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

# Relevant Functions at GAM

- 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

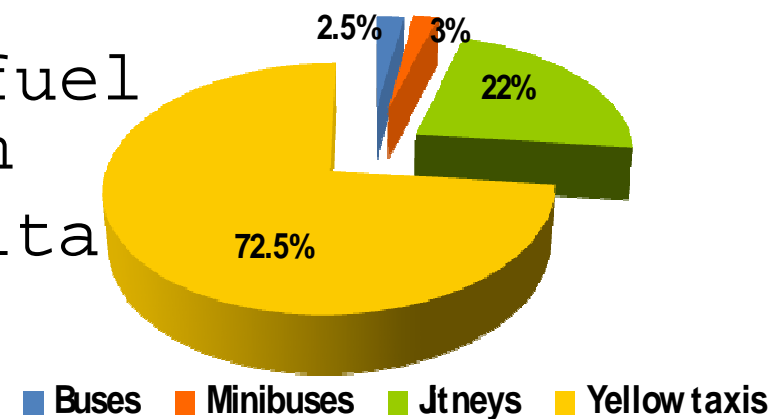
# Response: GAM Public Transport Law

- 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 CO<sub>2</sub> 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

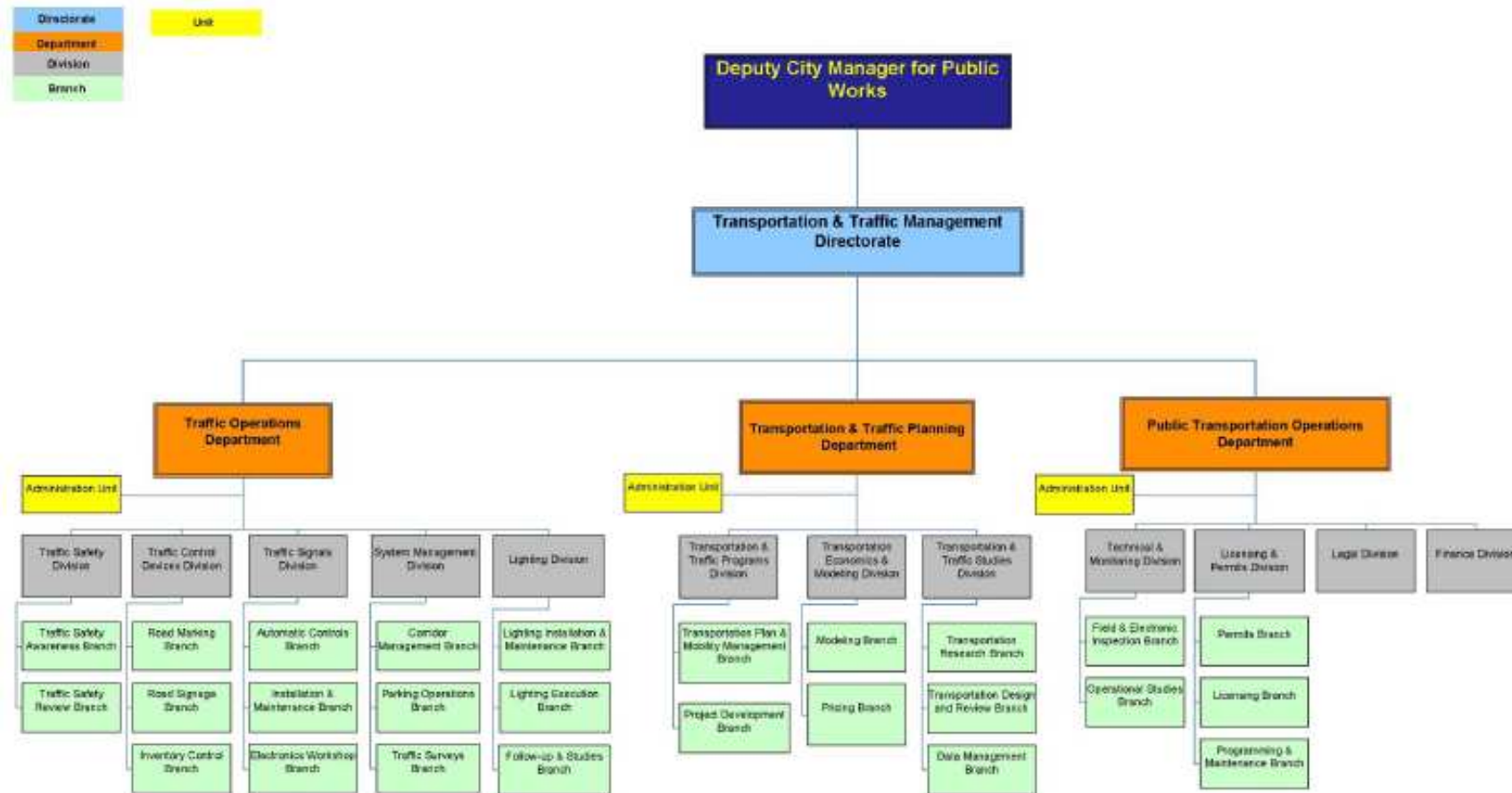


# Action Plan

- 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

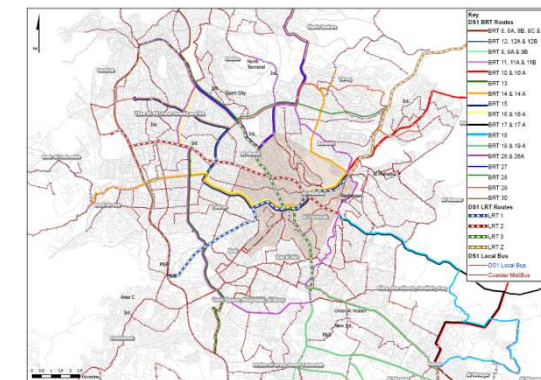
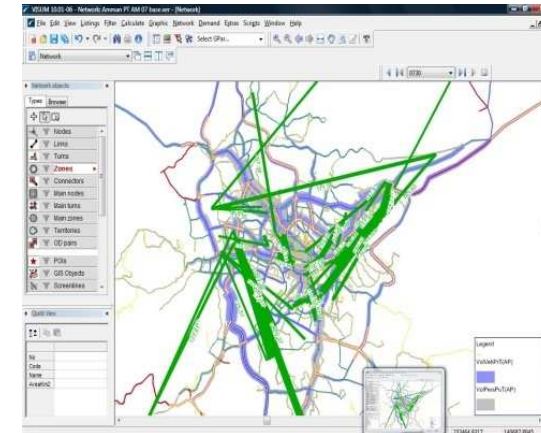


# Response: Organizational Structure



# 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)



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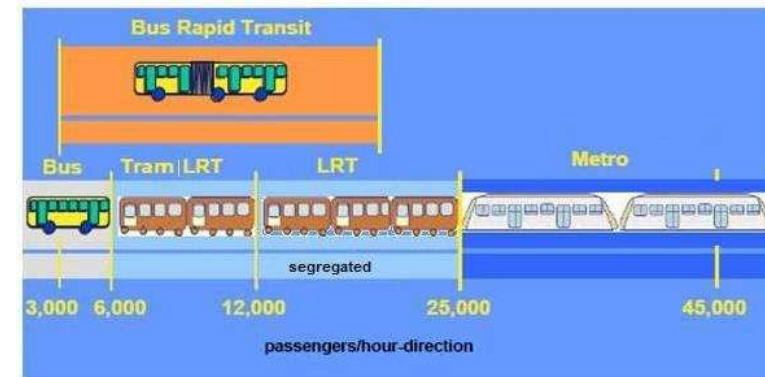
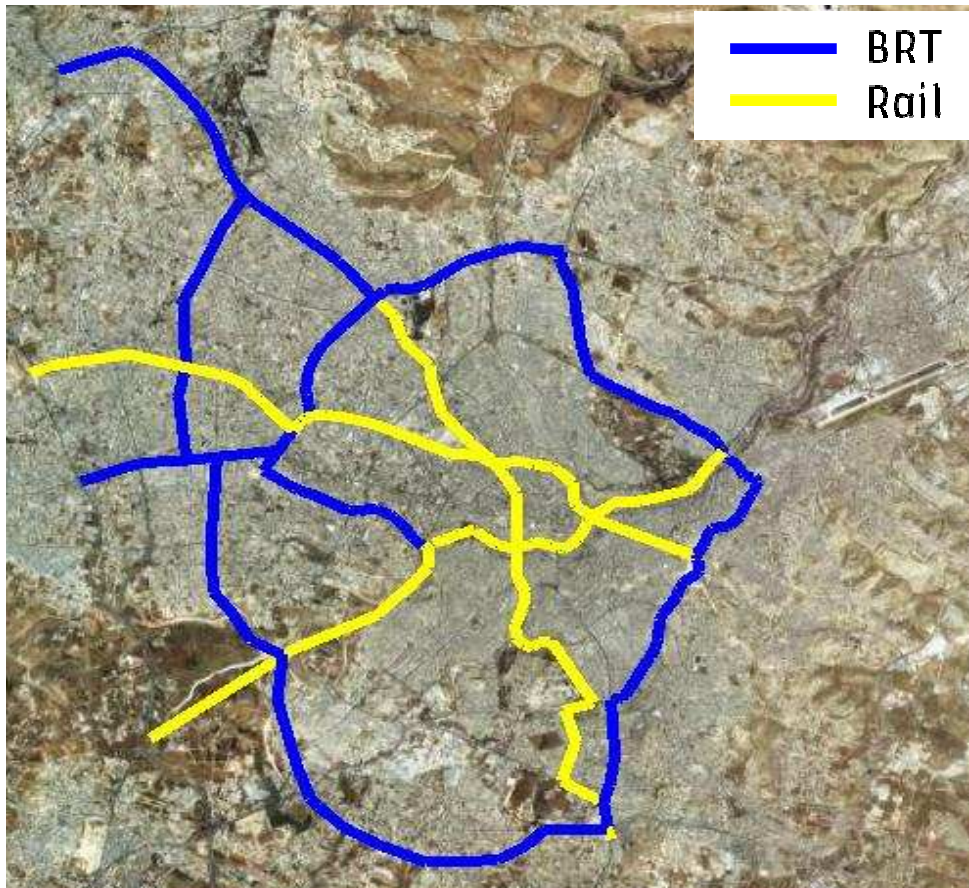
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# Terminals, Stations, and Stops

- Rehabilitate existing terminals
- Establish stations and terminals to facilitate interchanges
  - Park-n-Ride
- Coordinated street furniture
  - 700 modern bus shelters



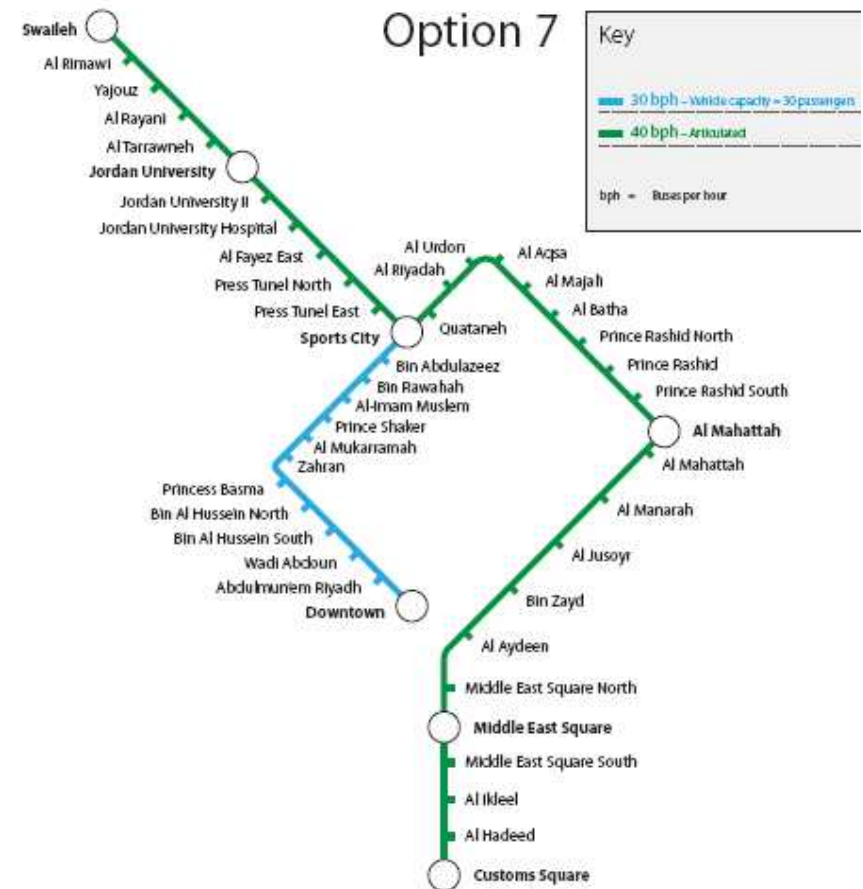
# Response: Rapid Transit Network



	Phase 1 2009- 2015	Phase 2 2015- 2025
BRT	30 km	20 km
LRT/Metr	20 km	20 km
Investme nt	\$1.5 Billion	\$1.1 Billio n

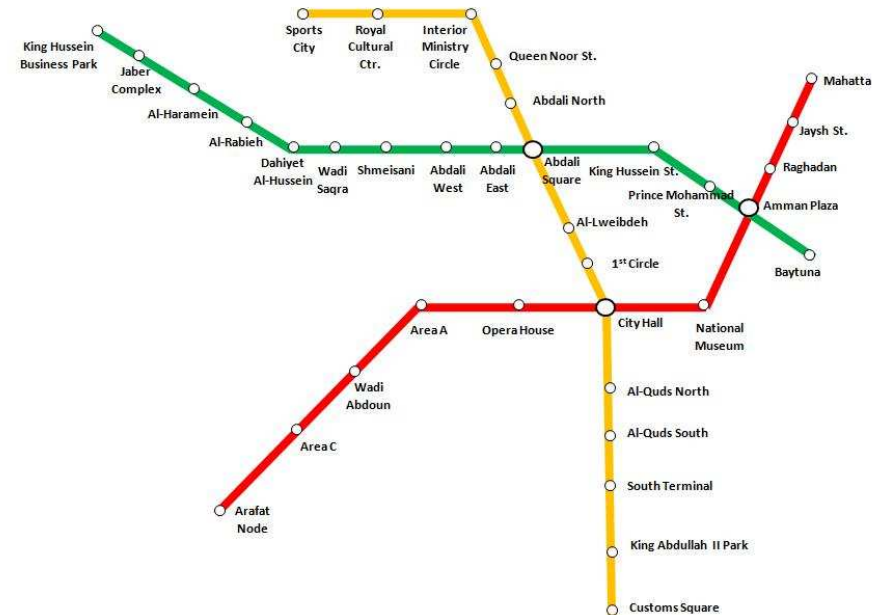
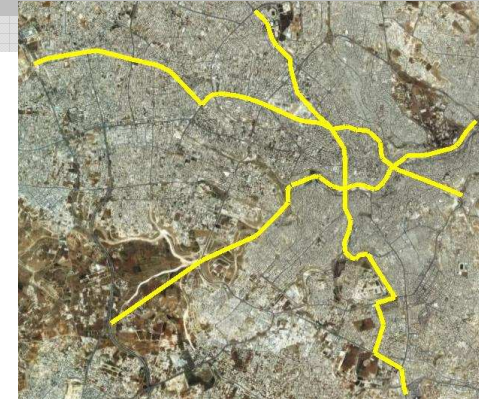
# Bus Rapid Transit (BRT) Phase -1

- 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

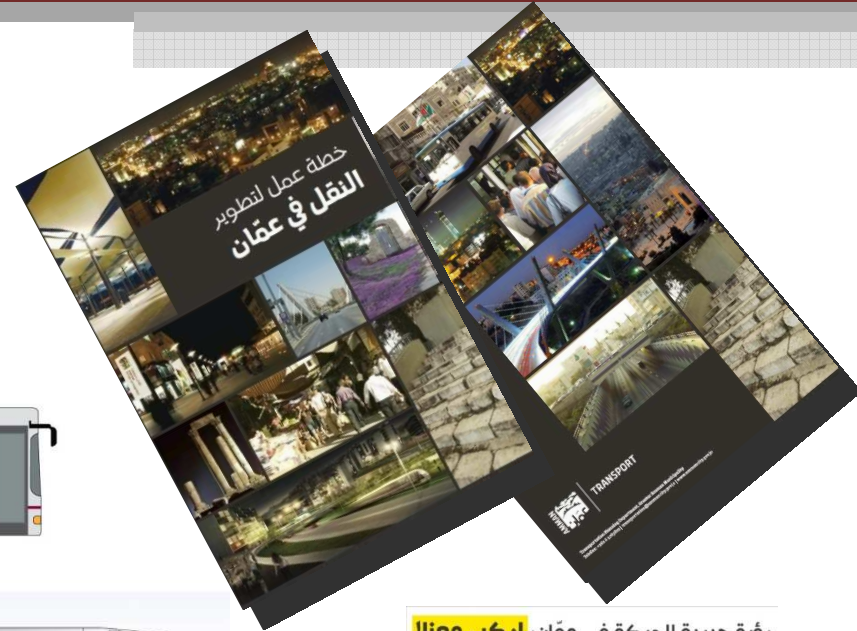
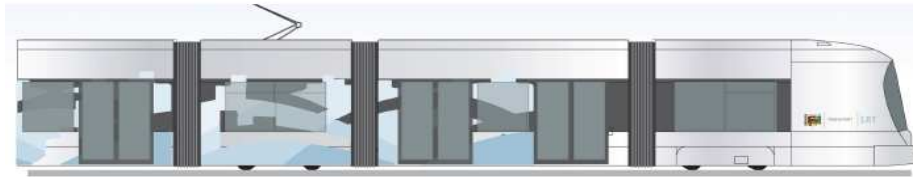
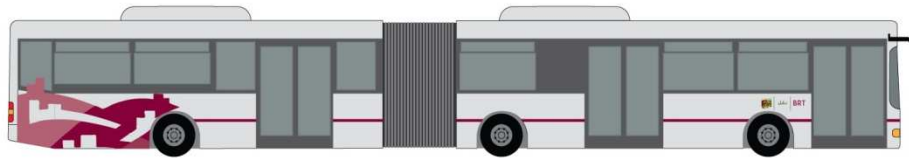


# Rail Rapid Transit Project

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



# Public Awareness - Branding



### رؤية جديدة للحركة في عمان: اركب معنا!

نظام حلات جديدة وسهلة 1 | الحلات السريعة ذات العنبر الخاص 2 | نظام الحافلات الجديدة 3

لا يختلف اثنان في وجود مشكلة كبيرة في النقل والمرور داخل مدينة عمان. السؤال الذي يتبادر إلى الأذهان في الوضع الراهن هو: **ما الحل؟**

في ظل النمو السكاني المتسارع في عمان، أصبحت مشكلة النقل والمرور داخل المدينة واحدة من أكبر التحديات التي تواجهها. مع وجود 330 ألف نسمة في عمان، أصبحت الحاجة إلى حلول جديدة وفعالة لتسهيل التنقل داخل المدينة أمراً ملحاً. هذا هو الهدف من خطة عمل تطوير النقل في عمان، التي تهدف إلى تحسين جودة الحياة للمواطنين من خلال توفير خيارات نقل جديدة وسهلة، مثل الحافلات الجديدة، الحلات السريعة ذات العنبر الخاص، ونظام الحافلات الجديدة.

**330 ألف نسمة** عدد سكان عمان مستخدمين وسائل النقل العام ما هو الوضع في عمان الأردنية؟  
 67% من إجمالي مستخدمي وسائل النقل العام في عمان مستخدمون للحافلات العادية.  
 33% من إجمالي مستخدمي وسائل النقل العام في عمان مستخدمون للحافلات السريعة ذات العنبر الخاص.

**ما أبرز التحديات التي تواجهها عمان الأردنية في مجال النقل والمرور داخل المدينة؟**  
 - ازدحام المرور في الشوارع الرئيسية.  
 - بطء وسائل النقل العام الحالية.  
 - نقص الخيارات المتاحة للمواطنين.

**مكونات أساسية لتطوير وضع النقل**  
 - تطوير وتوسيع شبكة الحافلات.  
 - توفير خدمات نقل جديدة وسهلة.  
 - تحسين جودة خدمات النقل العام.

استفسرنا! تعلموا معنا! 06 - 4746822  
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# 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!

