

## MÉTÉOR, PARIS, FRANCE

### OVERVIEW

LOCATION: PARIS  
 SCOPE: INTRA-URBAN  
 TRANSPORT MODE: SUBWAY  
 PRINCIPAL CONSTRUCTION: TUNNEL  
 NEW LINK: YES

### PRINCIPAL OBJECTIVES

CONGESTION RELIEF  
 LOCAL ECONOMIC DEVELOPMENT  
 REGENERATION  
 LOCAL TRANSPORT LINK  
 UTILISE NEW TECHNOLOGY

### PRINCIPAL STAKEHOLDERS

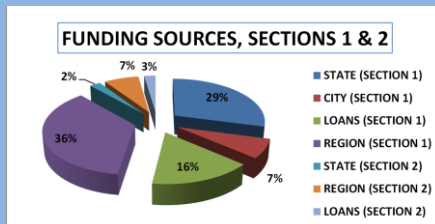
PROJECT PROMOTER/CLIENT: RATP  
 FUNDERS:  
 REGIONAL GOVERNMENT  
 NATIONAL GOVERNMENT  
 CITY GOVERNMENT

### PLANNING AND IMPLEMENTATION

APPROX. PLANNING START DATE: 1987  
 CONSTRUCTION START DATE:  
 1993/98/00  
 OPERATION START DATE: 1998/03/07  
 MONTHS IN PLANNING: 72/132/156  
 MONTHS IN CONSTRUCTION: 60/60/84  
 PROJECT COMPLETED: 60 MONTHS  
 BEHIND SCHEDULE (SECTION 2)

### COSTS (IN 2010 USD) (SECTIONS 1 & 2)

PREDICTED COST: 1.66BN  
 ACTUAL COST: 1.79BN  
 PROJECT COMPLETED:  
 8% OVER BUDGET  
 FUNDING: 100% PUBLIC

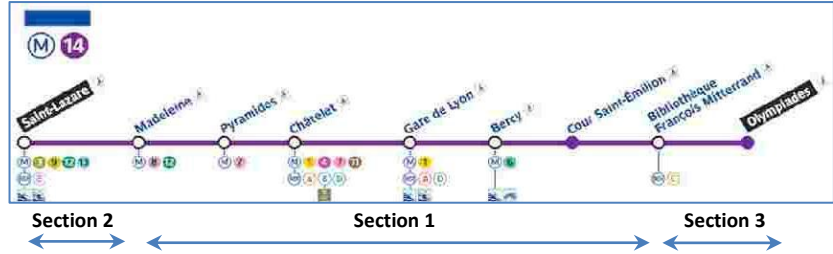


### INFRASTRUCTURE QUANTITIES

LENGTH: 12KM  
 COST PER KM (2010 USD): 0.15BN

### PATRONAGE

FORECAST TRAFFIC (1990 for 1992)  
 250,000 PPD  
 ACTUAL TRAFFIC (2007)  
 450,000 PPD



### INTRODUCTION

Météor is a 12km metro line running from the northwest to the south of Paris, with two terminals and seven intermediate stations (of which six connect to other metro lines or the national and regional railway network). It operates without drivers. It was built in three sections, the last opening in 2007.

Météor is associated with three urban development zones in the city – Paris Rive Gauche, Chalon and Corbineau-Lachambeaudie to Bercy – and with the regeneration of the 13<sup>th</sup> *arrondissement*.

### BACKGROUND

The main objective of the city transport provider, RATP, was to offer alternative routes for suburban passengers and commuters, in response to increasing passenger numbers on the existing network. The aim of building the region's first automatic metro was also a motivating factor. The city government wanted to serve planned new developments and increase access to areas with only bus links, and the regional government to create jobs in suburban areas.

The project was proposed by RATP in 1987. A competing project was proposed by the national rail operator, SNCF, at the same time and the decision to build both was made by the Prime Minister in 1989. The project was unusual in that the decision to proceed predated the normal regional masterplanning process. The three sections of the project were then included in successive State-region planning contracts, setting out agreed infrastructure investments.

As usual for French infrastructure projects, planning approval was then given, also in three sections, through the *déclaration d'utilité publique (DUP)* mechanism. Public consultation formed part of the *DUP* procedure, and was generally favourable to the project.

The project is thought to have accelerated regeneration of the 13<sup>th</sup> *arrondissement*. An estimated 15,000 jobs have been created at Paris Rive Gauche, and 1,495,800m<sup>2</sup> and 733,000m<sup>2</sup> of commercial and residential space respectively have been delivered throughout the three development zones.

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### TIMELINE

CONCEPTION: 1987: PROJECT PROPOSED BY RATP

CONCEPTION: 1987: NATIONAL RAIL OPERATOR SNCF PROPOSES COMPETING PROJECT

INCEPTION: 1989: PRIME MINISTER APPROVES PROJECT. SECTION 1 IN STATE-REGION PLANNING CONTRACT

INCEPTION: 1990: APPROVAL BY REGIONAL TRANSPORT AUTHORITY

INCEPTION: 1990: PUBLIC INQUIRY, SECTION 1

INCEPTION: 1991: *DÉCLARATION D'UTILITE PUBLIQUE* FOR SECTION 1

INCEPTION: 1993: PUBLIC INQUIRY AND *DÉCLARATION D'UTILITE PUBLIQUE* FOR SECTION 2

CONSTRUCTION: 1993: CONSTRUCTION STARTS, SECTION 1

DELAY: 1993: SECTIONS 2 & 3 DELAYED BY FIVE YEARS DUE TO FUNDING DIFFICULTIES

INCEPTION: 1994: SECTION 2 IN STATE-REGION PLANNING CONTRACT. PROJECT INCLUDED IN REGIONAL MASTERPLAN

INCEPTION: 1997: PUBLIC INQUIRY, SECTION 3

INCEPTION: 1998: *DÉCLARATION D'UTILITE PUBLIQUE* FOR SECTION 3

CONSTRUCTION: 1998: CONSTRUCTION STARTS, SECTION 2

DELIVERY: 1998: SECTION 1 OPENS

INCEPTION: 2000: SECTION 3 IN STATE-REGION PLANNING CONTRACT

CONSTRUCTION: 2000: CONSTRUCTION STARTS, SECTION 3

CONSTRUCTION: 2003: SECTION 1 CONNECTED TO REGIONAL EXPRESS RAIL NETWORK

DELIVERY: 2003: SECTION 2 OPENS

DELAY: 2003: CONSTRUCTION OF SECTION 3 STOPS FOR SIX MONTHS FOLLOWING TUNNEL COLLAPSE

DELIVERY: 2007: SECTION 3 OPENS

### CHARACTERISTICS

The project cost (sections 1 and 2) was estimated at EUR 1.121bn (2004 prices) in 1992, equivalent to USD 1.66bn (2010 prices)<sup>i</sup>. The final project cost was slightly higher: EUR 1.211bn (2004 prices) or USD 1.79bn (2010 prices).

The initial framework scheme of 1989 estimated a cost of only EUR 0.72bn (2004 prices) but changes to the scheme, particularly those requested by the regional transport authority, increased costs.

RATP is the main stakeholder, responsible for the conception of the project, supervision of construction, and operation of the line.

### TIMELINE ISSUES

The provision of funding by the City of Paris helped to accelerate progress on the project, and the planning and construction process was fast in comparison to other French transport projects. However, sections 2 and 3 were delayed by five years due to funding problems. A tunnel collapsed during work on section 3; construction was halted for six months to investigate the accident and the construction of a replacement tunnel caused a further three-month delay.

### FUNDING

RATP financed the project partly through public loans but primarily through public subsidies from the national and regional government. The city government also provided subsidies, uniquely for an infrastructure construction project, to help accelerate construction in the south of the city and thus to contribute to its regeneration aims.

The framework scheme of 1990 included revenue forecasts for 1996 and 2001, and predicted that RATP would be in deficit. The regional transport authority was to provide a subsidy to cover the deficit. Although it is not possible to distinguish the revenue of this specific line within the overall revenue of RATP, traffic volumes have increased steadily.

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<sup>i</sup> Costs have been converted to USD at 2010 prices, using historic inflation rates and current exchange rates, to allow comparison between projects.