



TRANSPORTATION STRATEGY
AND PLANNING



About Us



EWL is an Engineering Company which specialises in Project Management, Engineering and Infrastructure Management Consultancy, and has a team of experts who specialise in Infrastructure, Transport and Town Planning.

EWL is managed by experienced Directors, and all of them have more than 30 years experience in Design and Construction of Civil Engineering and Building Projects and Project Finance.

EWL has its own personnel specialising in Project Management, Design Management and Construction Management. This capability statement highlights are capability in the specialist field of Strategic Transportation Planning in Railways, Highways and all other modes of transport.

This includes the following:-

- Project Management and specialist Railway advice to non rail clients.
- Design, Build, Finance, Operate and Transfer (DBFOT) of Infrastructure Projects.
- Strategy and Planning advice.
- Project Finance.
- Green/Sustainable /Carbon Free advice.

In addition we also undertake the following specialist services to the other sectors of the engineering industry.

- Project Management
- Independent Audits
- Project Reviews
- Due Diligence
- Supplier Competency Checks
- Joint Venture Partnerships

EWL's team of specialist transportation consultants advise Governments on Strategy, Policy and Planning of Transportation projects and Smart Cities.

A number of new towns and cities are being planned worldwide and the proper functionality of these towns and cities is ever important to ensuring prosperity within these areas and at the same time provide new modernised forms of transportation appropriate for the particular town and/or city. This is not a "one solution fits all" area and requires careful interpretation by experts within the field of transportation planning and involving experts from the disciplines of: Highways, Railways, Airports, Buses, Trams, Metros, and extends to Ports in some areas.

EWL has key experts who can provide unique solutions for Governments, on both a National and local level. This area of work is highly specialised and EWL has a team, all of whom, have more than 30 years experience in their particular field of expertise.





Transportation Strategy Consultancy

Strategic Advice

EWL offer our clients informed strategic advice. We believe that our specialist railway team, in particular our high-speed rail experience, gained over the past 50-years gives us the ability to make in-depth, objective and trusted judgements. We continue to advise governments and the rail industry throughout the world on their strategic rail investments, and are expanding this into other transportation sectors.

Transportation Appraisals, Business Cases and Funding Options

Securing the funding and investment for transport solutions requires demonstration of value for money and financial sustainability. For public and private sector projects, value for money is obtained by investing in measures which best meet social, economic and technical requirements which are specific to that project. We provide the strategies, analysis of current problems and opportunities, by demonstrating a fit with policy aims, including risk identification.

Our team includes experts in stakeholder engagement; transport planning, modelling and forecasting; economic, safety, environmental and financial analysis; scheme design technical assessments, costing; and business case preparation.

EWL have been advising Clients and have expertise to help clients secure funding and approvals for a large number of schemes and programmes including Local Sustainable Transport Fund applications, High Speed Rail, National commuter rail networks, major transport schemes, and Metro-link projects.

Public Transport Development Strategies and Feasibility Solutions

Our transport planning and engineering skills are combined on all of our projects to develop evidence based public and private transport development strategies; balancing the requirements of the corridors served, policy goals and costs.

EWL offer integrated teams with expertise in project management, transport modelling and planning, demand analysis, stakeholder management, public transport scheme design, innovative engineering and operations, cost estimation, economic and financial appraisal and business planning.

Transportation Planning

We work with country governments, local authorities, regions, districts, cities and to support their aspirations to develop excellent transport networks in order to accommodate the world's growing populations, support economic vitality and most importantly protect the environment.

Our approaches include stakeholder and public consultation; transport modelling and analysis; capacity analysis, and engineering feasibility, design and costs.

Finance of Transportation Projects

EWL have a team of specialist who advise on PPP/PFI projects. EWL have been involved in numerous International Projects which required Finance. The team were responsible for creating the SPV and then provided the service required to ensure Financial closure of BOT, DBFOT schemes.

Scheme Development Planning and Traffic Engineering

Optimal traffic and transport engineering designs improve the efficiency and accessibility of our towns and new developments; which can be essential in securing planning approval. We design transport solutions to meet the needs of all cars, service vehicles, public transport, pedestrians and cyclists.

Our services include estimating trip generation of new developments, junction analysis and design, parking and pick-up/drop-off designs, internal circulation layout, signing strategies and temporary traffic management advice.

Our clients include governments, councils, developers, etc.



Transportation Strategy Consultancy



Built Asset Optimisation

Improving the profitability of a transport business relies on understanding what customers need and how much they are willing to pay; and understanding the demand, cost and revenue implications of an investment.

EWL offer integrated teams with expertise including customer satisfaction surveys, willingness to pay studies, financial analysis, stakeholder engagement, scheme design and cost estimation, modelling and forecasting, risk analysis and business case development.

Our clients include governments, National rail, highway agencies, train operators, toll road concessionaires, and international institutions.

Transport Research & Surveys

Understanding travel patterns, preferences and behaviour helps transport providers to better provide for transport demand, increase market share and revenues, and meet customer expectations of quality of service.

Our teams have expertise in household and traveller surveys, traffic and passenger count design and analysis, travel time surveys, customer satisfaction surveys, attitudinal studies, and willingness to pay research (including Stated and Revealed Preference).

Forecasting Transport Demand against Capacity Modelling

Forecasts of transport demand can be useful for host of applications including developing transport strategies to serve growing populations; tackling congested roads, stations and public transport services; optimising public transport; improving revenues from transport provision; securing financing and funding; designing new infrastructure; assessing and tackling local air quality and noise problems; and reducing the carbon foot-print.

We advise on proportionate approaches and employ a range of modelling techniques including highway and public transport modelling, micro-simulation, variable demand models, pedestrian simulation, and econometric analysis.

Engineering and Environment

We deliver engineering and environmental expertise for schemes that are both feasible and affordable. We have advised a funding partner of Rail Link Engineering Ltd, the project management and engineering team, which delivered HS1 on time and within budget. As a member of this consortium we managed the infrastructure design and construction and oversaw the construction of tunnels, bridges and viaducts, rail track and overhead catenary, in-cab signalling, power supplies and state-of-the-art telecommunication systems. Once built, we also managed the detailed programme of testing and commissioning the line.

Freight & Logistics

Freight services and logistics are essential to economic well being. We assist client to answer questions such as:

- What freight and logistics infrastructure is required?
- How to manage the interaction of goods and passengers traffic?
- How to reduce the environmental impact of transport?
- What are the financial, social and environmental impacts of potential investments?

Our services include logistic surveys, freight modelling and forecasting, socio-economic and environmental impact appraisals, operational optimisation, and freight infrastructure feasibility studies.





Railways

High Speed and Inter City Rail

EWL have a team of Technical Specialists who are advising on all engineering aspects of High Speed Rail projects worldwide and have been assisting Governments with strategic advice and providing them with support in preparing requests for tender proposal documentation. Our team do not possess any allegiance to any of the world's major suppliers of High Speed Trains and can therefore provide a truly independent and impartial service to our Clients. EWL have also been advising other technical design teams on the veracity of their solutions as well as reviewing designs from numerous other firms to ensure best practice is obtained on all these projects.

We are involved in:

- Infrastructure projects
- Design and construction of railways
- Leasing and financing
- Health & safety issues
- Real estate and construction
- Rolling stock and depots
- Planning and environmental issues
- DBFOT/PPP/PFI projects

Our rail team has a wealth of expertise in advising on all technical aspects of the rail industry. We act for a spectrum of clients and work together with legal and financial organisations to create tailor made techno-commercial solutions for each High-Speed Rail Clients, – both in the UK and overseas. We have a particular interest in High Speed Rail projects overseas but have also been working on the HS2 project.

Regional Trains

Railway systems that are efficient and eco-friendly can help to improve the competitiveness of the regions.

EWL is committed to regional development within the rail sector, offering strategic advice on an extensive range of high performance regional trains that are able to offer some highly competitive travelling times for medium and long distance services.

Most regional trains are designed with Passenger comfort in mind. All trains feature the very latest safety technology whilst meeting the most exacting interior design specifications, to operate on medium and long distance routes, day and night.

Locomotives

EWL has a long-standing tradition in the design and supervision of all types of locomotives for different track gauges:

- Electric locomotives
- Diesel locomotives

Any locomotives can be fitted with a special bogie system which can run on different track gauges, indistinctly and fulfil the kinematic design requirements have been assessed by EWL.

Maglev

Maglev is a benchmark in the field of high speed. It has 30 years' experience in the business, gained initially in France with the launch of the first TGVs, and later developed and enhanced through its many contracts around the world.



Metro, LRV, Trams and Buses

Metros

Millions of people across the globe use the metro as a means of transport for getting around each day. The cities of the future require urban transport solutions that are able to guarantee punctuality and travel comfort.

No two cities are the same. For this reason, metro solutions are specific to each customer and infrastructure.

EWL team members have been advising on many fully automated metros, which do not require the installation of a driver's cab or crew on board during operation. Each day, the metro solutions move millions of users throughout the world. In this way we have helped improve intercity traffic in cities such as London, Madrid, Barcelona, Brussels, Rome, Washington and Sao Paulo, by making it faster, safer, cheaper and environment-friendly.

Monorail

Monorail solutions, are in response to the need for mass passenger transport in big cities. This driverless system offers some exceptional economic and operational advantages, being a less costly construction and maintenance system, fitted with rubber tyres for a higher traction performance.

Modular solutions, offering different configurations based on the requirements of each particular customer have been proposed. This fast, punctual transport system is able to move a large number of passengers on each journey, thanks to its extensive areas for standing passengers.

Tram-Trains

The strategic development of cities and the need to link them to the neighbouring towns and villages has led to the creation of new tram-train transport solutions. These units not only run on the city's tram lines but also make use of the commuter line infrastructure to link the city to other urban areas.

On the other hand, a number of urban transport authorities, such as the North American ones, are demanding articulated units with greater performance characteristics than LRVs and low-floor trams. These have been successfully commissioned in cities such as Pittsburgh (USA), Sacramento (USA), Amsterdam (Holland) and Monterrey (Mexico).

Trams, Light Rail and Buses

Today light rails systems, (LRV) are becoming ever more important in cities around the globe, as they represent a mobility solution that helps reduce traffic congestion problems, offering passengers a fast, punctual and sustainable means of transport.

With their avant-garde design and flexibility, trams give each city its own identity.

Trams meet the most exacting requirements with regard to eco-design and accessibility, blending into the urban environment whilst maintaining a high performance level.

With our long-standing experience in the design and supply of urban solutions, we have been involved with the development of an innovative mobility concept called ACR for the catenary-free operation of trams.

We have advised several towns on Bus Rapid Transport (BRT) solutions and are the only engineering company that has experience in all of the different types of guided systems.





Highways, Airports, Ports and Car Parks

Highways/Roads

EWL has a very experienced Highways team. They have experience in National Highways, Motorways, Toll roads and Local road network planning and design. This team complements our transportation consultants to ensure a wholistic transportation solution is provided to all our Clients every time.

Airports

In addition to our Railways and Highways team, EWL has a very experienced Airports team. They have experience in International and National Airport planning and design. This team work together with our other transportation consultants to ensure a wholistic transportation solution is provided every time to all our Clients.

Ports

EWL have provided numerous studies, reports and outline designs of Port layouts for International Clients. This service is also combined into the rest of our transportation planning consultants for Cities which have major ports as part of their infrastructure requirements.

Car Parks

EWL has a team of Multi Storey Car Park (MSCP) specialists who assist with the strategic planning of towns and cities. We also have a unique permanent / demountable solution which may be suitable for some MSCP.

With our funding partners we also offer financial solutions for schemes, which allows clients to use their funding for other projects.

- Refurbishing and reconfiguration of existing car parks
- Provision of additional and extra spaces utilising user friendly designs
- Provision of the most appropriate Car Parks solution for a specific site
- Value for money analysis, business cases, feasibility and optioning reports
- Project surveys, topographical, ground investigation, services, asbestos, etc.
- Undertake all site surveys with in-house team
- Project Management
- Outline and detailed designs
- Detailed design and tender documentation
- Provision of finance if required to facilitate clients needs



We provide the following, but not limited to, services to the rail sector:

Management Consultancy

- Corporate strategy
- Organisation development
- Business plans
- Investment appraisals
- Profit enhancement plans
- Human resource assessments
- Health and safety audits
- Sales and marketing
- Business process re-engineering
- Information technology advice
- Due diligence
- Benchmarking
- Outsourcing
- Facilities/Estate management
- Procedural handbooks
- Training strategies
- Training course facilitation
- Dispute resolution

Project Management

- Developing the project brief
- Strategy and feasibility
- Estates review
- Options appraisal
- Business case
- Funding submissions
- PPP/PFI advice
- Team building and appointments
- Design management
- Programming
- Cost control
- Contract management
- Value management
- Risk management
- Contract and procurement
- Employer's agent
- Fund monitoring
- Completion and handover

