

# Baseline Conditions

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- High population growth rate
  - About 2.5-3 million people
  - Youthful population
- Major commuter traffic
- Relatively low HH incomes
  - Median is \$7,600/year
- Limited public transport
  - Great dependence on cars
  - 10% per year car registration



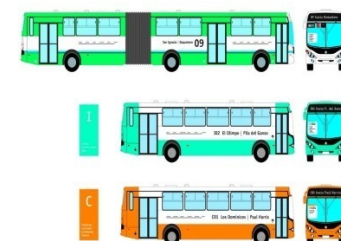
# Paradigm Shift

- Uncontrolled growth and related increases in traffic levels negatively impact mobility in Amman
- Traditional road expansion is not alone capable of accommodating mobility needs
- Severe economic, social, and environmental of status-qou
- Policy shift:
  - Public transport together with a comprehensive and intermodal system management strategy



# Transformation: Action Plan

- Integrate urban public transport in Amman with GAM functions (Nov. 2007)
- Assess problems and needs, and measure demand levels (TMMP)
- Improve quality of service
- Develop modern system using the latest technologies (metro/LRT, and BRT)
  - Integrated network with key interchange points
- Raise awareness (communications plan)
- Implement supporting activities



# Transport & Mobility Master Plan

- Comprehensive study to determine transport needs in Amman
  - Household survey (10,000 families)
  - Multimodal transport demand model (VISUM)
- Hierarchy of public transport
  - High-order services (rail and BRT)
  - Large bus services
  - Feeder services
- Recommended highway improvements
- Parking management and policy
- Safety strategy
- Pedestrian strategy

## Amman Master Plan

- Blueprint for growth to 2025
- Spatial policies and that will lead to the achievement of the City's Vision
- Effective urban form
  - Intensification
  - Densification



## Transport & Mobility Master Plan

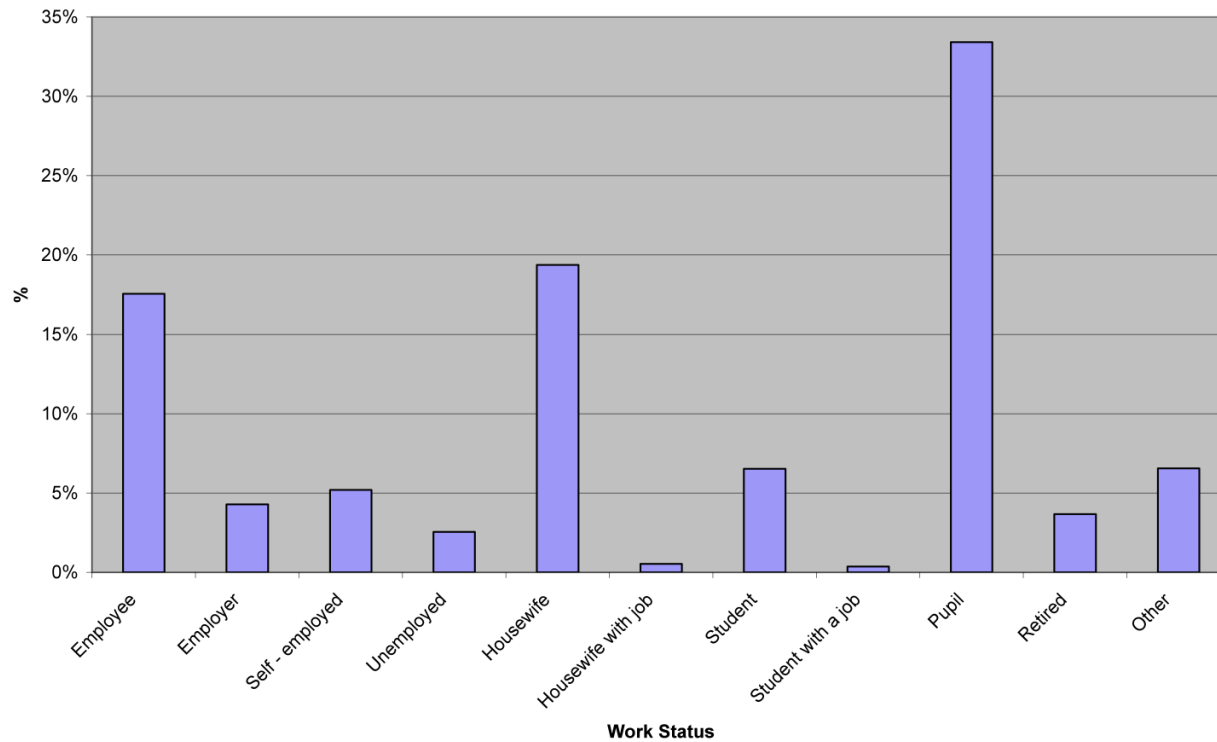
- Establish the baseline
- Mobility objectives and policies to ensure sustainability
- Set of strategies and projects





# Mobility Measures

Work Status Distribution

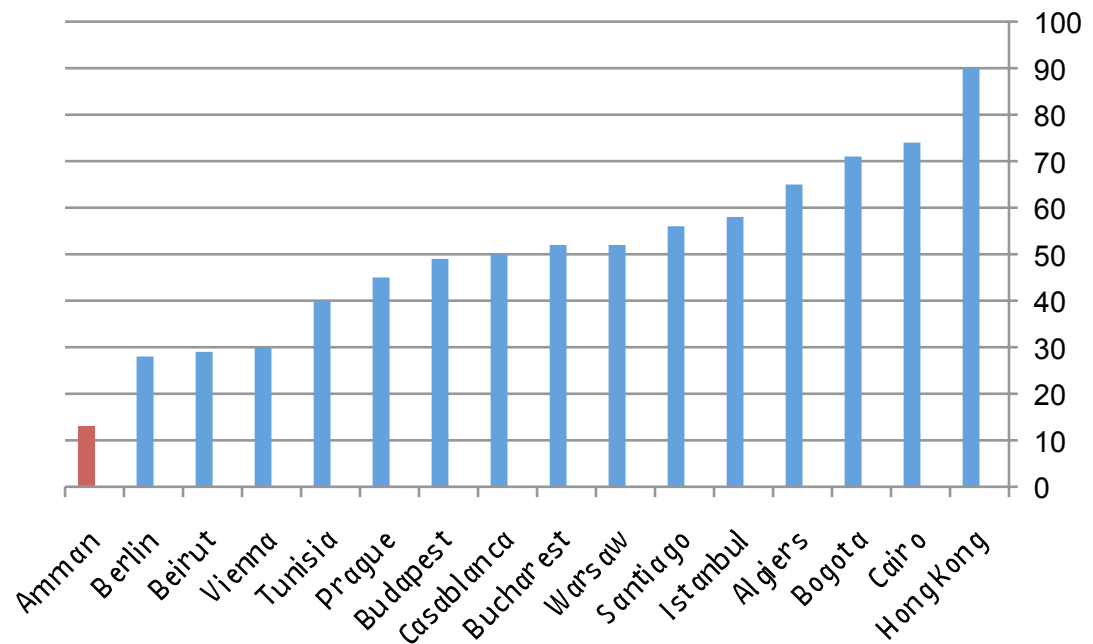
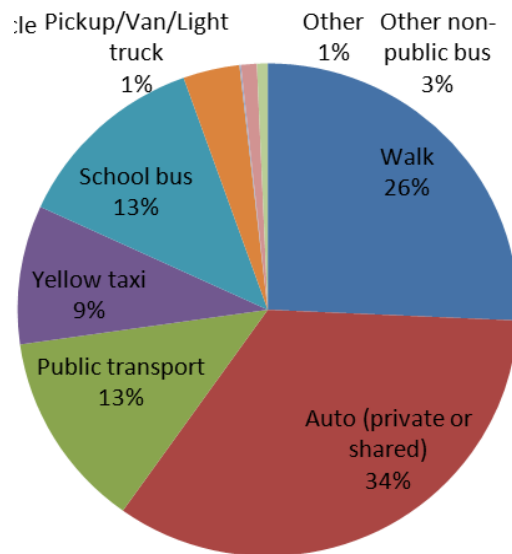


	Daily trips
Worker	2,06
Housewife	0,98
Unemployed	1,06
Student >14	2,05
Child	1,93
Retired	1,49
<b>Average</b>	<b>1,73</b>



# Baseline Conditions - Demand

- 4.35 million daily trips
  - 34% of daily trips by car
  - Only 13% by public transport
    - 5% by bus and 8% by white taxi



# 2025 Targets

- Public Transport Mode Share of 40% (from 14%)
- Reduce journey time by public transport to 30 minutes
- Reduce CO2 emissions
- Accessibility to public transport network
  - Increase HHs with PT access from 40% to 60%
- Accessibility to jobs
  - 40% of jobs within 2 km of a major transport node
- Reduce accidents by 10%

## Baseline

- 1 Billion JD annual cost of time in travel
- 720 million JD cost of fuel for transport in Amman (2008)
- Transport accounts for about 30% of fuel consumed and associated pollution



# Public Transport in Amman

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- Degraded over the years
- Poor service quality (use only by captive riders)
- Fragmented structure (individual operators)
- Poorly funded (both public and private)
- Lack basic service qualities
  - Timetables, reliability, safety, comfort...



# Enhance Existing Services

- Unified brand
- More and better buses
  - AC
  - Smartcard payment
  - Electronic display
- Subsidize bus service
- Improve facilities
  - Coordinated street furniture

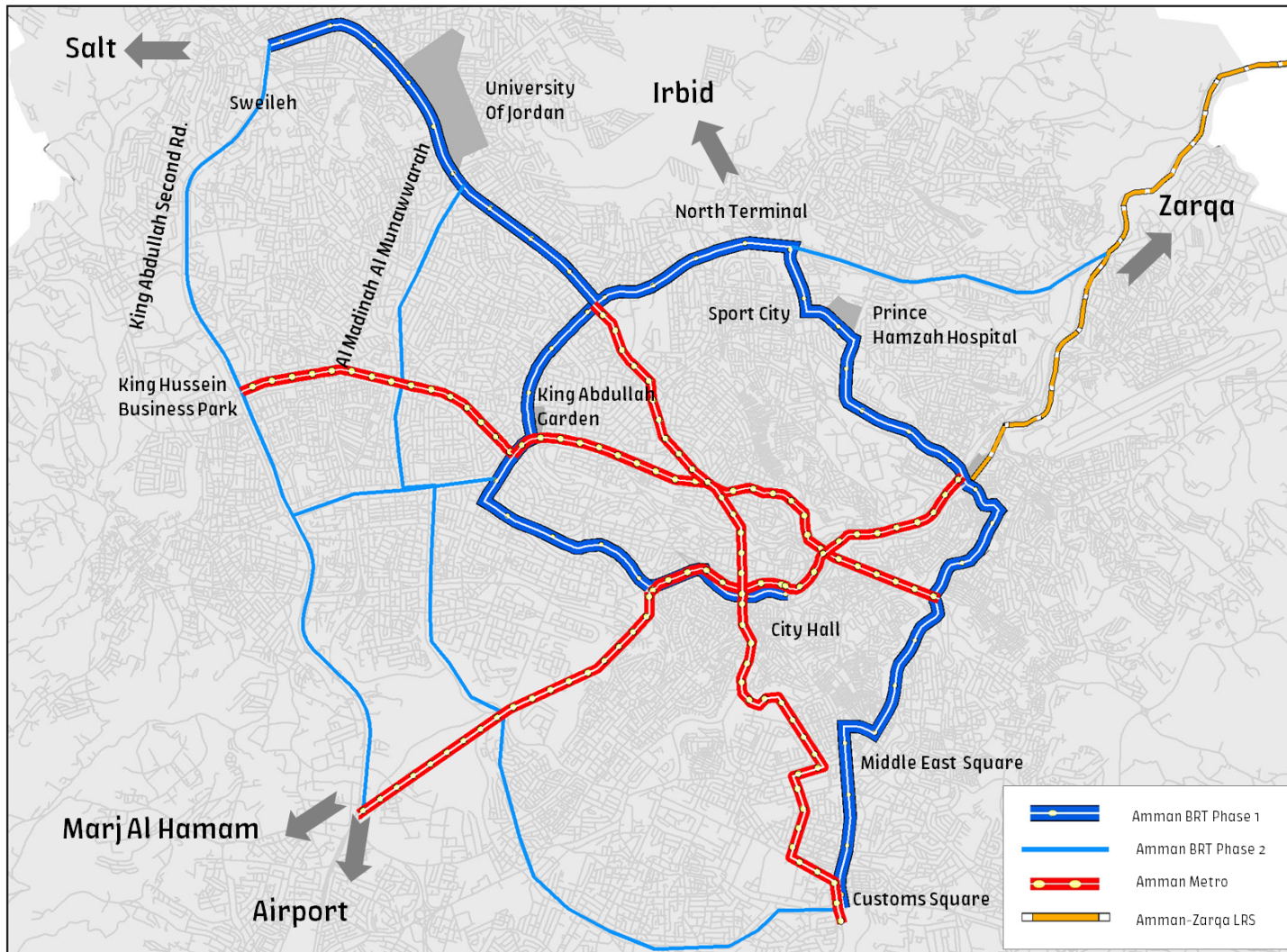


Transport



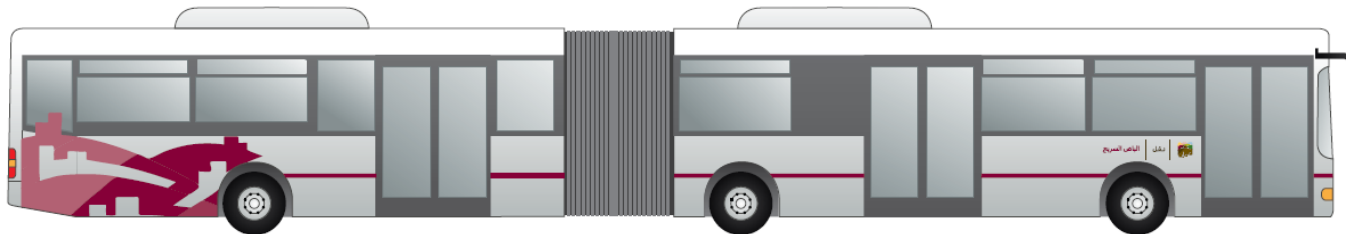
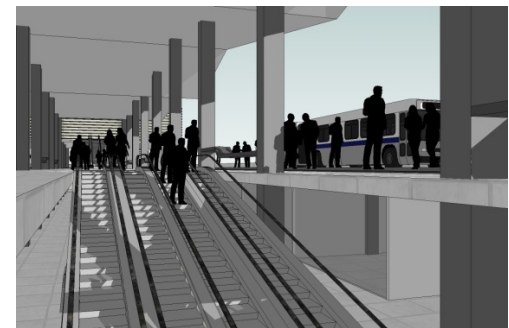


# Public Transport Backbone



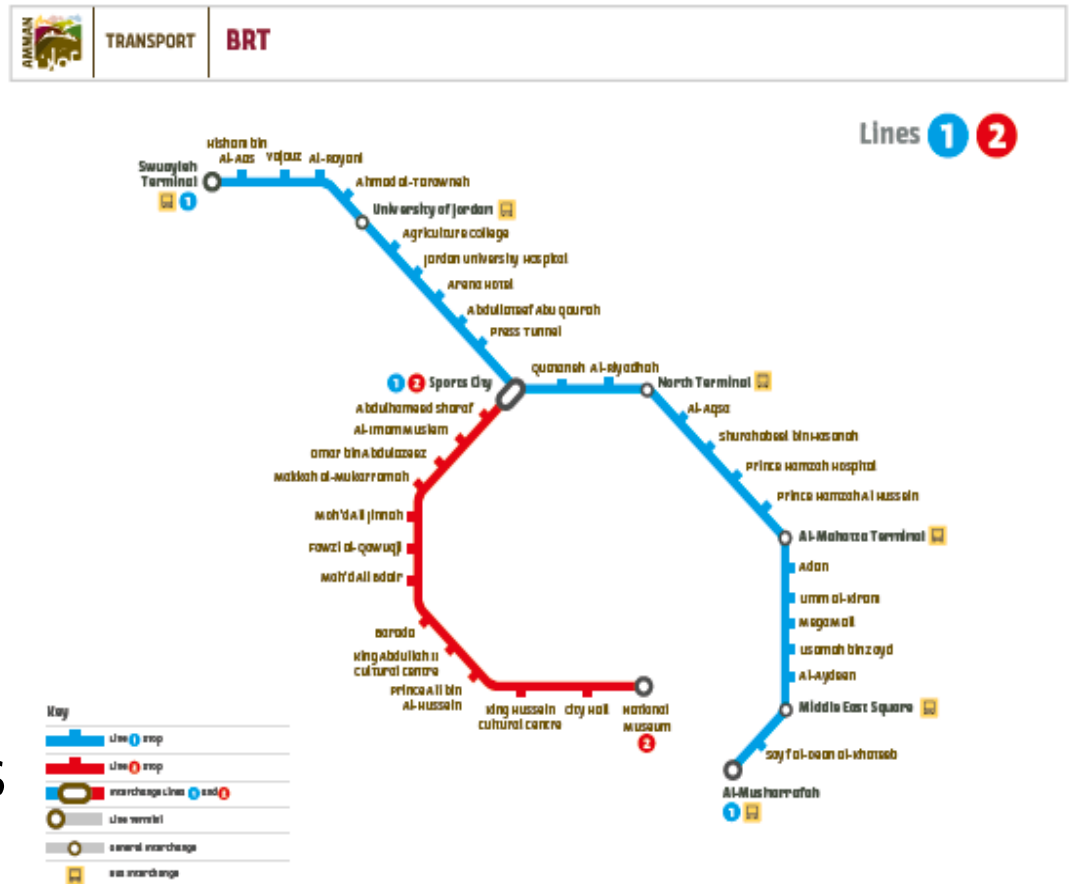
# BRT Phase 1 - Highlights

- Three routes (32km)
- New terminals (& park-n-ride)
- Stations with off-board payment
- Pedestrian facilities
- Extensive landscaping
- Traveler information system
- Electronic payment system



# BRT Service Plan

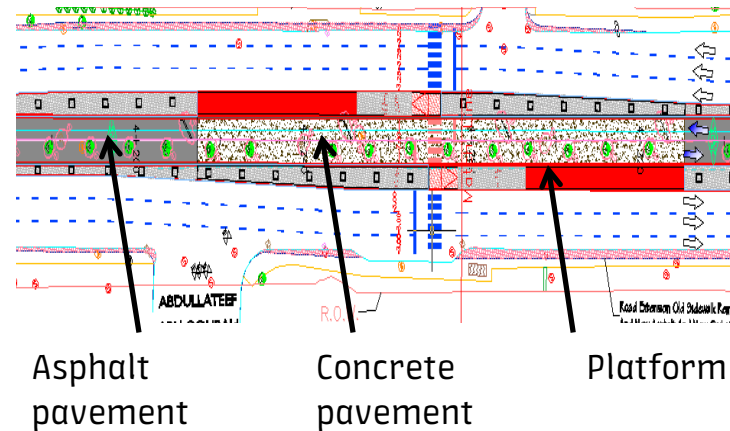
- Meet demand patterns
  - Express routing
  - Limited stop service
- Distribute demand along lines with available capacity
- About 7000 pax/hr
- 150 articulated buses
  - 1.5-3 minute peak headway





# Infrastructure Construction

- Widening on sides of road
- Bus lane construction
- Median alongside the running way
- Stations
- Storm drainage



# Business Model

## GAM

- Infrastructure
  - Bus lanes
  - Related road upgrades
  - Stations
  - Terminals
- Electronic payment system (hardware)

\$166m Capex

## Private Sector

- Bus operations
  - Buses (150 @ \$450,000)
  - Depot
  - Operations and maintenance systems
- Terminal operations
- Ticketing system operations

\$78m Capex

Financed thru AFD





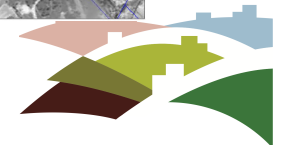
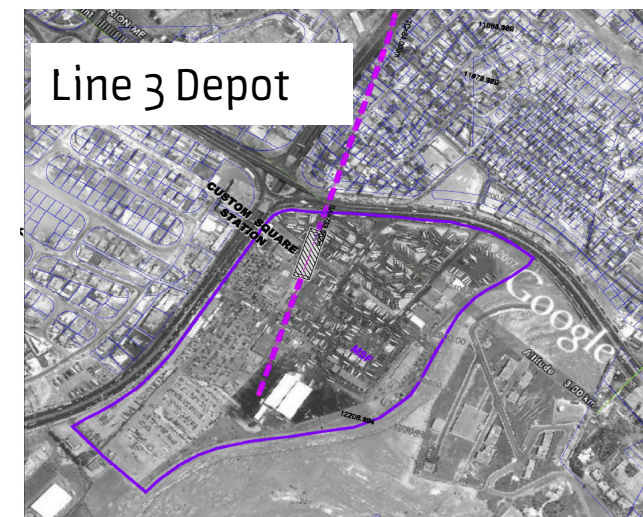
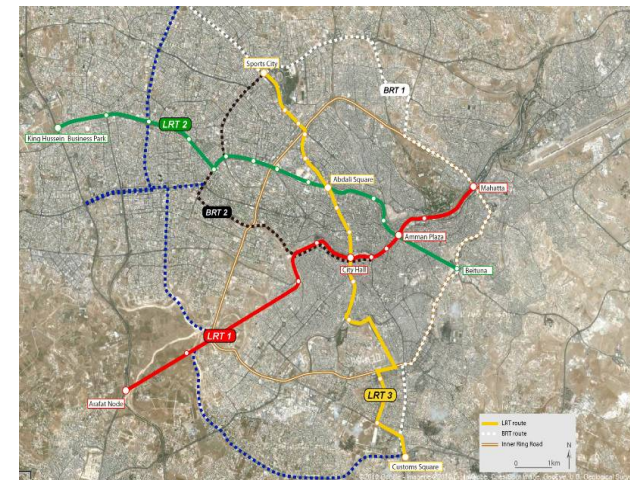
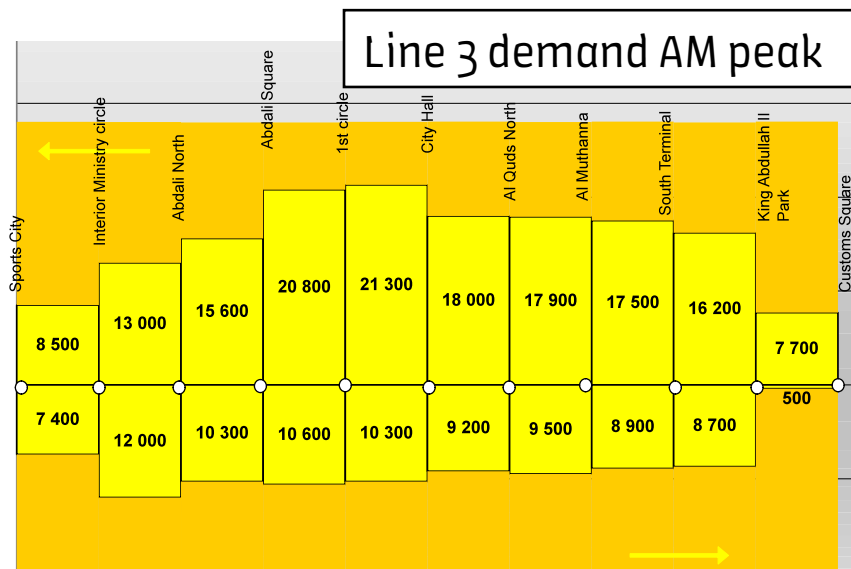
# Project Status

- Financing signed with AFD 2010
- Construction began July 2010
- September 2011- Construction halted pending traffic impact and design review by external experts



# Amman Rail Transit

- Feasibility and Preliminary Design
  - Line alignment
  - Station and depot locations
  - Preliminary design
  - Socio-economic impacts
  - Financing options



# Supporting Initiatives

- On-street parking management
  - 6 companies short-listed for phase 1
  - Start in 4 selected areas
- Taxi Call Center
- Street lighting
- Alternative fuels
  - Grant from AFD to look at feasibility and distribution system requirements (CNG)
- Air quality plan
  - EU funding

