

Introduction

Throughout the world, Halcrow is contributing to policy and infrastructure developments that combine economic regeneration with sustaining and improving the quality of people's lives.

We provide transport and development planning advice to public and private-sector clients, offering services ranging from policy formation and strategic planning, including detailed planning and design, through to implementation, operation and performance monitoring.

Our contribution to our client's success is based on our commitment to deliver first-class business solutions and consultancy services. Dedicated teams of professionals work with clients to bring each project to a successful conclusion.

These multi-faceted teams include transport planners, public transport specialists, traffic engineers, urban and regional development planners, environmental planners, economists, financial analysts, urban designers and architects and sociologists. These people can draw on a range of support services to ensure each project is managed and resourced to meet the client's needs.

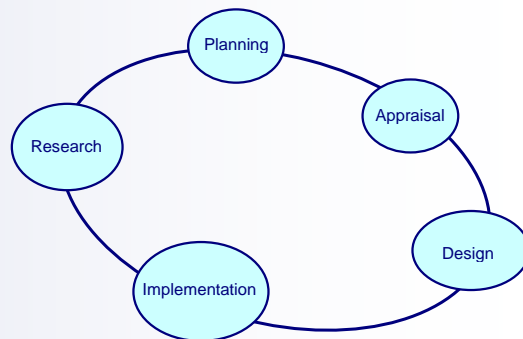
It's this ability to combine the relevant skills and experience that enables Halcrow to better understand and assist with the complex issues associated with developing sustainable transport systems. We can advise on the integration of transport and land use development plans; on the balance between financial viability and sustainability; and on identifying and eliminating risk and uncertainty.

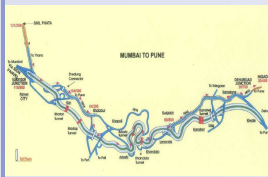
The energies, experience and knowledge of our staff make Halcrow distinctive. We provide an environment where creative ideas and innovation can flourish and we relish the opportunity to apply our expertise to each new challenge.

Services

Halcrow provides a full range of engineering, planning and environmental consultancy services for the development, operation and maintenance of highway and roads projects. These services include:

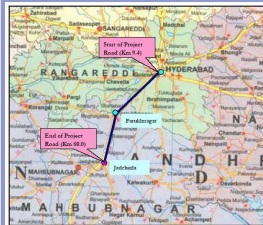
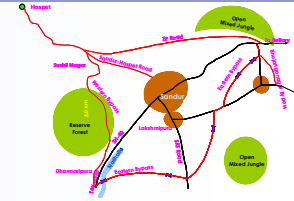
- **Transport Policy and Planning**
- **Public Transport**
- **Highways**
- **Traffic Engineering and control**
- **Intelligent Transport Systems**
- **Planning for Pedestrians**
- **Economic Policy**
- **Evaluation of Policy and Projects**
- **Private Funding of Infrastructure**
- **Business Economics**
- **Urban Management and Planning**
- **Development Planning**
- **Urban Design**
- **Environmental Impact Assessment**





Maharashtra: Mumbai – Pune Expressway Project-Macquarie Securities (Asia) Pte Ltd - Traffic assessment on Mumbai - Pune Expressway(95 km) and old NH4, produced independent set of traffic forecasts, in the terms of average annual daily traffic demand and annual revenue forecasts over the length of the concession period.

Karnataka: Pre-Bid Assistance for Sandur Bypass on BOT Basis—D S Constructions-The study was to assess present traffic scenario, travel patterns of the motorists using the roads around the proposed project road, identification of alternate routes, forecast the traffic growth in future, traffic assignment, and to estimate the revenues for the entire concession period.



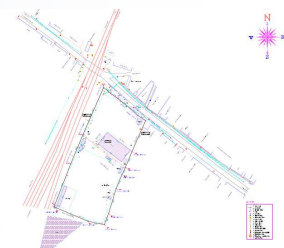
Andhra Pradesh: Lender’s Engineer’s Traffic Assessment Study for Shivarampalli-Farukhnagar-Jadcherla Section of NH7 on BOT Basis in Andhra Pradesh-ICICI Bank –Study to assess the present traffic scenario, travel patterns of the motorists using the project road, identification of alternate routes, forecast the traffic growth in future and to estimate the revenues for the entire concession period and finally do a thorough technical due diligence for this project.

Maharashtra: Traffic Studies for Market City Complex in Kurla, Mumbai -Offbeat Developers Pvt. Ltd. –Study all aspects related to parking demand estimation and design strategy , estimate the peak demand for arrivals, departure and circulation, concept design of the site entry and exit and site circulation, develop a parking strategy and conceptual parking layout for site and finally to develop a strategy to address different types of users.



Tamil Nadu: Independent Traffic Review for Pre-Bid Assistance on Madurai – Tuticorin Section of NH45B on BOT basis in the State of Tamil Nadu—GMR Group Ltd - Study the present traffic condition, travel patterns of the commuters using the project road, identification of alternate routes, estimation of tollable traffic on the project road, forecast the traffic growth in future and to estimate the revenues for the entire concession period.

Uttaranchal: Technical Layout for Redevelopment of Kashipur Bus Terminal in Uttaranchal-U-Dec Ltd. –Comprehensive data collection and analysis of bus and passenger movement at Kashipur bus Terminal, traffic forecasts for the concession period in terms of workshop and terminal buses and development of a technical layout to accommodate all required facilities on the site. HCIL will continue assisting the client during the bidding stages and provide design related support as well, till the project reaches completion.

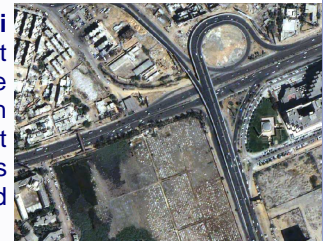


Rajasthan: Multi-Product Special Economic Zone at Jaipur -Uppal proposes to develop a world-class integrated Multi-Product SEZ spread over 2500 Hectares in Jaipur district in Rajasthan. Uppal has appointed Halcrow Consulting India Ltd. to prepare a project report as part of its Application to State Government for onward submission to Ministry of Commerce & Industry, Government of India for approval of proposed SEZ.



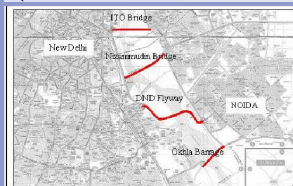
Gujarat: Lender's Engineer's Traffic Assessment and Due Diligence Study for Vadodara-Bharuch Section (Km 108.7 - Km 192.0) of NH8 on BOT basis in the State of Gujarat-L&T Ramboll—Study to assess the present traffic scenario, travel patterns of the motorists using the project road, identification of alternate routes, forecast the traffic growth in future and to estimate the revenues for the entire concession period and finally do a thorough technical due diligence for this project.

Pakistan: Toll Traffic and Revenue Forecasting Study For Karachi Elevated Expressway -IJM Croperation, Berhad, Malaysia – The project Road is about 27.74 km in length. It starts from Jinnah Bridge near the Karachi Port and passes through Shakra-E-faisal to end at Quidabad, which connects the city to the Pakistan Steel Mills, the Port Qasim and the Export Processing Zone industrial estates. Study to assess the present traffic levels on the project road and other routes in the Project Influence Area and estimation of tollable traffic and toll revenue on the project road.



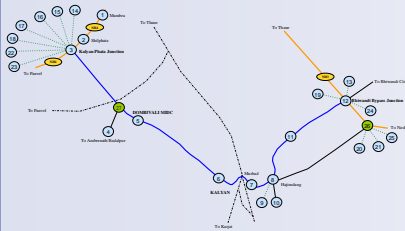
Gujarat: Lender's Engineer for Ahmedabad Ring Road-ICICI Bank—Ahmedabad Ring Road project will be executed on BOT basis through private equity mobilization to widen the road from 2-lane to a 4-lane configuration and operate & maintain the road for 20 years. Halcrow is Lender's Engineer to provide independent assessment of traffic on the improved ring road, future growth in traffic during concession period, toll revenue generation, tolling strategy; and other technical aspects covering implementation of construction schedule, quality control, cost estimates etc.

Maharashtra & Gujarat:Traffic Revalidation Study for Maharashtra Border – Wainganga Bridge Section of NH-6-IDFC Limited— Project highway starts at Km 405, Maharashtra – Chhattisgarh Border in Gondia district and ends at Km 485, Wainganga Bridge in Bhandara district. Total length of project road is 80 Km. Enroute mainly, it traverses through rural and semi urban areas like Lakhni, Sakoli, Saundad, Kohmara and Deori. Project road is located in Bhandara and Gondia districts. The main objective of the study is to establish the existing and future tollable traffic (over the entire concession period) on the project corridor.



Delhi and Uttar Pradesh: Noida Toll Bridge – North/South Links – NTBCL- South link has been proposed on the southern side of DND flyway to provide better connectivity between the proposed Kalindi Kunj bypass and DND flyway, This is 1.2 km long road included one cloverleaf and 100m long structural section. Estimated cost of the project is 430 million INR. Conceptual design for South Link, design review of North Link and cost estimates.

Uttaranchal: Uttaranchal Mountain Airport - Uttaranchal Infrastructure Development Company Ltd - The main objective of the consultancy services is to assess the feasibility of upgrading and development of existing airstrips and helistrips/helipads at various location in the state. This includes a preparation of a technical report which is technically sound, meets the DGCA requirements, financially and economically viable and acceptable from environmental and human impact considerations and can form the basis for investment decisions to be taken by the Government of the State of Uttaranchal.



Maharashtra: Traffic Assessment for Bhiwandi – Kalyan – Shilphata Road (22.6 km section) in the State of Maharashtra-PLUS, Malaysia— MSRDC is planning to widen and strengthen the Bhiwandi-Kalyan - Shilphata highway on a BOT basis. The project has two phases: Phase I: Strengthening the existing 4-lane divided carriageway and widening the existing 2-lane carriageway to a 4-lane divided carriageway (including the structures) and Phase II: Constructing the Kalyan Bypass (with major bridge on Ulhas river and an ROB on the Central Railway

Line along with the approach roads). Study to assess the existing traffic scenario, forecast it for the future and estimate the revenues for the stated concession period.

Punjab: Independent Traffic Review for Pre-Bid Assistance on Traffic Assessment for Rehabilitation and Improvement of Hoshiarpur-Phagwara Road-SPML Ltd.— Traffic Assessment for Rehabilitation and Improvement of Hoshiarpur - Phagwara Road on BOT basis in the State of Punjab. Study to assess the existing traffic scenario, forecast it for the future and estimate the revenues for the stated concession period.



Halcrow – sustaining and improving the quality of people’s lives