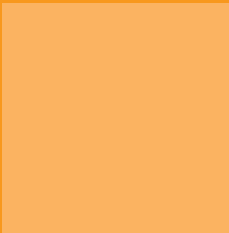


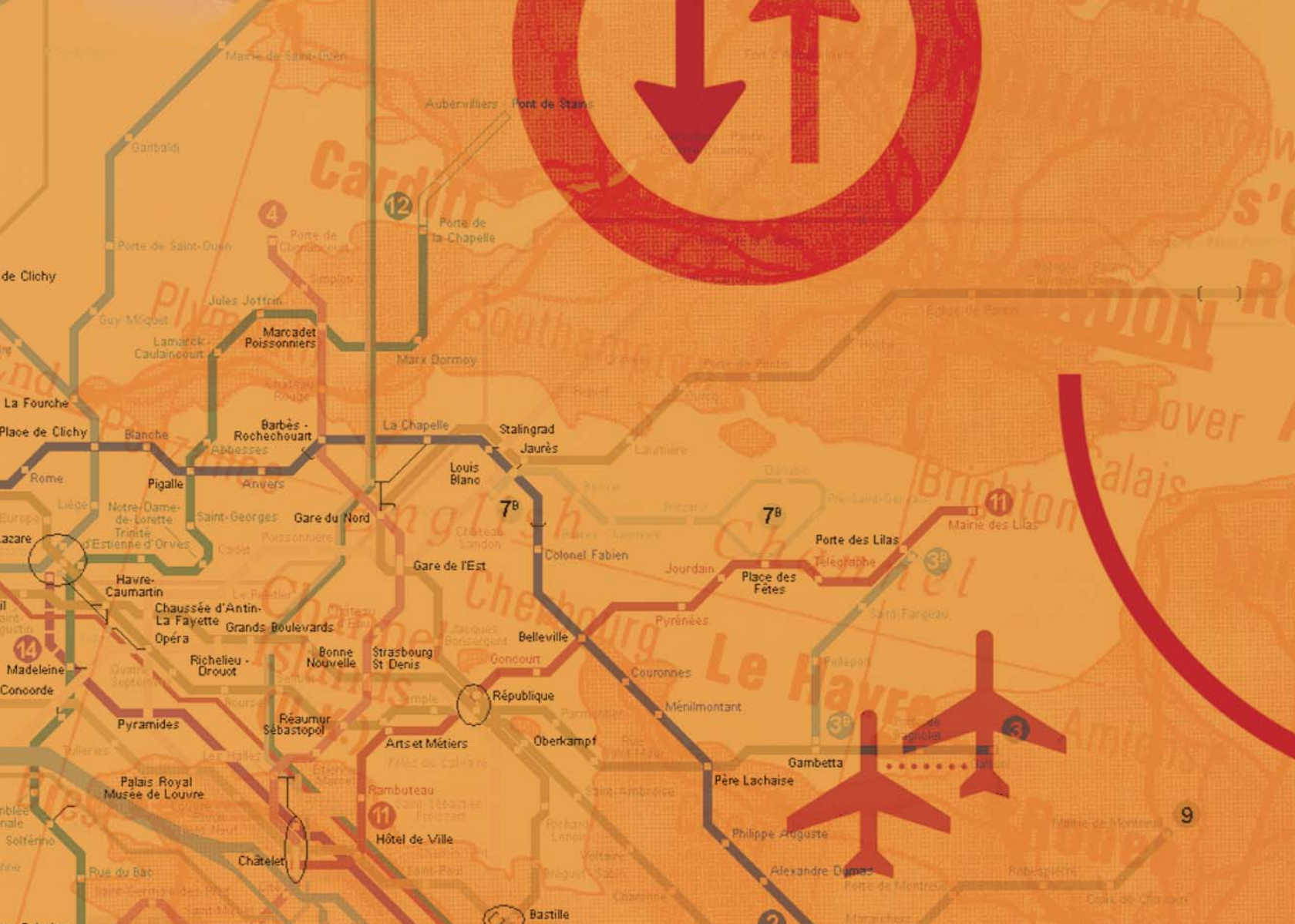
Services and Capabilities



Economic Advice in the Transport Sector



Economics is central



to tackling the challenges facing transport today.

Demand for travel continues to increase, while capacity constraints are widespread. Economics provides the analytical basis for making the best use of such limited resources. Pricing mechanisms allow capacity to be distributed to those who value it most; environmental and safety impacts may be internalised through user charges; and cost-benefit analysis remains an important technique in comparing options for transport investment.

In many countries the transport sector has experienced major restructuring for more than a decade, often delivering important efficiency gains. Whether considering options for future restructuring or seeking to make the existing structure work better, policy makers and regulators are increasingly drawing on economic techniques to develop and appraise transport policies, and to contain subsidies to operators whilst ensuring appropriate levels of service quality and investment.

NERA Economic Consulting has a dedicated Transport Group with unparalleled expertise in tackling this range of issues across the sector. We provide robust, independent, and clear economic advice to operators, infrastructure providers, potential investors, policy makers, and regulators.

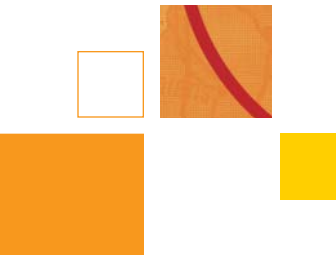
NERA's Transport Group

NERA's Transport Group is a leader in providing economic advice to the transport sector. With headquarters in London, we work on projects internationally, drawing on the expertise of our economists in Europe, Australia, and the United States. We have knowledge of and practical experience in each of the main transport fields:

- *Rail*: rail industry structure and reform, rail infrastructure, rolling stock, passenger services, freight operations
- *Aviation*: airports, airport capacity and slots, airlines, air traffic control

- *Urban transport*: public transport organisation and regulation, bus services, mass transit, congestion charging
- *Maritime*: port infrastructure, operations and services, shipping
- *Sector-wide*: privatisation and regulation, competition, taxation and pricing, safety, environmental impacts, transport appraisal

We help transport operators and their associations, governments, governmental bodies, international agencies, and regulators. We frequently work in collaboration with bankers, lawyers, public affairs consultants, transport planners, engineers, and other technical specialists.



Our experts help transport industries around the world develop and implement economically sound policies.



Selected NERA Transport Experience

NERA's Transport Group works on:

- Privatisation and liberalisation
- Economic regulation
- Cost and pricing analysis
- Competition policy
- Business and industry restructuring
- Public policy appraisal
- Financing
- Modelling and forecasting

Privatisation and Liberalisation

NERA provides world-class consultative expertise on both the impact of proposed reforms and the most appropriate form of industry restructuring. We help governments, public bodies, international organisations, regulators, and companies understand and address the complexities of privatisation and deregulation, and have particular expertise in the design of institutional and regulatory frameworks.

NERA's experience in this area includes:

- Regulatory and commercial advice to a banking alliance supporting the successful bidder in the part-privatisation of the UK National Air Traffic Services Ltd (NATS)
- Research for the Asian Development Bank identifying international best practice for promoting the role of the private sector in financing and operating infrastructure in developing member countries, focussing on the airport and air traffic control sectors
- Advice to the Airport Authority Hong Kong regarding a suitable regulatory framework for the airport after privatisation
- Analysis and recommendations for introducing private sector participation into the operations of the Zambian National Airports Corporation
- Review of private sector participation in transport infrastructure, and its legal and regulatory environment, in Côte d'Ivoire as part of a multi-sectoral Country Framework Report for the World Bank
- Consultative services to the Greek Ministry of National Economy on the future restructuring and privatisation of the ports of Piraeus and Thessaloniki

Economic Regulation

NERA is a leading adviser on regulatory issues and strategy. Our consultants are internationally recognised academics and industry experts who have been responsible for important developments in both the theory and practice of regulation throughout the world. These experts have combined their understanding of the economic principles of regulation with extensive international experience of practical application in a wide range of industries.

NERA's transport regulation experience includes:

- Projects on the regulation of airport charges for airport operators or regulators in the UK, Ireland, Italy, and South Africa, including appointments as economic advisers for the duration of a periodic charging review
- Wide-ranging assistance to the Government of Colombia in establishing a regulatory agency for the transport sector
- An investigation through a series of international case studies, for the Irish Public Transport Partnership Forum, of alternative models for the provision of city public transport services
- Preparation of the regulatory accounting system for the airport, railway, and port operators for the Peruvian transportation regulator
- Advice to a UK rolling stock leasing company during a regulatory review
- Advice on options for reviewing the railway incentive framework for the Office of the Rail Regulator
- Analysis of airport charging and regulation for the Sydney Airports Corporation
- Evaluation of rail fares regulation for the Strategic Rail Authority
- Study of price cap regulation for toll roads in Italy

Cost and Pricing Analysis

NERA helps clients develop cost-reflective charging structures which encourage efficient use of facilities and ensure cost recovery. We have extensive experience in advising clients in the rail, aviation, gas, electricity, and telecommunications industries on setting access charges.

Our work on cost estimation and efficiency measurement has helped clients respond to both competitive and regulatory pressures.

NERA's experience of cost and pricing analysis includes:

- A ground-breaking study for the European Commission (EC) examining the scope for a common approach to rail infrastructure charging in the European Union (EU)
- A benchmarking study of airport costs for the UK Civil Aviation Authority
- Advice to Network Rail on the expected cost of service disruption due to engineering on the railway
- International comparison of railway infrastructure productivity for the UK Rail Regulator
- An evaluation of the efficacy of existing and proposed Railtrack access charges for the Association of Train Operating Companies
- A study comparing the congestion costs of different heavy goods vehicles with infrastructure capital and road damage for the EC
- A study of future efficiency improvements by the London Underground Infrastructure Companies
- Advice to easyJet in its negotiations with London Luton Airport on a fair and efficient charging structure
- A wide range of advice on airport pricing for a number of major US airports
- Extensive advice on the implementation of highway congestion charging in the UK

Competition Policy

Competition policy exists to ensure the effective operation of the market. NERA provides economic expertise and professional support to lawyers and their clients in all areas of competition work in the UK and the EU.

NERA's advice on competition issues in the transport sector includes:

- Advice to the UK Rail Regulator on the application of the Competition Act with respect to allegedly excessive prices charged by train operating companies
- A major study of barriers to entry to the European aviation market for the EC
- Advice on competition issues with respect to a motorway concession in southern Europe
- A study on the impact of low-cost carriers on competition in the UK aviation market for the Civil Aviation Authority
- Expert testimony and litigation support for transport operators in the airline, shipping, port, rail, and bus industries facing UK and EC competition investigations
- Analysis of possible barriers to entry in railway rolling stock manufacturing markets, for the Strategic Rail Authority

Business and Industry Restructuring

The restructuring of businesses or industries can be a precursor to privatisation, a response to competition authorities' concerns, or simply a way of improving efficiency and effectiveness. NERA provides comprehensive analysis and management capabilities on organisation and market structure to help achieve these objectives.

In the transport sector, NERA's experience of business and industry restructuring includes:

- Advice on restructuring and regulation to the UK Government following Railtrack's move into financial administration
- Design of a performance contract between the Government of Cape Verde and the Cape Verde Airport Authority (ASA) to enhance managerial efficiency as a precursor to privatisation
- A study on the restructuring of heavy and light rail services in the state of Victoria, Australia
- Advice to a European airline on alternative policies for alliances with other airlines
- Advice on business prospects and a new organisational structure for Spanish sea ports
- Expert witness statement in an international arbitration case concerning a failed concession at Manila Airport



We have been at the forefront of establishing efficient and effective pricing structures for airports, railways, and many other industries.



Our economists make practical and implementable recommendations to governments and industry leaders.

Public Policy Appraisal

Policy appraisal and evaluation, including the development of guidance on methodology, is an important component of our work.

NERA's experience in this area includes:

- Formulation and analysis of market-based solutions for efficient allocation of slots at congested airports for the EC (DG TREN)
- Advice to London Buses on the value of the London bus network
- Best practice case studies of local integrated transport initiatives which improve accessibility to health care, education, and employment, to inform future Department for Transport guidance
- An economic impact assessment for a port operator
- Economic review of a report on the European Rail Traffic Management System for the Health and Safety Executive
- Development of guidelines for appraisal of capacity utilisation for the Strategic Rail Authority
- A comparative analysis of London Underground services for the London Assembly
- Advice to the National Audit Office on the appraisal of privately-financed roads and other projects
- Assistance to the Strategic Rail Authority in the development of its rolling stock strategy
- A study for Greater Manchester Public Transport Executive assessing the value of the local rail network
- Assessment of railway safety regulation regimes in the EU, and advice to the EC on measures to promote harmonisation
- Estimates of the impact of easyJet services on the economy around Luton airport
- A published manual for the UK Government on the application of multi-criteria analysis in government
- Preparation for the Department for Transport of a guide on the ex-post evaluation of major local transport projects
- Regulatory impact assessment of rail legislation (3rd Railway Package) for the Department for Transport



Financing

In an effort to increase the efficacy of public funds, policy makers are reviewing expenditure programmes. They are looking for ways of directing subsidies to where they are needed most, and searching for alternative structures for financing public services. Economic analysis is crucial to assess the effectiveness of subsidy mechanisms, and for exploring alternative ways of financing infrastructure and other major investments.

NERA's experience on financing in the transport sector includes:

- Analysis of the impact of reforming the subsidy mechanisms for UK bus services for the Commission for Integrated Transport (CFIT)
- Analysis for the EC of the financial position of railways as well as the subsidies and other state payments received. Some of the results were updated in a subsequent study for Deutsche Bahn
- Advice on the funding structure for the Land Transport Authority for the Ministry of Finance and the Land Transport Authority of Singapore
- Advice to NATS, Dublin Airport Authority, Aeroporti di Roma, and others, on the cost of capital
- Estimation of optimism bias and recommendations on its treatment in appraisal, with respect to rail infrastructure projects, for the Strategic Rail Authority
- Assistance to the National Audit Office in a financial analysis of London Underground Public Private Partnership
- Advice to a bidder for a major infrastructure project on proposals for sharing revenue risk with government
- A study of the profitability of the UK bus industry for the CFIT

Modelling and Forecasting

Quantitative analysis forms an important part of many of our studies. We are renowned for our expertise in the application of econometric and quantitative techniques to real-world problems.

Our transport sector modelling projects include:

- For the CFIT, development of a highly disaggregate model to estimate optimal congestion charges on roads across England
- Econometric analysis to derive long-term rail fare elasticities for the Strategic Rail Authority
- Development of a strategic model of the London bus network, for London Buses
- Freight traffic forecasts for the Strategic Rail Authority using different freight access charges
- An econometric benchmarking study for EUROCONTROL comparing the costs of European air traffic control operators
- Two published reports on the impact of teleworking and videoconferencing on future traffic and road congestion levels
- Revenue forecasting for the Consorcio Regional de Transportes de Madrid for underground and local bus services under alternative pricing scenarios
- Detailed econometric estimation of total factor productivity growth in US railroad infrastructure to inform the British rail regulator about feasible annual reductions in unit rail infrastructure costs
- For the Strategic Rail Authority, analysis of disaggregate regulated and unregulated rail fares to model the impact of fares regulation in different rail markets



NERA's Transport Sector Clients

ACEA
Angel Train Contracts
Asian Development Bank
Association of Train Operating Companies
Australian Federal Government
BAA plc
British Airways plc
Brittany Ferries SA
Civil Aviation Authority
Civil Aviation Authority of Singapore
Commission for Integrated Transport
Competition Commission
Confederation of Passenger Transport
Department for Transport
Deutsche Bahn
Dublin Airport Authority
EBRD
EUROCONTROL
easyJet
European Commission (DG TREN)
European Conference of Ministers of Transport
First Group plc
Health and Safety Executive
HM Government (various central departments)
GE Capital
Goldman Sachs
Greater London Assembly
Greater Manchester PTE
Greek Ministry of National Economy
Iberia Airlines
Irish Public Transport Partnership Forum
London Buses
Madrid City Council
National Audit Office
National Express Group plc
Network Rail
New Zealand Treasury
Office of Fair Trading
Office of the PPP Arbiter
Office of Rail Regulation
RAC Foundation
Singapore Land Transport Authority
Singapore Ministry of Finance
Strategic Rail Authority
Swedish National Rail Administration
Sydney Airports Corporation
Transport for London
Transport Reform Unit, Victoria State Government
World Bank

NERA's International Experience

NERA has extensive international experience facilitated by a global network of offices. Countries in which we have carried out transport consultancy assignments include:

Australia
Austria
Belgium
Bulgaria
Cape Verde
Colombia
Denmark
Estonia
Finland
France
Germany
Greece
Hong Kong
Ireland
Italy
Ivory Coast
Jamaica
Kazakhstan
Lithuania
Luxembourg
Malaysia
Netherlands
New Zealand
Norway
Peru
Philippines
Portugal
Singapore
South Africa
Spain
Sweden
Switzerland
Tanzania
United Kingdom
United States
Zambia

