
BUS
SYSTRA

The growth and success of our company has been founded upon our core values and our desire to constantly evolve to meet our clients' needs. This constant drive ensures that we can always provide our clients and our partners with a standard of service and performance worthy of the trust placed in us.

SYSTRA provides a whole range of services throughout Ireland that will support you in the evolution of your thinking and solidify the delivery of your projects. Our unique approach guarantees you efficiency, success and peace of mind.

"I am pleased to present this brochure which details the services we provide in Ireland and some of the projects we are proud to have delivered. If you would like to know more, please contact me."

Ian Byrne,
Director, Ireland

- Network & Strategy Demand Modelling
- Public Transport Modelling
- Micro-Simulation
- Pedestrian Simulation
- Econometric Analysis
- Local Development Frameworks

- Masterplanning and Urban Design
- Access Design
- Transport Assessment & Travel Plans
- Signage Strategy
- Parking Justification
- Site layout and Circulation design
- Expert Witness

- Delivery of Planning Obligations
- Integration of Public Realm
- Public Transport Interchange Design
- Freight Route Strategies
- Urban Traffic Control
- Mobility Management Plans

GLOBALLY
78 OFFICES
6000 STAFF

IRELAND
STAFF
20

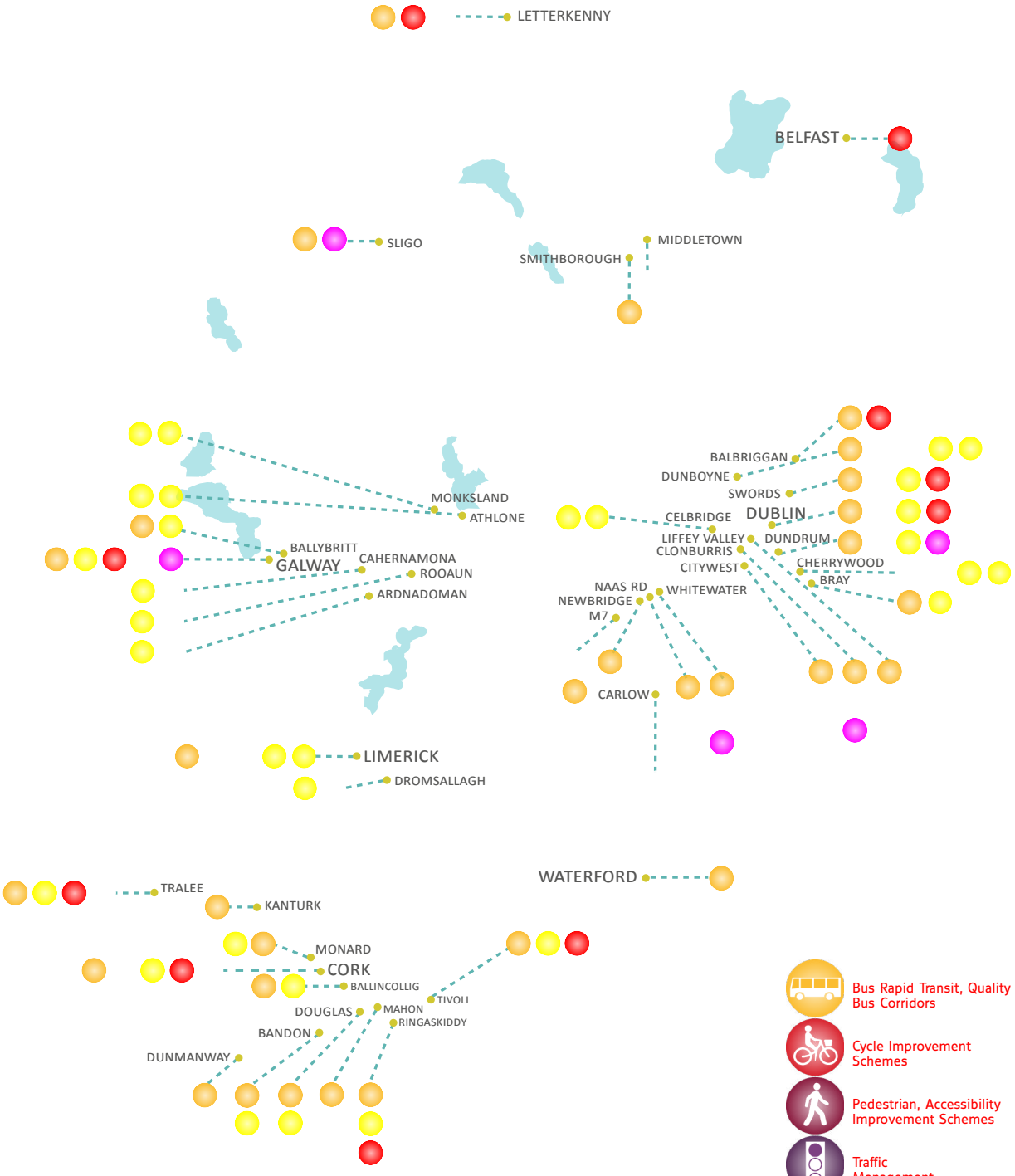
UK
STAFF
450

- Evidence Appraisal
- Business Case Preparation
- Integrated Fares & Ticketing
- Stakeholder Engagement
- Scheme Costings
- Financial Analysis
- Risk Identification

- Travel Behaviour Research
- Behavioural Change Monitoring
- Large dataset processing
- Research & Analysis
- Public Perception
- Innovative Technology Implementation

- Workplace Travel Plans
- Smarter Travel Planning
- Public Transport Scheme Design
- Environmental Assessments
- Carbon Footprint Estimation
- Public Consultation

OUR AREAS OF WORK



Flood Risk Assessments
Highway & Drainage Design
Design of Transport Infrastructure – tunnels, bridges, viaducts
Railway Systems Engineering
Project Management

Bus Rapid Transit, Quality Bus Corridors

Cycle Improvement Schemes

Pedestrian, Accessibility Improvement Schemes

Traffic Management

Street, Road, Junction Improvement

Rail, Metro

Health & Safety

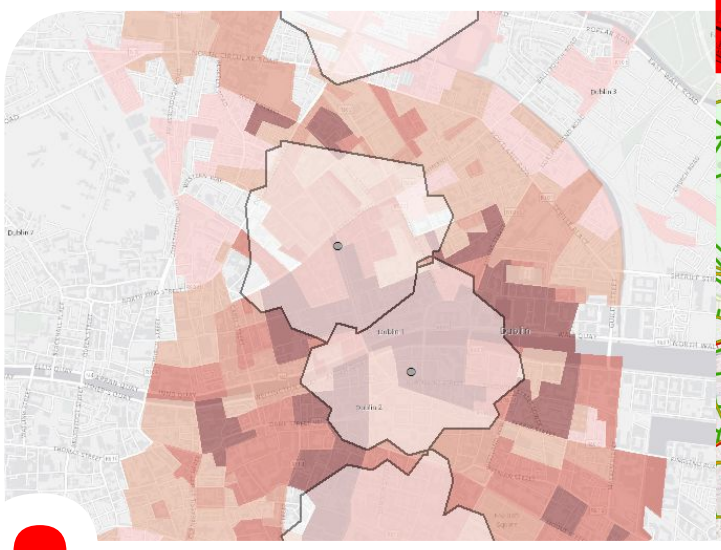
Intelligent Transport System

Environmental

Developing transport plans and strategies that consider the mobility needs of all, and recognise and deliver national policy and best design practices, depends more and more on sophisticated data analysis and models to deliver economic, social and environmental benefit. The relatively recent return to strong economic growth means further residential and commercial development and infrastructural investment, even while challenges remain in creating an efficient transport system and delivering national housing targets. Now there is more need than ever to develop and implement plans that tackle these challenges using evidence based, data-driven modelling so that the decisions being made today lead to lasting improvements in quality of life and economic resilience for years to come.

Our extensive team of professional consultants use cutting-edge modelling, transport planning, and a keen collaborative ethos, to guide our clients through every planning challenge, from strategy development to on-the-ground implementation. SYSTRA Dublin is the leading transport modelling team in Ireland, with highly qualified and experienced members who take pride in providing optimal modelling solutions to your needs. We strive to develop clear insights based on proportionate and deliverable approaches, tailored to the transport situation and most importantly the goals you are trying to achieve.

We offer capability in all standard transport modelling software, including Cube Voyager, SATURN, PTV VISUM, PTV VISSIM, S-Paramics, AIMSUN, and OmniTrans, and have applied these tools in transport plans to serve growing populations; tackle congested roads, stations and public transport services; optimise public transport; improve revenues from transport provision; secure financing and funding; secure planning permission; design new infrastructure; assess and tackle local air quality and noise problems; and demonstrate environmental impacts.

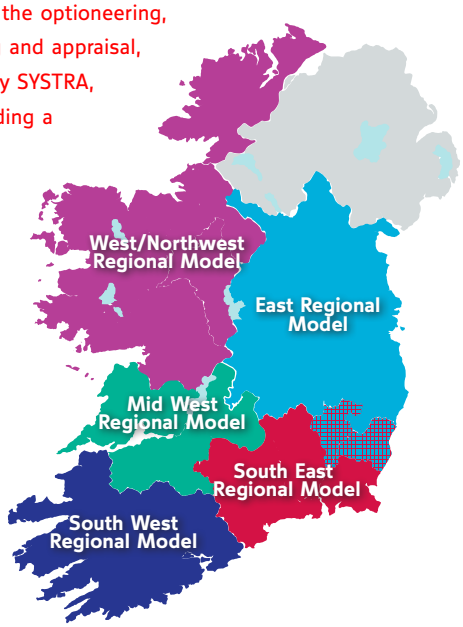


National Transport Authority (NTA) Transport Modelling Services Contract

SYSTRA are working with the National Transport Authority and Irish Rail to develop a range of options for the DART Expansion Rail project in the Greater Dublin Area (GDA). The purpose of the DART Expansion Programme is to provide a substantial improvement in public transport supply in the GDA by integrating the existing four heavy rail lines in Dublin City Centre thereby increasing passenger capacity, train frequency and interchange opportunities.

The DART Expansion Programme will represent the cornerstone of the future transport system for the GDA through integration with other modes of transport. The DART Expansion Programme is primarily enabled through the construction of a rail tunnel underneath Dublin City Centre, linking the Cork line west of Heuston station to the Northern line north of Connolly station. Ancillary improvements to the existing network include electrification to Drogheda, Maynooth, and Hazelhatch, removal of level crossings, purchase of additional rolling stock and provision of new depot facilities.

The tunnel section of the DART Expansion Programme (with stations at Inchicore, Heuston, Christchurch, St. Stephen's Green, Pearse and Docklands) is called the DART Underground Project and has a capital cost of approximately €3billion. The tunnel section is subject to much of the optioneering, transport modelling and appraisal, being undertaken by SYSTRA, with the aim of finding a possible cheaper alternative to this element of the project whilst maintaining much of the potential benefits of the overall scheme.



Some of the major model development projects undertaken by SYSTRA include:

- This involved a year long period of consultation with the NTA to define the proceeding programme of model development based on a thorough analysis of how transport modelling best supports its remit

- This system converts planning forecasts (e.g. demographics and land use) into estimates of levels of trip making.

- 5 regional models were developed to cover every city-region (e.g. Cork, Limerick, Galway, Waterford cities and regions); this part of the commission is concerned with efficient, coordinated delivery and rapid development of these models through the application of repeatable techniques and methods development out of the ERM (Dublin) modelling project.

- A project to pilot the use of the new ERM model and compare business case measures (e.g. CBA / TUBA outputs) to corresponding outputs developed using the pre-existing Greater Dublin Area model.

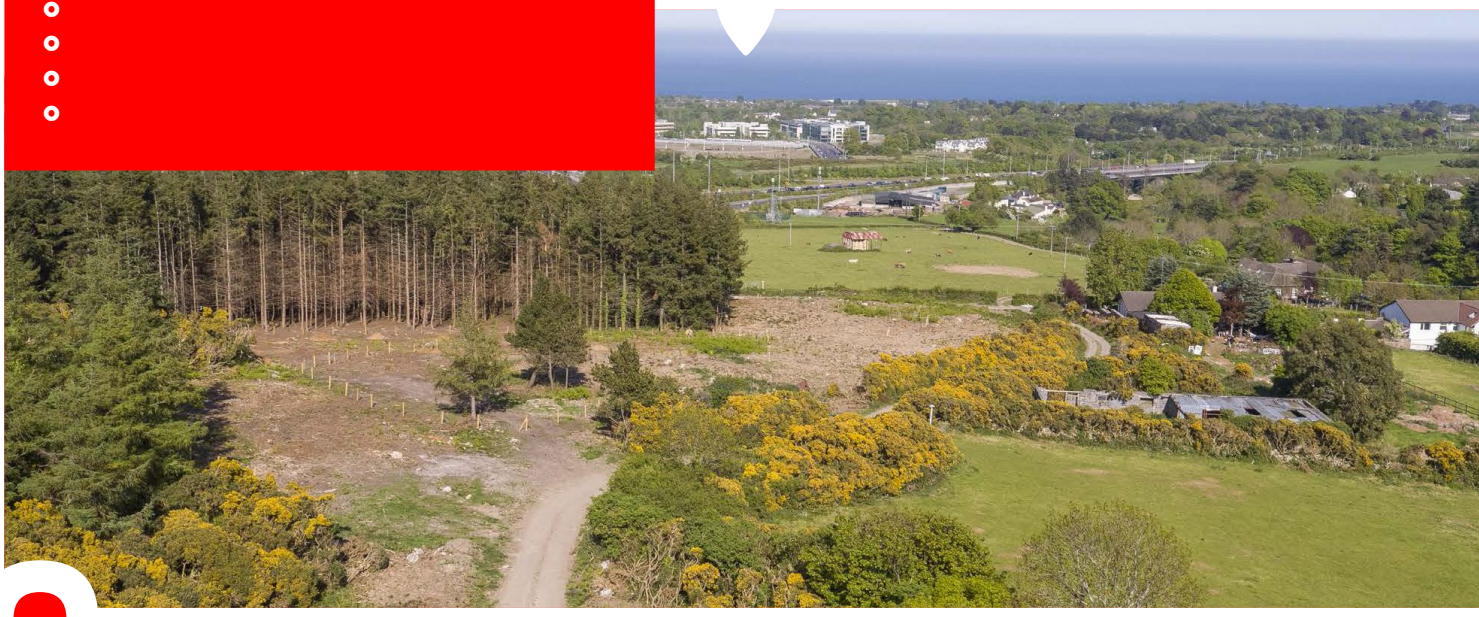
Transport access is vital for successful development. The journey to and from a place and the ease of movement within, shape our memories and our decision to return. Understanding the ways in which people move and behave is fundamental to good transport planning and, therefore, the success of any development. At SYSTRA we understand the key challenges faced in the development of a site including the need to optimise the development potential whilst ensuring its sustainability; integrating the development into the existing and future urban fabric; and developing viable transport solutions commensurate to the scale of the development.

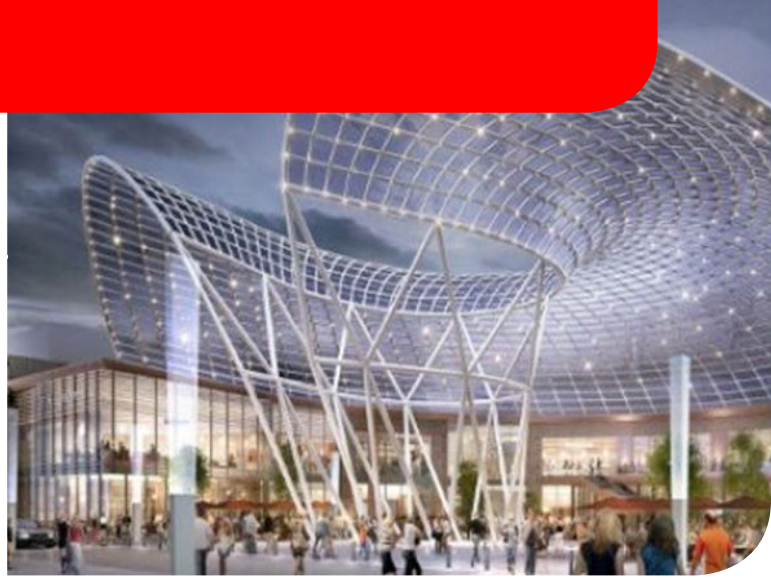
We provide a bespoke service that produces high quality and responsive advice. Our senior staff are intrinsically involved in projects from commissioning to planning permission; therefore they will be fully aware of all the specific issues pertaining to each project and will be able to provide insightful advice. We ensure that our assessments provide 'sustainable' solutions and as such an assessment of how favourable the site is in terms of access by non-car modes (public transport, cycle and pedestrian) has become an essential part of our approach.

Cherrywood SDZ is strategically located in an undeveloped land-bank of approximately 360 Hectares, situated 16km south east of Dublin City Centre.

To understand the impact generated by Cherrywood SDZ, SYSTRA were required to provide advice at both the strategic and local transport level. A Transport Assessment Framework was undertaken to understand the impact generated by Cherrywood SDZ, its multi-modal infrastructural needs and phasing requirements. The framework established the transport modelling required to enable a clear understanding of both the strategic and local impacts of the Cherrywood SDZ.

The framework established a process of using the National Transport Authority's East Regional Model (ERM) to assess strategic level multi-modal impacts generated for numerous forecast years. The ERM was also used to support the development of a more detailed Local Area Model.





SYSTRA were appointed by Hines Real Estate Ireland Ltd. to undertake a Strategic Transport Assessment (STA) to support the planning application for the proposed Liffey Valley Plaza development to be located to the south of the existing Liffey Valley Shopping Centre. The proposed development will consist of a mix of retail, leisure, commercial and entertainment uses.

The purpose of the Strategic Transportation Assessment was to provide a multi-modal review of the expanded centre in terms of positioning it within the wider strategic transport network and the role it will play in supporting future public transport services, other sustainable transport proposals, as well as planned growth of the South Dublin area.

Utilising the NTA's Eastern Regional model, SYSTRA produced a Strategic Transportation Assessment report outlining the strategic mode share, the traffic impacts generated and the mobility management requirements for the extension.

SYSTRA have retained their role as transport advisors to the Port of Cork Company and continue to support PoCC during the preparation for the redevelopment of Ringaskiddy Port. This has included continued transport planning advice for the planning responsibilities set out by An Bord Pleanāla and stakeholder discussion to ensure all planning responsibilities are adhered to.

SYSTRA have produced and agreed with Cork County Council the principles of the Construction Traffic Management Plan which sets out the responsibilities and quantum of construction traffic allowed on the surrounding highway network during the construction stage of the redevelopment.

SYSTRA are continuing their support in the development of a Freight Mobility Management Plan. Currently on trial at Tivoli docks this will be relocated to Ringaskiddy with the redevelopment of the Port and will ensure all freight vehicles arriving at the port benefit from an efficient turnaround time.

SYSTRA was appointed by Crossbridge Investments as Transport Consultants for the planning, design and construction stages of the Dundrum Town Centre shopping centre development south of Dublin which opened of 3 March 2005. At the time, the Centre was the largest building project under constrctuion in Ireland with a value of €640m and is a unique example of what is best in European urban renewal.

SYSTRA was responsible for bringing forward measures to ensure that the development is highly accessible by bus and rail systems including the LUAS lightrail system, which has accounted for approx. 20% of all trips to the Centre to date. Further measures included the prodcution of a mobility plan to help manage staff travel to and from the development.

SYSTRA designed new road infrastructure to support the development and its traffic imact on the surrounding road network, as well as a full external signage strategy for the development including variable message signs. SYSTRA also designed the access system for the 3500 space multi-storey main car park which has been widely praised, setting a new benchmark for parking facilities in Ireland.

The public sector in Ireland faces a series of challenges in delivering their objectives for future development. The provision of a sustainable and affordable transport network is an essential part of planning for growth. At SYSTRA we understand the key challenges facing Local Authorities in delivering transport solutions including the need to constructively engage with a diverse range of stakeholders; integrate new development within the existing urban fabric; balance competing needs for space and services; and, champion innovative and progressive transport solutions.

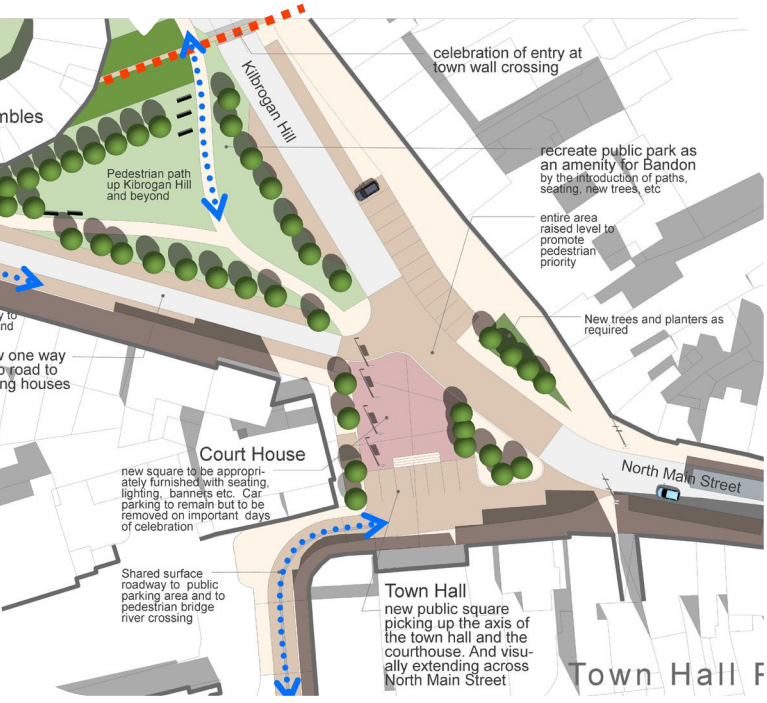
We provide evidence based advice to the public sector building on our market leading reputation for rigorous analysis and delivery of innovative solutions. We understand the challenges that Local Authorities face in developing land use strategies and dealing with development proposals.

We consider all modes of transport from the outset with a strong emphasis on improving accessibility and integration to encourage a modal shift away from the private car. Working closely with designers and spatial planners we develop transport solutions using a holistic approach that considers area wide transport requirements.

- Traffic management design
- Town centre enhancements
- Parking management strategies
- Public transport interchanges
- Park-and-ride-schemes
- Pedestrian and cyclist planning
- Urban Traffic Control and signal design
- Road and junction outline designs
- Freight routing strategies
- Accessibility surveys and design
- Road safety
- Public and Stakeholder Consultation

SYSTRA worked closely with Cork County Council to prepare a Land Use and Transport Strategy for Douglas Village and its hinterlands. The strategy adopted an integrated approach to land use planning, urban design and transportation engineering to support the future development of the town. SYSTRA also helped Cork County Council secure funding for delivery of the strategy from the NTA.

SYSTRA was appointed by Cork County Council to undertake the Bandon Transportation and Public Realm Enhancement Plan (Bandon TPREP). The overall aim of the Bandon TPREP was to ensure that there is an integrated approach to public realm enhancement and transportation engineering for the future development of the town. SYSTRA developed a number of transportation and public realm strategies through reviews of local and national policy and consultation with Cork County Council and local residents / stakeholders. These strategies were tested using a strategic traffic model developed in SATURN for the Bandon local area, and micro-simulation models of key junctions.



SYSTRA Ltd assisted Westmeath County Council in the preparation of a public realm enhancement plan for Church Street in the centre of Athlone Town. The overall aim of the scheme was to transform the core of Athlone Town Centre to a more attractive destination for people to live, work, visit and socialise.

A number of alternative public realm/traffic management solutions were developed and assessed for Church Street and the surrounding town centre. The optimal solution was developed for a Part 8 Planning application and a public consultation event held to address recommended proposals and changes. As part of the scope SYSTRA undertook the detailed design of the three main junctions in the town centre. The final scheme, which was successfully adopted by the elected members of the council, included proposals for the implementation of a revised circulation system for the town centre to enable the creation of an enhanced public realm facilitating improved access for all.

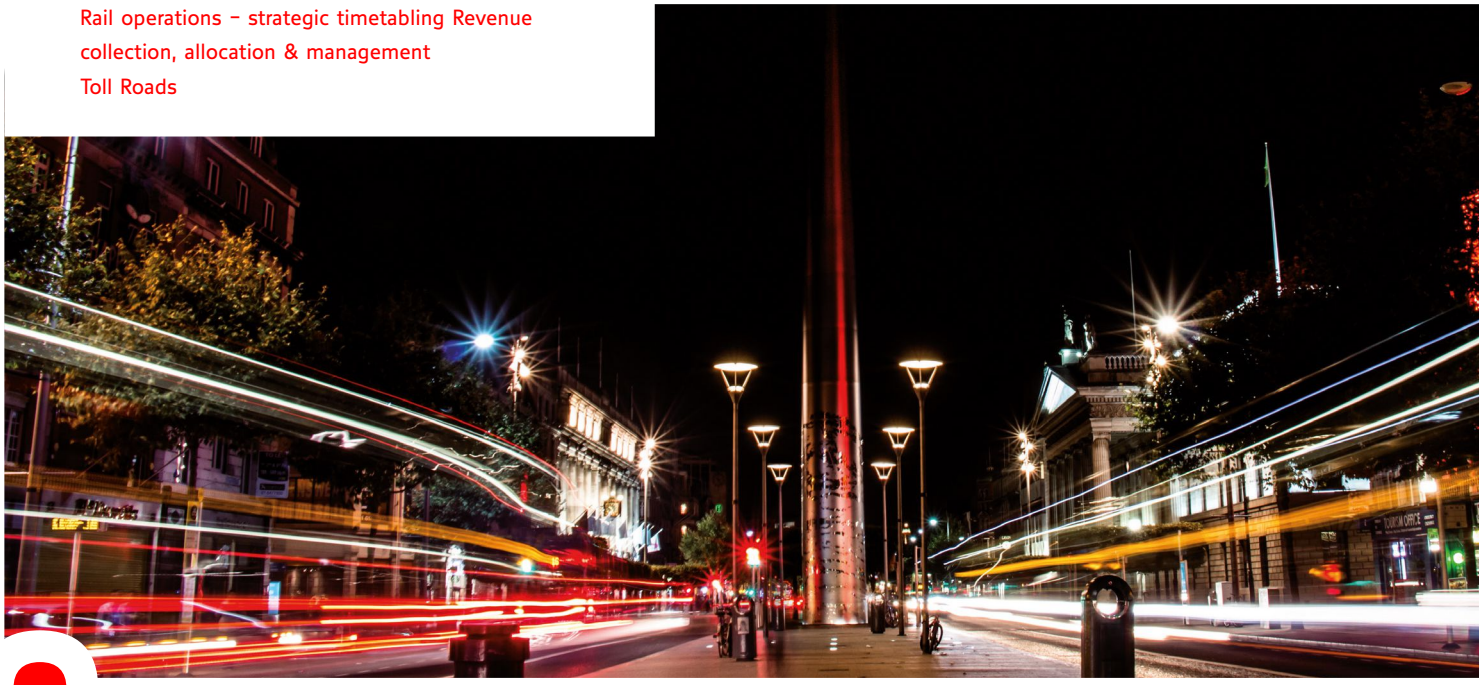
As governments throughout the world struggle to find the necessary finances to develop their transport infrastructure, it is imperative that schemes demonstrate value for money and financial sustainability. For the public sector, value for money is obtained by investing in measures which best meet economic and social goals. We provide analysis of current problems and opportunities, demonstrating a fit with policy aims and systematic risk identification.

We 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 public transport operators, toll road concessionaires, industry bodies, governments and international institutions.

SYSTRA's economists have undertaken a wide range of economic appraisals which have been used to support funding applications from public and private funding streams. As well as project appraisals, we also have considerable experience in preparing and supporting business case development.

All appraisals are undertaken in line with the Department of Transport, Tourism and Sport Common Appraisal Framework (CAF).

Project Appraisal
Financial Appraisal
Business Case Preparation
CBA / Economic Appraisal
Feasibility Studies
Change & programme management / Demand & revenue forecasting / Fares, Ticketing & payment means
Rail operations – strategic timetabling Revenue collection, allocation & management
Toll Roads



SYSTRA were appointed by Galway City Council, as part of a multi-disciplinary team, to develop a multi-modal transportation solution to existing transport issues in Galway and its environs. As part of this ongoing project, SYSTRA were involved in the delivery of Phases 1, 2, and 3 for the N6 Galway City Transport Project (GCTP), in compliance with the TII Project Management Guidelines (TII PMG).

During TII Phase 2, (Route Selection) SYSTRA carried out an economic appraisal, including Cost Benefit Analysis, of several route options for a Galway City Ring Road. The outputs from the economic appraisal formed part of the option selection process and helped establish an Emerging Preferred Route Option.

During Phase 3 (Detailed Design) of the project, SYSTRA produced a detailed economic assessment, including CBA, appraisal of the proposed N6 Galway City Ring Road and also prepared a Financial Appraisal in compliance with Department of Transport Tourism and Sport's Common Appraisal Framework and TII's Project Appraisal Guidelines.

An Roinn Iompair Turasóireachta agus Spóirt
Department of Transport, Tourism and Sport

Údarás Náisiúnta Iompair
National Transport Authority

TII
Bonneagar Iompair Éireann
Transport Infrastructure Ireland

SYSTRA provided a peer review and advice on forecasting in the then draft guidance by the Department with respect to updated parameters for the Common Appraisal Framework for transport projects. A range of relevant economic issues across five key parameters were presented and key principles that could be applied in setting parameter values were identified. The five key parameters considered were Value of Time, Vehicle Operating Costs, Emissions Values, Collision Costs and Active Travel. The approach to calculating parameter values together with observations, methodology, future forecasting and recommendations was provided under each parameter.

SYSTRA provides strategic, policy, technical and contract advisory services to the National Transport Agency (NTA) under a three year single consultancy team framework. The spectrum of transport related projects delivered by SYSTRA under the framework mirrors the NTA's remit and includes transport infrastructure provision, transport planning, transport management and service delivery. Tasks undertaken to date by SYSTRA include the following, advice in relation to the preparation of a National Bus Plan for 2020, review of the DART Underground Business Case, senior support in relation to Bus Service Tendering and Service Contracts and secondment of staff to assist with the management of public transport contracts and the administration and management of bus licensing.

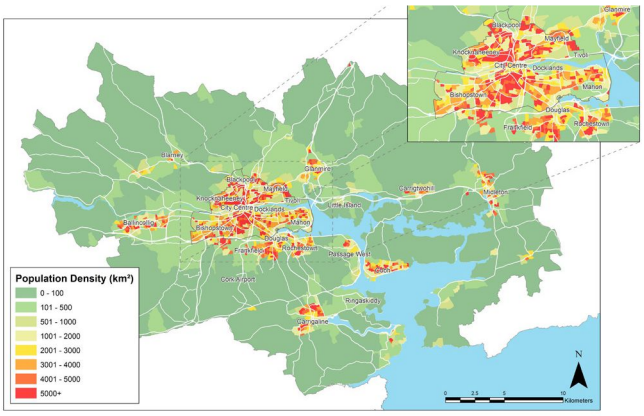
The rate of change in people's travel behaviour is evolving more rapidly than ever before. The impact of technology is changing how people access and use our transport networks. Our transport networks are becoming more multi-modal and it is increasingly important to understand what motivates people in making travel choices. Private and public sector decision-takers need more than ever to identify the needs of users and potential users, including hard-to-reach and potentially excluded people, thus involving every stakeholder. The industry needs better tools to forecast user responses to the inevitable change that lies ahead.

Meeting the research challenge needs specialist skills and up-to-date knowledge. We provide customised, high quality research and analysis coupled with expert interpretation and pertinent recommendations to help our clients achieve their objectives. We undertake qualitative and quantitative research, statistical and geo-demographic data analysis and modelling. We have a reputation for innovation and a passion for technical rigour and problem solving.

- Travel behaviour research
- User satisfaction surveys
- Survey design and management
- Literature review
- Pricing research
- Data analysis
- Large dataset processing
- Data presentation
- Public and stakeholder consultation
- Workshops
- Focus groups
- Software design and development

The Department of Transport, Tourism and Sport (DTTaS) engaged a research team from SYSTRA to examine the potential to derive parameter values from available evidence to evaluate journey reliability and quality for all modes of surface transport in Ireland. The outputs of the study will feed into the continued development and updating of the Department's Common Appraisal Framework (CAF). Our team comprised Irish and international leading experts with extensive academic and consultancy experience.

SYSTRA brought together knowledge of local and global research and best practice together with an understanding of the requirements and tools for conducting transport appraisals in Ireland. Informed by research, and in discussion with DTTaS, the study focused on priority areas of reliability, public transport crowding and cycle quality. Clear and actionable recommendations were made that will enhance the field of transport appraisal in Ireland in the future.



The wider context of the research is that the NTA want to increase the level of sustainable travel in Ireland, so any insights that could be gathered on barriers to increased use of public transport – and ways of overcoming them – would be valuable.

To better understand the existing provision as well as the attitudes among transport users in the regional cities, SYSTRA undertook a series of focus groups across Ireland. The focus groups also provided a first opportunity to informally test understanding and reaction to the hypothetical, but realistic, travel choices in the future.

A subsequent quantitative survey was undertaken which included stated preference exercises to derive monetary values of key elements in journey decision-making factors among residents of Cork, Galway, Limerick and Waterford and their surrounding areas.

SYSTRA provided Kerry County Council with baseline data to assess the performance of their sustainable travel schemes against economic, environmental, social and safety objectives. Baseline surveys were carried out in 2014 to provide a baseline measure with further surveys planned for 2017 to measure the post implementation of the sustainable travel measures. A range of surveys were carried out including interviews and counts to monitor the Town Centre users perception, business satisfaction, modal shift for school pupils and traffic surveys.

Since the arrival of Leap in 2011, Dublin's fares and ticketing structure has evolved enormously, moving away from a highly complex, inconvenient structure that in many ways deterred people from using public transport. But, as is commonly the case for fares and ticketing work, any change brings with it the risk of impacts on transport demand and revenues. SYSTRA have worked with the NTA over the last number of years to better understand passenger response to change and advised on how to improve fares and ticketing structures.

SYSTRA developed a sophisticated fares and ticketing model for the NTA to test potential developments. It is built on a complex large dataset comprising extensive ticket sales data from Dublin Bus, Rail and Luas with multi-annual full year data at route and stage/zone level. SYSTRA's model allows the NTA to test multiple scenarios and to understand the likely impact on demand and revenue across different modes and geographic sectors of the City.

SYSTRA responded to the NTA's needs at different times and adapted the model so that new fares and ticketing scenarios could be tested. We are exploring with the NTA how the model can support the NTA's Bus Connects programme, which will transform the Dublin Bus network.

Reducing our reliance upon the private car for every journey and providing credible alternatives is at the heart of Government policy. Sustainable transport can make a positive contribution to the environmental, social and economic fabric of our communities - nationally as well as locally. Ireland is highly reliant on car based transport and it is widely recognised that our car dependence must be addressed to ensure that Ireland's future transport network is sustainable. Not only are cars a major contributor to air pollution, the social costs can include road crashes and reduced health and well-being levels through lack of physical activity, and time wasted in traffic congestion which has an enormous knock-on economic cost.

To achieve a sustainable transport network, we must ensure that the environmental impact of future development is well understood and that measures are taken to adequately support and encourage sustainable modes of transport such as public transport, walking and cycling. However, balancing travel demand with the needs of society, the economy and the environment remains a significant challenge to overcome.

We combine strategic advice and the delivery of individual interventions to provide our public and the private sector clients with the complete solution. We help deliver practical projects that reduce unnecessary car use. Our committed behavioural change experts have developed tried and tested techniques that can help positively shape your communities.

We have an excellent understanding as to why people choose to travel in certain ways and we know how to encourage and enable effective transition to more active modes. We support a range of clients to facilitate the uptake of active travel and subsequent improvements to project participant's health.

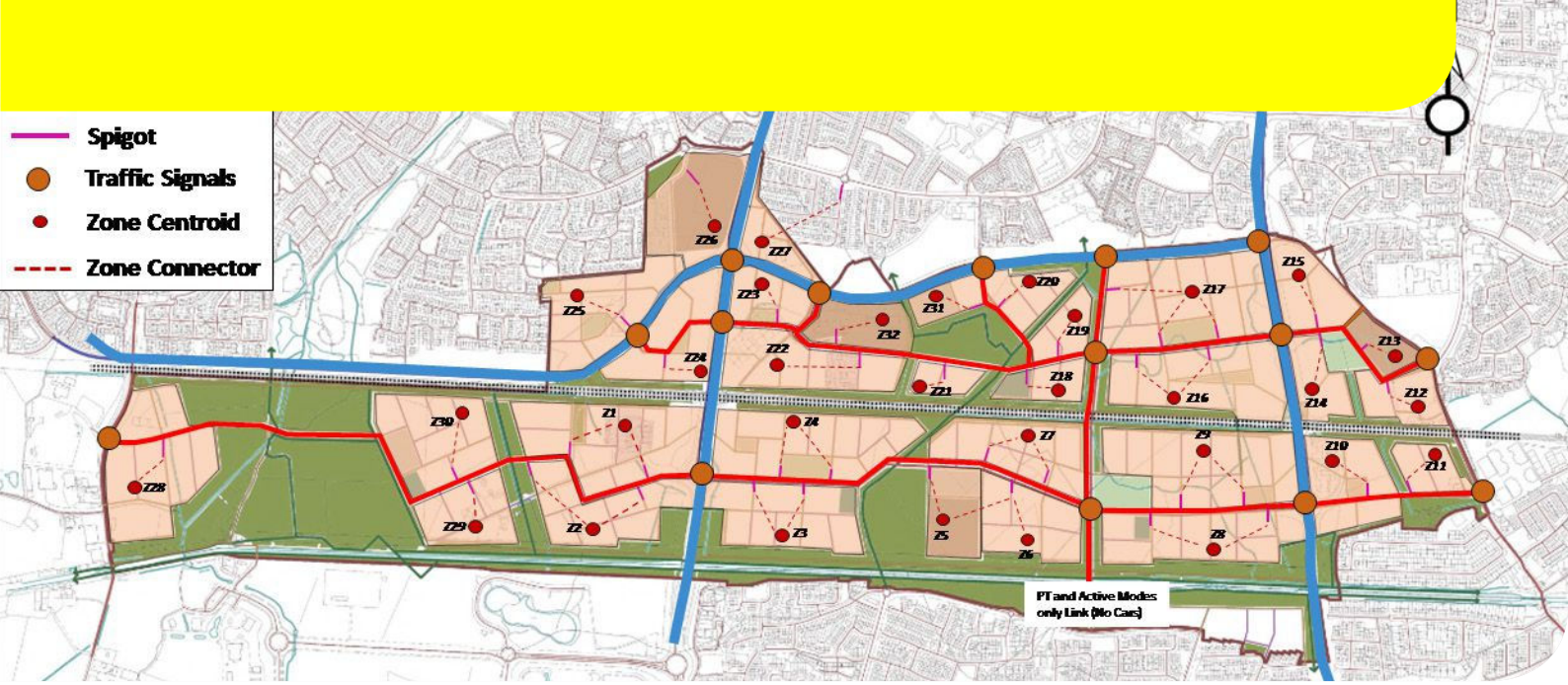
Our staff represent some of the leading practitioners in environmental appraisal and smarter travel. Effective implementation of integrated strategies can support more sustainable and healthier travel choices, and show better value for money for organisations, government and the community.

We are leaders in mobility management plans, and supportive regeneration strategies and streetscape design techniques helping to support more sustainable, better value and healthier travel choices for organisations and the community.

- Environmental Impact Assessments
- Behavioural change initiatives
- Personal travel planning
- Sustainable travel strategies
- Mobility Management Planning
- Smarter Travel Planning
- Public Transport, Cycle, Pedestrian Modelling and Planning
- Walk & cycle infrastructure planning & design
- Urban realm improvement schemes
- Smarter travel monitoring, evaluation and appraisal
- Advice on alternative fuelled vehicles
- Environmental Appraisal
- Air Quality Mapping
- Noise Mapping

SYSTRA is supporting Limerick County Council in the improvement and enhancement of the urban environment and mobility of O'Connell Street in Limerick. This is being achieved through a targeted infrastructure and citizen investment programme specifically designed for the street, in the heart of Limerick City.

The LUCROC project aims to improve the public realm, regenerate the urban fabric, reduce air pollution and promote noise reduction. In addition, as Ireland's First Smarter Travel Demonstration Area 2012-2016, the project seeks to promote walking, cycling, electric vehicle use and public transport to, from and within O'Connell Street.



The National Transport Authority in conjunction with Galway City Council developed an Integrated Transport Management Programme (ITMP) for the Galway City area that sets down a framework for how Galway City's transport network can be redefined to address the current transportation issues for all modes, as well as cater for future increases in travel demand. SYSTRA, as advisors to the NTA, provided transport modelling and appraisal assistance in the preparation of the ITMP.

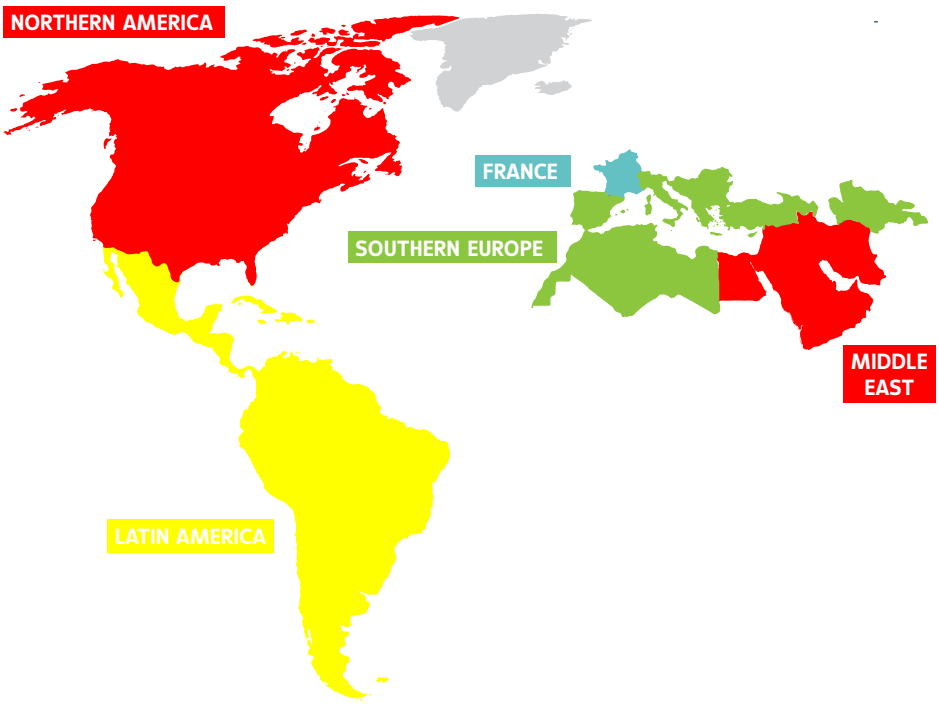
SYSTRA was responsible for undertaking a range of tasks including travel demand analysis for all modes, advice on bus operations and network development, preparation of appraisal criteria and assessment process, advice on Park and Ride and demand management measures, participation and contribution to project team workshops and solution development. Combined transport strategies were examined and assessed by SYSTRA using the new NTA West Regional Transport model and the results were used to inform the ITMP.

SYSTRA is supporting South Dublin County Council in the preparation of a Planning Scheme for lands at Clonburris, consisting of approximately 280 hectares of undeveloped land in west Dublin. The SDZ will provide residential development for approximately 20,000 people and 50,000 sqm of commercial development, as well as ancillary developments such as schools, rail infrastructure, emergency services and the provision of community facilities. SYSTRA was responsible for the delivery of the following services:

- Preparation of a baseline review to determine the existing traffic conditions, public transport services, walking and cycling infrastructure, demographic profile of the region and planned future developments/infrastructure
- Development and testing of a large number of scenarios to inform the Traffic Impact Assessments and junction designs
- Undertaking an accessibility analysis and development of a walking and cycling strategy for the SDZ
- Produced an evaluation of the public transport measures proposed in the GDA Transport Strategy and outlined further measures to encourage public transport travel in Clonburris and its environs

SYSTRA supported Galway City Council in developing smarter travel schemes for the City. The team examined multi-modal proposals using the Galway Transport Model to help identify a suite of integrated smarter travel solutions for the City of Galway, which were then taken forward as part of the city's bid for smarter travel funding.

Our global subsidiaries



100 SYSTRA employees allocated for the Riyadh MRT Project

118km or track, 21km of tunnels, 37 stations and an estimated 200 million passengers per year – Crossrail, the biggest engineering rail project to connect from west to east London

MRT Dubai is the world's longest & driverless transport network transporting 1.85 million people per day

SYSTRA developed the MRT Mecca system capable to cover the highest passenger capacity during HAJJ Period

50% of cities operating MRT systems have cooperated with SYSTRA

Owners representative for the 11.5km of Mumbai Metro Line 1

75% of Light Rail / tramways built in France are thanks to SYSTRA

31km, 48 stations and 250,000 passengers per day in Casablanca – SYSTRA Project Managed the 1st LRT in Africa

Project Manager for 34km of LRT in Lusail, Qatar

15.7km of Caen LRT, adapted dual-purpose wheels on rolling stock to allow for negotiation of Caens unusual topography with slopes of 13%

52 BRT projects in France alone

- Metz
- Dunkirk
- Nimes
- Saint Brieuc
- Rouen
- Lyon
- Senart-Corbeil

2,000km of High Speed Lines were built by SYSTRA in France

The World Speed record of 574.8km/h (357mph) on the East European HSR held by SYSTRA

General Consultant for the 412km, 330,000 daily passenger HSR Seoul to Busan in South Korea

Kenitra Tangier HSR in Morocco, SYSTRA have been General Consultant

Nimes to Montpellier bypass – the 1st High Speed Line to support mixed-use traffic of both passengers and freight trains, SYSTRA design superstructure and infrastructure

Provider of CADNA-A noise mapping and ADMS-roads pollution dispersion modelling
Undertaken over 20 successful carbon and ESOS audits in the past year
Nitrogen dioxide monitoring for Highways England and Local Councils
EIA provision for public and private sector clients
Environmental representation at Public Inquiry
Environmental Input to support Local Authority Business Case development
Clean Air Zone assistance for London Boroughs
Air quality Advice to schools and Local Authorities.
Day and Night Noise monitoring

Feasibility and outline planning stages leading into strategic works design for 1,800-dwelling greenfield scheme in Grantham, over 250 units delivered to date with 350+ in next phase. Housing parcel works for two parcels of 250 units for the housebuilders on the same scheme
Strategic works design for over 600 homes on a former Peugeot factory in Coventry
Trunk and detailed works for a series of small to medium sites for Taylor Wimpey and David Wilson Homes around the West Midlands
Feasibility and outline planning stages for urban expansion at Grantham comprising up to 3,500 dwellings and 11ha of commercial/light industrial development
Feasibility stage of 6,000-home expansion on edge of Birmingham

3000km of highway design from 35 projects
3500km of highway feasibility from 25 projects
2000km of highway construction supervision from 20 projects
The world's longest sea bridge connecting Kuwait City's 2.4 million inhabitants with Subiyah
4 rail tracks, 6 lanes of motorway, 46km span – Tianxinghzou Cable Stay Bridge
Double Way Tram Line, 4 lane road and 2 foot and cycle ways, 722m Krasinski Bridge, Poland

Since 2014 SYSTRAs RFID allows for freight wagon tracking
Project Manager on Baffin Island for 143km Mary River Railway Project
General consultant for the 650km TransGabon Railway line
Technical assistant or Mumbai Freight Corridor

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Air quality Advice to schools and Local Authorities.
Day and Night Noise monitoring

Feasibility and outline planning stages leading into strategic works design for 1,800-dwelling greenfield scheme in Grantham, over 250 units delivered to date with 350+ in next phase. Housing parcel works for two parcels of 250 units for the housebuilders on the same scheme
Strategic works design for over 600 homes on a former Peugeot factory in Coventry
Trunk and detailed works for a series of small to medium sites for Taylor Wimpey and David Wilson Homes around the West Midlands
Feasibility and outline planning stages for urban expansion at Grantham comprising up to 3,500 dwellings and 11ha of commercial/light industrial development
Feasibility stage of 6,000-home expansion on edge of Birmingham

3000km of highway design from 35 projects
3500km of highway feasibility from 25 projects
2000km of highway construction supervision from 20 projects
The world's longest sea bridge connecting Kuwait City's 2.4 million inhabitants with Subiyah
4 rail tracks, 6 lanes of motorway, 46km span – Tianxinghzou Cable Stay Bridge
Double Way Tram Line, 4 lane road and 2 foot and cycle ways, 722m Krasinski Bridge, Poland

Since 2014 SYSTRAs RFID allows for freight wagon tracking
Project Manager on Baffin Island for 143km Mary River Railway Project
General consultant for the 650km TransGabon Railway line
Technical assistant or Mumbai Freight Corridor