



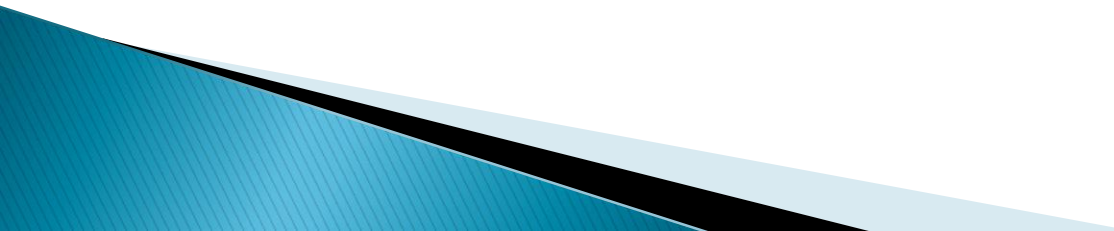
Jordan Hejaz Railway

Reality & Aspiration

Dr. Abdallah Malkawi

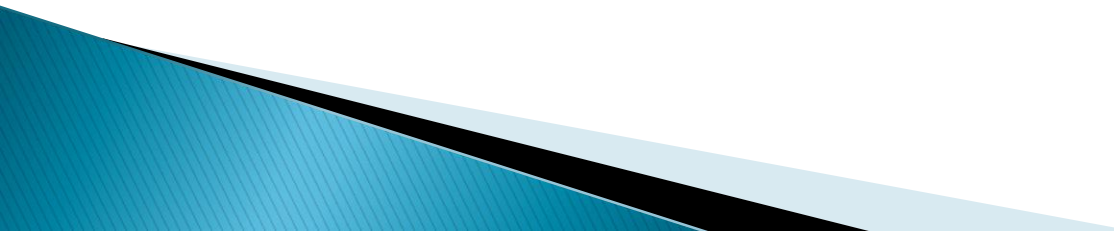
General Director of Jordan Hejaz Railway

Outlines:

- **Jordan Hejaz Railway Background.**
 - **Challenges in Transportation sectors (Jordan).**
 - **Conducting Projects and future Ambitions.**
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Introduction

Arab region is witnessing these days a rapid development in the field of transport . The leaders of Arab countries took strategic decision to link all Arab countries with railway. we look forward to the day when Arab world will connect with Europe via Jordan, Syria, Turkey and in the end with Europe with a modern rail system with international standards.



Background

Jordan Hejaz Railway is considered as the oldest railway line from fragrant history of Arab region, which has been established 116 years ago, and might the latest transport sector at that time.

revolution in the



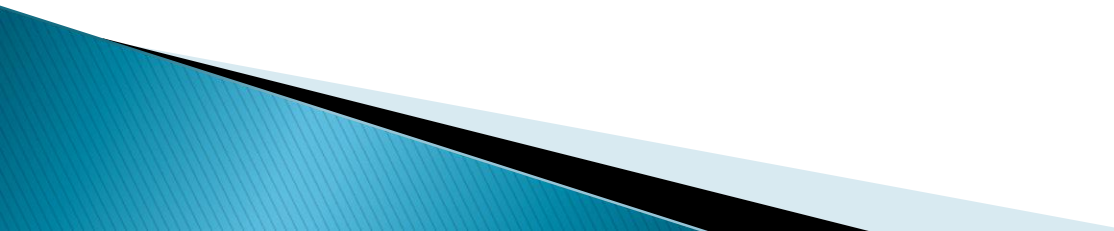
Background

The Hejaz Jordanian Railway is considered a heritage milestones in the modern history of Jordan, In addition one of the building of the Hejaz Railway located in Ma'an city has had the dignity to be the official headquarters of the late His Majesty King Abdula Bin Al-Hussein .


- The rail line is narrow gauge (1050 mm)
- excel load (10.5 tons)
- with total long (1303) km
- The maximum speed was 40 km / h while the normal speed was 25 km / h for pilgrim's trips.

The total number of JHR stations is 59, starting from Al- Kadam station in Damascus up to the last station in Al-Madina Al- Munawara city total length is (1303 km), the length of the JHR in Jordan about (452 km) and the number of stations in Jordan is 29.


JHR Main Goals:

- ▶ Preserving the properties of the Jordan Hejaz Railway.
 - ▶ Investment in the moveable and immoveable properties of Hejaz Railway to support the financial resources of the Corporation.
 - ▶ Developing the infrastructure of the Hejaz Railway.
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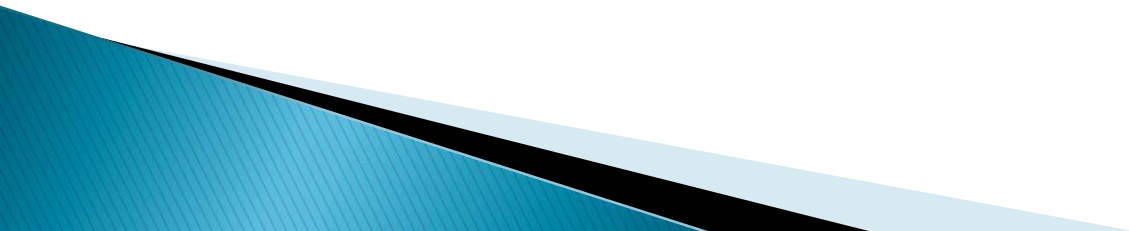
JHR Main Goals:

- ▶ Renovating the JHR heritage buildings to become as tourist attraction destinations.
 - ▶ Coordinating with all concerned stakeholders to locate the Hejaz railway on the Jordanian tourism map.
 - ▶ Coordinating with all stakeholders to list the Corporation as one of the UNESCO World Heritage Sites.
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JHR Main Goals:

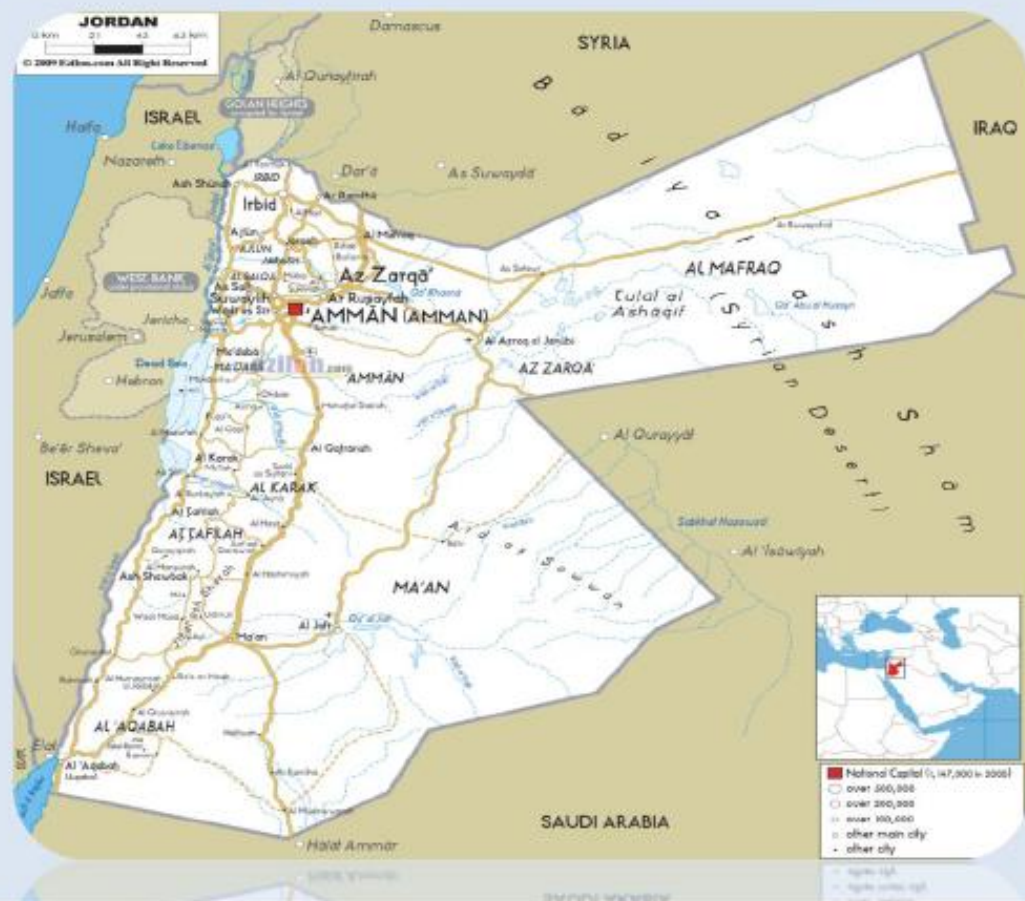
- ▶ Conduct various types of trains in order to meet the demands of the public by various categories of trains, diesel and steam through the reconstruction of locomotives and passenger coaches and goods trucks.
 - ▶ Maintain the railway infrastructure from north of Jordan up to south to insure the safe movement of trains.
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Challenges in Jordan Transportation



Jordan is in the geographical key position serving transport mainly between

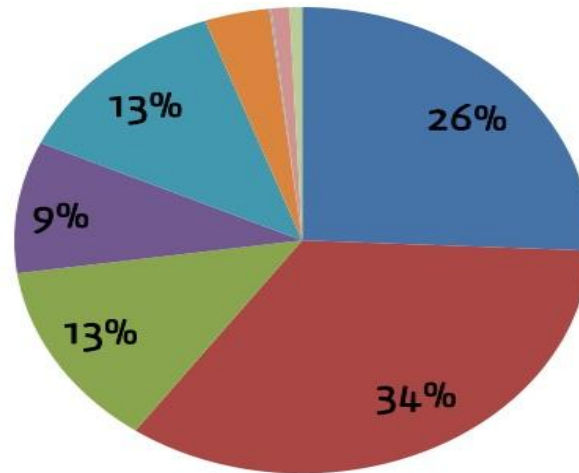
- KSA and Europe
- Iraq and Egypt
- Red Sea and the Mediterranean Sea



The Transport Sector in Jordan

5 million transport daily trips ▶

700.000 trips from outside Amman ▶



- The total length of the **Jordanian Railway Network** in operation is 509 km and its composed of narrow gauge track (1050 mm gauge)



- **Transport in Jordan** is not only a vital sector for the Kingdom's economy but also relevant for the economical development of the whole Middle East region.
- During the last **10 years** Jordan has heavily invested in the transport sector:
 - ✓ *Expanding the Road Sector (1,700 km of new highways)*
 - ✓ *Improving Urban Mobility*
 - ✓ *Enhancing the logistic industry*
 - ✓ *Full opening of a new sea port in Aqaba in 2015*
 - ✓ *Opening of Queen Alia International Airport (freight and passenger) 2013*
 - ✓ *Planning and design of a National Railway Network*
 - ✓ *Jordan started – as the first country in the Middle East - a process of liberalization of the transport sector with the purpose of raising the performance, efficiency and enhancing competitiveness.*

Transport Demands

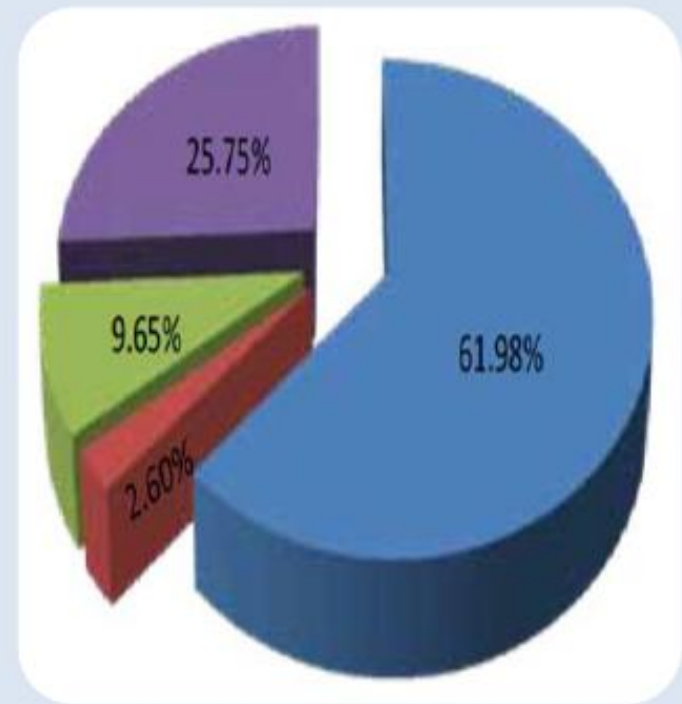
Cargo payload for land transport in Jordan

2013: 45,000,000 tons

2030: 80,000,000 tons

Jordan is dominated by
land transport

- Land Transport
- Maritime Transport
- Aviation Transport
- Supporting & Auxiliary transport activities



Main challenges:

- Improving Public Transport (BRT and tram services)
- Improving Safety
- Environmental protection
- The Jordan National Railway Project which has been labeled by UfM as a priority project (approx. 950 km, investment 1.9 Billion EUR)
 - Political
 - Financial
 - Implementation
 - Capacity building
- Technical harmonization to achieve intra- and intermodal interoperability

Main challenges:

- Situation of Syrian refugees in Jordan (enormous financial and logistic efforts for the Kingdom)
- Low volume of trade to, from and across the Kingdom as a result of the international economic crises and the political unrest in the Middle East, which reflected on the national economy.
- Funding for the development in Jordanian Transport Sector:
 - Development of Infrastructure (Investment in new infrastructure, expansion of infrastructure and maintenance of existing infrastructure)
 - Optimization for operation of transport services (freight and passenger)

Jordan Transportation Systems Problems

- 1. Congestion and traffic jams.**
- 2. Increase of car ownership ratio.**
- 3. Roads capacity problems.**
- 4. Traffic demand management issues.**
- 5. Traffic regulations issues.**
- 6. Drivers and pedestrians cultural and behavioral issues.**
- 7. Mobility and safety issues.**
- 8. Lack of reliable public transportation system.**
- 9. Absence of BRT, light and national railway systems.**

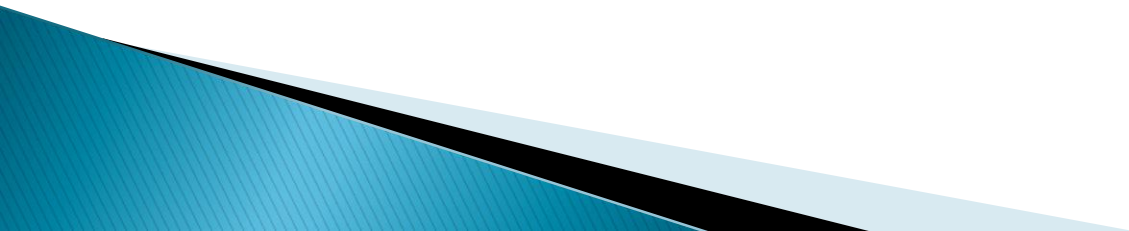
Problems Caused by Congestion

- Increased...
 - Travel time
 - Travel cost
 - Air pollution
 - Accident risk

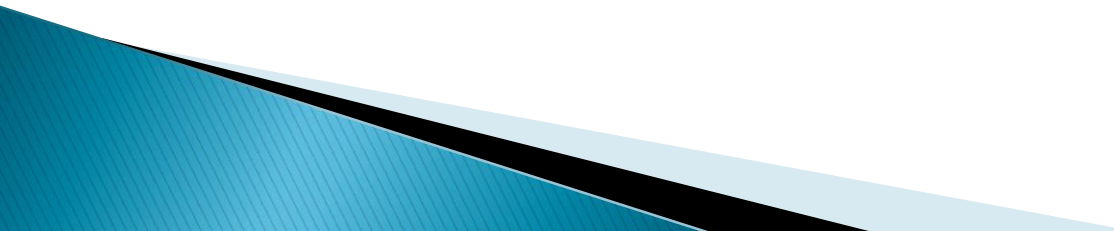


- **New strategy to set priorities (Development Roads, BRT, light and national Railways).**
- **Move toward Public Transit Systems.**
- **Efficient travel demand management systems, and increasing of the existing infrastructure capacity through utilization of Intelligent Transportation System (ITS).**
- **ITS is a cost efficient system, however, it requires a lot of requirements and experiences in new advanced technologies.**
- **Implementation of ITS requires institutional capacity buildings through academic and research institutes, awareness, deployment and finally being operational.**

Conducting Projects and Future Ambitions



Projects

- ▶ Preparation JHR stations for investment and marketing to the private sector for the establishment of centers of attraction of the tourist hotels, restaurants and entertainment centers.
 - ▶ JHR and some of cement factories in Jordan studying a possibility of the transfer cement to a number of cities within Jordan and to Syria
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Rehabilitation of Steam locomotives









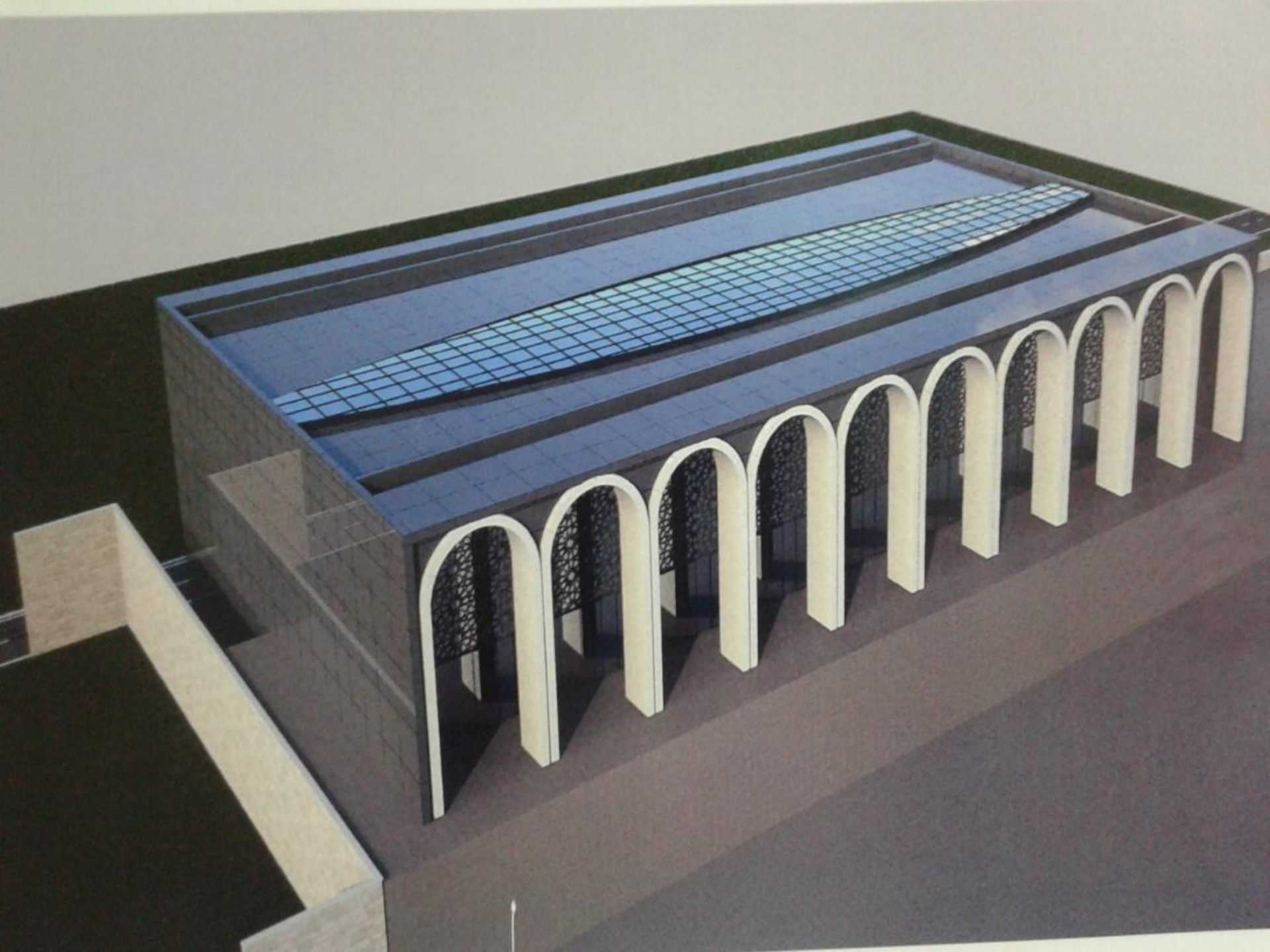


Ambitions

JHR MUSEUM

- Establish JHR museum with an area (3000 m²) in Amman station to reflect the history and heritage of the Hejaz Railway.






Queen Alia International Airport LRT

JHR prepare a study to run trains (tram) for the passengers transit from al-zarqa and Amman to Queen Alia International Airport, the total length of the rail line is (75 km) using the double ,standard gauge (1435 mm),

Deserves to be mentioned that the number of the passengers and travelers who travel between the two cities exceeds (400 000) in both directions every day.

LRT Project Objectives

- ▶ To respond to future transportation needs as a fixed reliable link between Amman and Zarqa Queen Alia Airport .
 - ▶ To be a support tool for the city's urban development and enhancement
 - ▶ Real alternative to car usage
 - ▶ Ensure high ridership
- 

Route Description



— Amman-Zarqa LRS
— Amman Ring Road
— Jordan Rail Link

● Workshop & Depot
● 1st Stage Stations
● Future Stations

■ Overpass
■ Underpass
■ Existing Bridge
■ Roadway Bridge



Bus Rapid Transit (BRT)

1. Amman-Zarqa Project:

- Middle of Amman-Zarqa road
- Reliable public transportation system
- Reduce congestion and traffic accidents
- 100 thousand passengers daily
- Employment
- Energy consumption
- Prequalification for contractors and consultants

-2. Great Amman Municipality (GAM):

- Infrastructure
- Contract



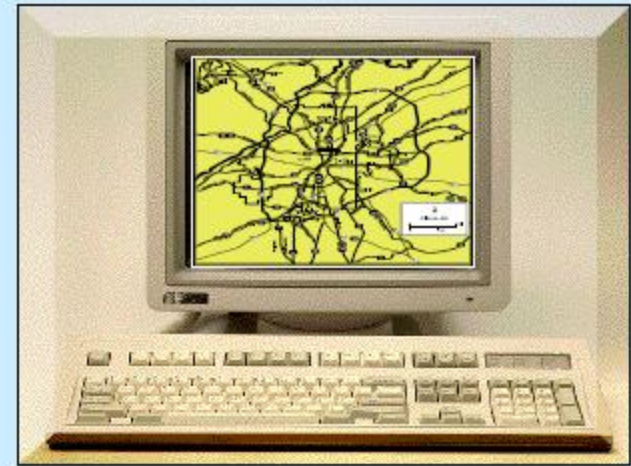
Amman-Zarqa BRT Route



Amman Ring Road

Public Transit





**Real-Time Traveler
Information is a goal.**



...Traffic and Transit Management



Thank you



Dr.malkawi15@yahoo.com

Reconstruction of locomotive 52 video