

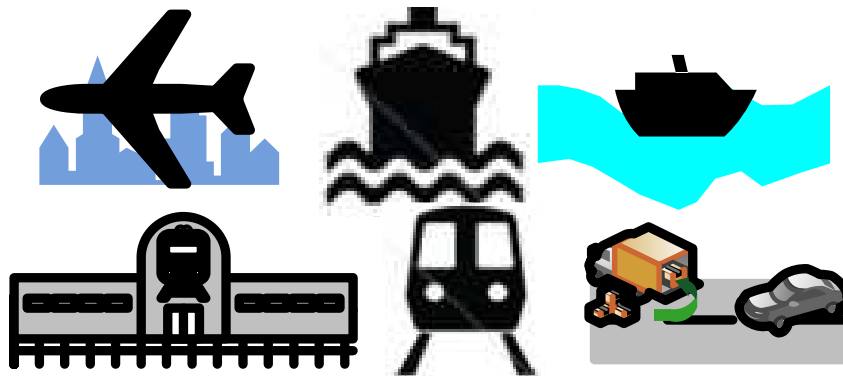


**TRANSPORT PLANNING
& TRAFFIC ENGINEERING HOUSE
(TPTEH)**

TRANSPORT PLANNING & TRAFFIC ENGINEERING HOUSE (TPTEH)

PROJECTS PORTOFOLIO

2014



Offices

Cairo Office: 19 Sakhawi Street - Manchiat Al Bakry – Heliopolis – Cairo - Egypt

Tel: + 202 24535681 - Mobile: + 201067230608 - + 201099648951

Email: K.abbas@tpteh.com

Web Page: www.tpteh.com



CONTRIBUTION OF TPTEH STAFF IN PROJECTS IN AUSTRALIA



Dr. Khaled A. Abbas

Eastern Broadacre Traffic and Transport Modelling (2008)

Client: Macroplan/ACT Planning and Land Authority

[http://www.actpla.act.gov.au/data/assets/pdf_file/0004/18283/6_EBPS_SMEC_EB_Traffic_and_Transport_Modelling - Final Report.pdf](http://www.actpla.act.gov.au/data/assets/pdf_file/0004/18283/6_EBPS_SMEC_EB_Traffic_and_Transport_Modelling_-_Final_Report.pdf)

Services provided: Transport planning, Traffic Modelling, Intersection Analysis, Public transport

Macroplan is investigating the feasibility of the eastern edge of the ACT (from Majura through to Hume) for future employment generating developments. The purpose of this study is to assist Macroplan by undertaking a traffic and transport modelling exercise to provide advice on the implications to the study area (including on new road requirements). The specific objectives of this study was to conceptualise main road network connections to link the expected Eastern developments to the main Canberra road network, update SMEC strategic transport model to account for road network scenarios and land use changes within the study area, model road network performance in future years with expected Eastern Broadacre developments as well as other developments and finally assess the Level of Service (LOS) of road network links in light of generated traffic to identify potential road network deficiencies and public transport requirements

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Preparing NCA Case for Submission & Presentation at an Inquiry held by The Australian Federal Parliament's Joint Standing Committee on Public Works on 6 August 2008 Regarding Bridging of Kings Avenue over Parkes Way at Russell Roundabout, Canberra, Australian Capital Territory (2008)

<http://202.14.81.34/house/committee/pwc/canberraeewrfitout/report/fullreport.pdf>

<http://www.aph.gov.au/house/committee/pwc/shanghaiexpo2010/report/appendixb.pdf>

Client: National Capital Authority

Services provided: Parliamentary Expert Witness

In August 2008 SMEC experts (Dr Khaled Abbas & Lindsay Jacobsen) were called upon to participate as Expert witness in an inquiry held by the Federal Parliament's Joint Standing Committee on Public Works. This involved assisting National Capital Authority in preparing its case for submission and presentation. In August 6th 2008 Dr Khaled Abbas made a presentation at the morning site tour to Parliament members of the inquiry. This was followed by an inquiry at Australian Parliament where Dr. Khaled Abbas demonstrated to the Committee the traffic operability of the various options and responded to posed technical questions.

Dr. Khaled Abbas (Expert Witness- Project Manager/Transport & Traffic Specialist)

Traffic Modelling and Analysis for Parkes Way – Kings Avenue Intersection Options (2008)

Client: National Capital Authority - Services provided: Traffic Modelling, Intersection Analysis

This project is meant to test the operability of a number of grade separation options for the Parkes way/ Kings Avenue intersection and to compare these options with a do nothing option. The 2 considered options are a tight diamond & a single point diamond. SMEC was provided with 2 configurations from Taylor Thomson Whitting (NSW) Pty. Ltd. SMEC has explored an additional scenario of a grade separated roundabout. It was shown that Single Point Urban Interchange provides a significant performance improvement in both peaks compared to both Do Nothing scenario & Tight diamond Symmetrical design. The single point arrangement is also expected to operate at good levels of service if signalised pedestrian crossings were used during off-peak periods. While maintaining approximately the same area of road pavement, the addition of a second right turn lane on Kings Avenue approach from Parliamentary Zone direction provides a measurable improvement to average intersection delay. Level of Service of the Single Point Urban Interchange with additional right turn is expected to operate at LOS D in AM peak and C in PM peak, in contrast to E in AM peak and D in PM peak for Symmetrical SPUI design, and F in both peaks for Do Nothing scenario. SMEC also notes that the design of the Parkes Way approach from city direction ought to take into consideration that deceleration and storage lanes are of sufficient length so as to minimise possibility of queues on this approach blocking the through Parkes way intended tunnel movement.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)



Modelling and Analysis of Parkes Way – Constitution Avenue Road Network in Light Kings Avenue Intersection Options (2008)

Client: National Capital Authority

Services provided: Transport planning, Traffic Modelling, Intersection Analysis

This study is concerned with calibrating a micro simulation Paramics based model for simulating 2007 AM network and traffic conditions. The study develops two future 2012 models. The study reports on network performance, urban arterial and traffic signals performance for the two modelled scenarios in 2012. This is meant to examine the road network operability in the context of expected land use developments including Anzac Park, ASIO, RSL and Defence office developments. Currently 97% of the demand is met within the AM peak period. With the increase in travel demand in 2012, it is expected that the network capacity will not be able to accommodate all the demand within the peak period which will cause peak spreading and degradation in levels of service. The Released Vehicles statistic demonstrates that the network comes under considerable stress with the Anzac Park, ASIO, RSL and Defence office developments in place. The Single Point Urban Interchange offers some relief from the increased traffic load.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Modelling and Traffic Analysis of Proposed East-West Link (2008)

Client: Port Macquarie Hastings Council

http://www.hastings.nsw.gov.au/resources/documents/0014387prelimroute_Annexures_D_E_F.pdf

Services provided: Transport planning, Traffic Modelling, Intersection Analysis

In the past SMEC was commissioned to investigate the options for an outer link road system for Port Macquarie. The outer link road system was to consist of a North-South link connecting the Oxley Highway near Area 13 to Hastings River Drive and an East-West link connecting the Oxley Highway to Ocean Drive. These links were intended to allow traffic to bypass the roads closer in to the CBD. The original SMEC study determined the option that provided the best traffic operability in relative terms. The SMEC study used the model of Port Macquarie that was generated as part of the Hastings Road Study in 2001. The model was not significantly updated but it was felt at that time that the model was sufficient to determine the best option in relative terms. As a result of this screening modelling exercise, the East-West link 3A/3/3D was recommended to be the option that provided better traffic operability. In this study, SMEC was commissioned to conduct a scoping modelling exercise for the East-West link option based on the work that had been carried out for the Area 13 and Sancrox Traffic Study. This required updating the Port Macquarie strategic transport model. The changes to the model included network changes, refined zoning for Area 13 & Sancrox, land use changes, new growth factors and recalibration of the origin/destination matrix based on traffic counts conducted between 2001 and 2006. This work is intended to provide a better indication of the traffic that will be expected to use the E-W link 3A/3/3D. These results are used in generation of Environmental Impact Statement.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Modelling & Feasibility of North Weston Intersections (2008)

Client: ACT Procurement Solutions

Services provided: Transport planning, Traffic Modelling, Intersection Analysis, Feasibility Analysis

This project is concerned with developing a micro simulation Paramics model for modelling and testing two options for the three main intersections in North Weston mainly Street on Drive/Cotter road, Kirkpatrick Street/Cotter Road/New Road and Streeton Drive/Unwin Place/Dixon Drive intersections. In addition the Cotter road configuration is also investigated. The study will conclude by conducting an economic appraisal to examine the feasibility of the considered options. The study concluded by recommending a preferred staged option.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)



Modelling Road Network Options Along Parkesway in Light of Russell Office Expansion (2008)

Client: National Capital Authority

Services provided: Transport planning, Traffic Modelling, Intersection Analysis

NCA received conceptual options of the road network proposed by Russell office expansion for review and comment. In this context, NCA requested that SMEC independently review, propose and model a number of alternative road network options for the three main intersections:

- Kings Avenue/Parkes way Intersection/Interchange
- Intended Blamey Crescent/Parkes way intersection and
- Intended Morshead drive/Sellhiem Avenue Intersection/Interchange

The investigation assumed that all other intersections remain as is. Such study was meant to be conducted for the year 2031 being the planning year used. It was also meant to take into consideration the expected developments in the area. The study involved developing a micro simulation Paramics model for modelling and testing intersection options for the three main intersections along Parkesway. The study concluded by recommending a preferred option.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Southern Distribution Business Park Road Access Study (2008)

Client: Mariner (as sub consultant to BG&E Consulting Engineers - Sydney)

Services provided: transport planning, traffic modelling, intersection & midblock capacity analysis.

The Southern Distribution Business Park (SDBP) is planned to be built to the south of the Goulburn Bypass section of the Hume Highway that connects Sydney to Melbourne. This study is meant to develop a simple strategic model using TRACKS or Transcad to examine the distribution of the expected SDBP related employment traffic from/to Goulburn to/from the SDBP development. In addition the study aims to develop a micro simulation model using TRACKS or Paramics to examine the operability of the proposed network in light of any expected traffic diversions that may occur for trips entering/exiting Goulburn from the Hume highway. In particular the report seeks to demonstrate that the road infrastructure requirements are met by the provision of a two lane two bridge roundabout interchange between Bungonia Road and the Hume Highway with long acceleration/auxiliary lanes for the entry ramps.

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)

Park and Ride Strategy for the Australian Capital Territory (2007-2008)

Client: ACT Procurement Solutions

Services provided: parking analysis, site selection, policy review, transport planning and traffic modelling, strategy development

The main objective of the project is to develop a Park and Ride Strategy for the Australian Capital. This will entail establishing a set of goals and objectives, as well as supporting policies, for park & ride and bike & ride facilities that will guide their development and will contribute to the overall Territory objectives of achieving a sustainable transport system. The study will also identify the demand and size for potential park & ride facilities by 2031 through examining relevant market areas, anticipated future public transport service and cycling plans, growth areas, and application of an appropriate demand forecasting methodology. It will also identify the preferred locations of future park & ride facilities through the development and application of a set of area-specific and site-specific selection criteria. Finally, the study is meant to recommend a strategy for implementation, timing and costs of providing park & ride facilities.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)



Molonglo Roads Feasibility Study (2007-2008)

Client: ACT, Department of Urban Services

Services provided: Road Feasibility Study

This Study is conducted to determine the locations and details of roads, bridges and intersections throughout the proposed Molonglo Valley urban development area and identify upgrade requirements for existing roads and intersections that will service the new development considering engineering, environmental, urban design / planning and cost effectiveness requirements.

The most significant roads in the proposed Molonglo Road development area will be the north-south arterial which will connect Cotter Road in the south to Coulter Drive in the north as well as the East-West arterial. The study reviewed existing road alignment options as well as proposed a new set of options in light of steep terrain that exist over much of the site. Several criteria were considered in the determination of the preferred alignment. The north-south arterial is to be able to accommodate a future IPT in the median, and on road cycling, both of which make low gradients desirable. The north-south arterial is to provide access to the group centre and town centre sites for road vehicles and IPT. SMEC also provided information and facilitated discussions to assist in the selection of the group centre location.

SMEC was also involved in the calibration of a transport strategic model for Canberra that took into account the expected land use zoning of Molonglo development as well as the expected demography and urbanisation pattern. SMEC utilised this model to examine the regional accessibility of Molonglo to the Canberra road network and the expected traffic impacts. SMEC role also included identifying quality urban design requirements to guide future planning and design for the area (e.g. road crossings of Molonglo river within the Molonglo Valley area).

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Parliamentary Triangle Study (2006-2008)

Client: National Capital Authority

Services provided: parking analysis, transport planning and traffic modelling, concept design, intersection modelling, and intersection design.

This study involved three main components. The first is to review parking arrangements within the Parliamentary Zone as well as to assess the sufficiency of parking over the medium term. The second main component involved conducting a traffic study that involved strategic modelling and microsimulation modelling and analysis to assess the impacts of changes in the parliamentary Zone access arrangements. The third component is involves the preliminary design of the agreed access arrangements.

Details of the project include:

A parking review study involving identifying current and future parking issues in light of expected construction activities and conceptualising parking options. A traffic study involving calibrating a strategic transport model using TransCAD and utilising such model to examine the potential current and future impacts of road network modification options including entry point modifications, and establishing a legible road hierarchy in the Parliamentary Zone.

A microsimulation traffic study involving calibrating a PARAMICS micro simulation traffic model and utilising such model to examine the potential current and future traffic operational impacts of road network modification and access point modifications on major roads of the study area. This also includes intersection capacity analysis using aaSIDRA. Preliminary design involving conducting a preliminary intersection design to Final Sketch Plan (FSP) stage for the proposed King Edward Terrace/ Commonwealth Avenue and King Edward Terrace/ Kings Avenue intersections.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)



Area 13 & Sancrox Traffic Study (2006-2008)

Client: Port Macquarie-Hastings Council

Services provided: transport planning, traffic modelling and intersection analysis.

This study is concerned with developing a strategic transport model to examine a number of road network scenarios and land use changes involving Area 13 and Sancrox towards the west of Port Macquarie Hastings. This involves traffic prediction and LOS analysis of road network links and major intersections in light of examined scenarios. The study is also concerned with developing a strategic action plan for the undertaking of improvements to the road network within the study area

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Majura Parkway / Pialligo Avenue Options Review (2007)

Client: ACT Procurement Solutions

http://www.actpla.act.gov.au/_data/assets/pdf_file/0004/19651/Part_2_Majura_Parkway_Economic_Analysis_Report_2009-01-15_rev_5avA6939790.pdf

http://www.actpla.act.gov.au/_data/assets/pdf_file/0017/14057/Appendix_E_Economic_Analysis_Report.pdf

Services provided: traffic modelling, intersection analysis, economic appraisal

Traffic in the vicinity of the Canberra airport has increased over the last few years with the continuing growth in Gungahlin and increased employment at the airport. The roads in the vicinity of the airport play an important role for the ACT economy, the surrounding New South Wales (NSW) region and nationally given the importance of the Monaro Highway as a freight route connection to the Federal Highway. This study considered the road network improvement option to improve traffic flows on the road network in the area between Duntroon and the Canberra Airport. At this location five major arterials converge namely Majura Road, Pialligo Avenue, Monaro Highway, Fairbairn Avenue and Morshead Drive. The main objectives of this study are to conduct an economic analysis of the Pialligo Avenue alignment options. This study reflects up to date construction staging and construction cost estimates.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Development of a Structural Plan for Cooma CBD (2007)

Client: Subcontracted to CBRE to Cooma Council – NSW

Services provided: Transport planning, structural plan development

In this project, Cooma CBD is thoroughly examined. Issues and planning principles are identified including road hierarchy, traffic circulation, parking utilisation, pedestrian connectivity, and public transport. These are input into the process of developing a structural plan for Cooma CBD.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Athllon Drive Closure (2007)

Client: ACT Procurement Solutions

Services provided: Traffic Impact assessment, Traffic Modelling, Intersection Analysis

SMEC investigated the impact of closing a section of Athllon Drive in Tuggeranong to assist in the construction of the duplication of this section. It was found that with the closure of Athllon Drive, there will be significant levels of congestion along the main roads and intersections in the study area operating at or above capacity.

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)



Woden East Development Concept Review of Master Plan (2007)

Client: Hindmarsh Property

Services provided: master Plan Review, Concept analysis, Road Design

SMEC experts attended regular EDP meetings and provided key conceptual comments in these meetings such as the removal of the link between east street and Mower Place to the neighbouring residential district . SMEC also conducted a conceptual review of the Master Plan for the proposed Woden East development Master plan. SMEC provided expert advice, in a general sense, on road cross-section and geometry, service vehicles turning templates and allowable slope of roads within blocks to collect garbage, street crossings from roads onto blocks, off street parking and traffic impacts on internal residential areas.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Intersection Analysis for North-West Link (2007)

Client: Austrlands Holdings

Services provided: intersection analysis

SMEC was requested to perform a series of intersection analysis on several junctions along North-West Link at Shell Cove, New South Wales. The purpose of this analysis is to understand how well these intersections operate under the latest geometric configurations.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

Callam Street Traffic Impact Assessment (2007)

Client: Hindmarsh Property

Services provided: Traffic Impact Assessment, Traffic Forecasting, Road Network Analysis, Intersection Analysis

A commercial development is planned for the corner of Callam Street and Wilbow Street in Woden. This study was concerned with conducting a Traffic Impact Assessment for the expected development towards the ultimate year of development. The study area includes all intersections along Callam Street. These will be analysed for the 2009 AM peak period (0800-0900) both with and without the development to determine the impact

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)

Gungahlin Drive – Wells Station Drive Intersection (2007)

Client: ACT Procurement Solutions (ACTPS)

Services provided: master Plan Review, Concept analysis, Road Design

SMEC reviewed the recommended upgrading of the Gungahlin Drive and Wells Station Drive intersection in 2011. This recommendation was part of the South Gungahlin Traffic Study (2005) carried out by SMEC. ACTPS requested that SMEC review the analysis of this intersection using current traffic counts and traffic predictions based on the EMME2 strategic transport model maintained by Territory and Municipal Services (TAMS).

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)



Humanities and Science Campus: Traffic Analysis of Master Plan Options (2007)

Client: National Capital Authority as subconsultant to Spackman & Mossop Landscape Architects

http://www.nationalcapital.gov.au/downloads/enhancing_and_maintaining/humanities_and_science/TrafficStudy_HSCTrafficReport.pdf

Services provided: Master Plan Review, Traffic Modelling and Analysis, Intersection Design

SMEC was requested by Spackman and Mossop Landscape Architects in Conjunction with Lahz Nimmo Architects (SMLN) and the National Capital Authority (NCA) to provide expert feedback on two master plan stages proposed for the Humanities and Science Campus adjacent to the National Library (NLA) and Questacon in Canberra, ACT. In this context, SMEC reviewed the two master plan stages as well as the current base situation. Different components of the master plan stages were examined in an effort to identify changes, advantages, limitations and recommendations. These were laid out in a table format. The recommendations were also drawn in a sketch format to show the difference between SMLN proposal and SMEC recommendation. SMEC was also requested by SMLN and the NCA to undertake a traffic study as part of Spackman & Mossop team to conduct a Design and Development Phase Study for the Humanities and Science Campus Square. The main objective of this study is to examine the traffic impacts of changes in the proposed Master Plan Stages 1 and 2 for the Humanities and Science Campus Square. This is meant to identify any traffic, circulation or safety issues that may arise out of the suggested Master Plan Stages and to recommend solutions.

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)

Road Access Arrangements – Albert Hall Precinct (2007)

Client: National Capital Authority

http://www.nationalcapital.gov.au/downloads/planning_and_urban_design/draft_amendments/Road_AccessArrangement_Albert%20Hall_Precinct_%20120407.pdf

Services provided: transport planning and traffic modelling, concept design, intersection modelling

This study proposed several options for new access arrangement for the Albert Hall Precinct along Commonwealth Avenue. These were modelled, analysed, compared and evaluated. Such process led to the recommendation of a preferred option. This option includes the introduction of a new 4 leg intersection at Commonwealth Avenue/King Edward Terrace/ New Albert Hall Access road with 2 phase signal control. This is accompanied by introducing a new signalized 2 phase T intersection at Kaye street/Commonwealth Avenue to provide a recognisable access to the Albert Hall Precinct from both north and southbound carriageways of Commonwealth Avenue.

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)

Wooden East Traffic Impact Assessment (2007)

Client: Land Development Agency

Services Provided: Traffic Impact Assessment, Traffic Forecasting, Road Network & Intersection Analysis

The LDA asked SMEC to review a previous traffic study undertaken by SMEC in light of revised land-use and updated network plans. This involved taking new traffic counts to allow for intersection analysis in a larger and more detailed study area than previously analysed. The tasks involved were:

- Use SMECs' TransCAD model to determine origins/destinations for traffic entering/leaving study area.
- Manually assign traffic through internal network based on entry/ exit points as determined in TransCAD
- undertake intersection analysis for all internal intersections to determine required capacity
- undertake intersection analysis for nearby external intersections to determine impact of existing facilities
- Make recommendations on network layouts and land-use based on optimum traffic performance and manageable impact on existing facilities.

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)



Crace Infrastructure Forward Design (2007)

Client: ACT Procurement Solutions

Services: Design of Road Intersections with associated landscaping and traffic management, removal of old and design of new sewer systems,

The project entails the design of three intersections, the elimination of the Palmerston Sewer Pump Station and approximately 350 m of gravity sewer. The main elements of the project include:

- Design and documentation of three intersection – a roundabout on Gundaroo Drive, a roundabout on Nudurr Drive and a tee intersection on Nudurr Drive
- Associated landscaping components
- Forecasting turning movements and examining future performance of optional layouts for a third T intersection from Crace devotement into Nudurr Drive
- Traffic control devices and temporary traffic management for all intersections
- Call tenders, tender evaluation, and Superintendence during Construction for the intersection works
- Remove the existing Palmerston Sewer Pump Station
- Design and documentation of a gravity sewer to drain the southeast corner of Palmerston to the new trunk sewer in Gungaharra Creek floodway

Dr. Khaled Abbas (Transport & Traffic Specialist, Principal Transport Planner)

Hobart Travel Demand Model (2006-2007)

Client: Department of Infrastructure, Energy and Resources (DIER)

Services provided: Literature Review, Developing a generic Architecture for Travel Demand Modelling, Professional Training

Travel Demand Modelling (TDM) is required as an aid in the strategic level decision making for infrastructure in Tasmania State. The TDM will enable forecasting of Hobart road network traffic volume and characteristics (e.g. travel speed, mode share) when applied against future scenario changes and forecasts. This study has two main linked components. The first component is meant to produce a generic conceptual architecture for a Travel Demand Model (TDM), while the second component is meant to apply such conceptual architecture to develop (calibrate, validate) a TDM for Hobart region. This document is mainly concerned with the first component.

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)

National Travel Behaviour Change Project –Phase C Evaluation, ACTPLA (2006-2007)

Client: ACT Planning and Land Management as sub consultant to IMIS

Services provided: transport planning, household and car diary design, conducting surveys, data verification and coding

This study is concerned with conducting an independent evaluation of the ACT household based travel behaviour change project - the TravelSmart ACT Households Project. This involved conducting a comprehensive, independent before and after evaluation of the effectiveness of the Travel Smart program undertaken by a different consultant where approximately 11,000 households in the Belconnen area of the ACT were targeted for intervention during the program. This independent evaluation is supported by comprehensive, 7-day before and after household travel and activity diaries for 420 households in target and control groups and is executed during 2006 and 2007 by SMEC. The study required the development, administration and coding of complex self-administered household and travel activity surveys for over 2,500 households which included all persons over the age of 5 years. The information gathered from the survey responses formed the basis of the database. Initial contact was made with respondents via telephone interviews

Dr. Khaled Abbas (Project Manager/Transport & Traffic Specialist & Principal Transport Planner)



Traffic Impacts on Newcastle Street Due to Section 48 – Stage 1A Development (2006-2007)

Client: Canberra Capital Airport Group as sub Consultant to Mallesons Stephen Jaques

Services provided: Master Plan Review, Traffic Impact Assessment, Traffic Modelling and Analysis, Intersection Analysis

This study examines the potential impact of section 48 – stage 1A development on Newcastle Street towards the development side as well as the impact on Newcastle/Collie/Barrier Streets intersection. In this context, SMEC has examined the current and future performance of Newcastle Street in the vicinity of the Canberra Avenue/Hindmarsh Drive/Newcastle Street intersection as well as the performance of Newcastle/Collie/Barrier Streets intersection. The future examination was done for two scenarios the first is the without section 48 – stage 1A scenario and the second is with section 48 – stage 1A scenario.

All future traffic analysis was based on traffic levels in 2011 reflecting a population in Canberra and Queanbeyan of 382,000 as reported by ACTPLA. The assessment is meant to include the impact of the proposed section 48 development – stage 1A which is not specifically included in the 2011 ACTPLA EMME2 transport planning model forecast.

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)

Pialligo Road Network in Light of Section 48 Stage 1A Future Development (2006-2007)

Client: Canberra Capital Airport Group as sub Consultant to Mallesons Stephen Jaques

Services provided: Master Plan Review, Traffic Impact Assessment, Traffic Modelling and Analysis, Intersection Analysis

The development of Section 48 Stage 1A development is planned for construction on the Eastern corner of Canberra Avenue/Newcastle Street/Hindmarsh Drive intersection within the ACT suburb of Fyshwick.

SMEC conducted this study of the Pialligo road network in light of Section 48 Stage 1A future development. SMEC has examined the future performance of the Pialligo road network for two scenarios, the first being the existing (or “base case”) configuration and the second with Section 48 Stage 1A, both in a projected 2011 PM peak period. The examination of each scenario involved midblock flows as well as the performance of the intersection of Monaro Highway, Morshead Drive and Pialligo Avenue. This was achieved by updating and running the SMEC strategic transport model of Canberra for the two scenarios. In running the second scenario the expected trips to be generated as a result of Section 48 Stage 1A were computed using the RTA NSW developed trip generation principles (RTA, 2002.) These trips were then distributed and assigned to the network using the SMEC Strategic Transport Model for Canberra.

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)

Institutional Development Study for Highway Department: Congestion Management and Parking Strategy (2006)

Client: Government of Tamil Nadu, India

This component of the study is concerned with preparing a report on Congestion Management and Parking Strategy. The main objectives of this report were to present objectives, components and interactions of the transport and traffic systems as well as to identify generic traffic problems. The report presents a classification of main causes of traffic problems as well as identify, categorise and compare the main strategies adopted for relieving the generic traffic problems of congestion, accidents and environmental degradation. In addition, the report presents the various network supply based policies and measures directed towards relieving traffic problems identifying and categorising the various Travel Demand Management policies and measures, Parking Management policies and measures. The report concludes with reviewing the applicability of the various traffic relief measures.

Dr. Khaled Abbas (Transport & Traffic Specialist & Principal Transport Planner)



Traffic Impact Assessment of Goulburn Southern Distribution Business Park (2006)

Client: Mariner (as sub consultant to BG&E Consulting Engineers - Sydney)

<http://site.sdh.net.au/pdf/appendix/Appendix J Traffic Impact Assessment Main Report.pdf>

Services provided: concept design, traffic impact assessment, intersection and midblock capacity analysis.

The Southern Distribution Business Park (SDBP) is planned to be built to the south of the Goulburn Bypass section of the Hume Highway that connects Sydney to Melbourne. The gross floor area for this development is expected to be approximately 1,000,000m². As part of the development application for the SDBP, SMEC was tasked with the concept design of access to the new business park, and determining the impact of the additional traffic on the Hume Highway and surrounding local roads. The concept design consisted of a new service interchange for the proposed development on the Hume Highway (Goulburn Bypass). Twelve options were considered, and a semi-direct option selected to optimise truck safety, maximize truck merging speed on re-entering the Highway, minimise environmental effects (noise, visual impact), retain elements of the existing road system for local travel, and minimize unwanted diversion of Goulburn traffic from the existing Bypass interchanges. In the traffic impact assessment, vehicle, land use and employment data was collected from the client and the RTA and future compiled into future projections. Future options with and without the proposed development were assessed using Highway Capacity Manual methods and aaSIDRA for intersection analysis.

Dr. Khaled Abbas (Project Manager/Transport/Traffic Specialist & Principal Transport Planner)

Review of Traffic Impact Assessment Section 48 Traffic Review Stage 1A - Ratio Report (2006)

Client: Canberra Capital Airport Group

Services provided: Master Plan Review, Traffic Impact Assessment, Traffic Modelling and Analysis, Intersection Analysis

This study reviewed and examined the Traffic Impact Report for the proposed DFO Shopping Centre and Bulky Goods Centre development on Section 48 Fyshwick, prepared by Ratio Consultants Pty Ltd for Austexx Developments Pty Ltd in April 2006. This review was meant to note whether the appropriate standards and guidelines relating to traffic generating developments and parking were followed. In particular, the review examined the impact of the proposed stage 1A development on the Canberra Avenue/Hindmarsh Drive/ Newcastle Street intersection.

Dr. Khaled Abbas (Transport & Traffic Specialist & Principal Transport Planner)

Review of Proposed DFO Shopping Centre Development Consistency with Preliminary Assessment & Traffic Impact Study (2006)

Client: Canberra Capital Airport Group

Services provided: Master Plan Review, Traffic Impact Assessment, Traffic Modelling and Analysis, Intersection Analysis

This study examined the Scott Wilson Traffic Impact Study (January 2005) for the proposed Section 48 development at Fyshwick. The objectives of this review were to ensure the adequacy of the traffic impact assessment (TIA) with the preliminary assessment (PA) produced by Land Development Agency (LDA) as well as to review the impact of the development on the surrounding road network and particularly the nearby signalised intersection of Canberra Avenue/Hindmarsh Drive/Newcastle Street as well as on Newcastle Street.

Dr. Khaled Abbas (Transport & Traffic Specialist & Principal Transport Planner)



Traffic Impacts on Newcastle Street Due to Local Developments (2006)

Client: Canberra Capital Airport Group

Services provided: Traffic Impact Assessment, Traffic Modelling and Analysis, Intersection Analysis

SMEC has examined the future performance of Newcastle/Collie/Barrier Streets intersection based on traffic levels in 2011 reflecting a population in Canberra and Queanbeyan of 382,000. The assessment is also to include the impact of proposed developments in Fyshwick not specifically included in the 2011 model forecast, namely Section 48 – stage 1 and a proposed extension of the Bunnings store

Dr. Khaled Abbas (Transport & Traffic Specialist & Principal Transport Planner)

West Belconnen Regional School TIA (2006)

Client: ACT Procurement Solutions (Department of Education and Training)

Services Provided: Traffic Impact Assessment, Traffic Forecast, Intersection design and Analysis, Carpark Design

The existing Ginninderra High School is marked for demolition and a new school is planned to be built on the site. SMEC was asked to evaluate Master Plans with regard to traffic impact on existing facilities and also to evaluate various carpark designs for capacity and safety. The tasks undertaken were:

- Conduct traffic counts around the area to determine current traffic flows
- analyse traffic generation at schools in the ACT to determine traffic generation rates
- predict traffic generation for the new school
- predict traffic origins and destinations based on school enrolment patterns
- design and analyse intersections required by the school for capacity and safety
- analyse intersections in the area to determine traffic impacts
- make recommendations on preferred Master Plan based on analyses.

Dr. Khaled Abbas (Transport & Traffic Specialist & Principal Transport Planner)

Canberra Airport Access Study (2006)

Client: Canberra Capital Airport Group

Services provided: transport planning, traffic modelling and intersection analysis.

This project examined the impact of introducing a second access to the airport. It involved updating SMEC's Canberra TransCAD network to 2006, to include future works and land use to match the test years. Once this was done the network was calibrated around the Airport for a close fit to recent vehicle counts. aaSIDRA was used to assess the performance of the new intersection in various configurations and for various years.

The project involves the planning and design of new access options to the proposed upgraded airport terminal - the planning and design of the duplication of arterial roads leading to the airport. This involves using PARAMICS and aaSIDRA to optimise traffic arrangements.

Dr. Khaled Abbas (Transport & Traffic Specialist & Principal Transport Planner)

Batemans Bay Bypass (2006)

Client: Eurobodalla Shire Council

Services: Road works of route section 1 of the Surf Beach Bypass, Pedestrian cycle Bridge in Surf Beach Avenue spanning the bypass road. Sewer Rising Main along part of the road corridor.

This is a large project involving all aspects of building a highway bypass. It includes a traffic component concerned with estimating turning movement counts at key intersections for the intended bypass. This is followed by level of service analysis for different intersection configurations and reporting on the most appropriate configuration from a traffic operational point of view.

Dr. Khaled Abbas (Transport & Traffic Specialist, Principal Transport Planner)



Kings Highway (2006)

Client: Department of Urban Services, Roads ACT

Services Provided: Detailed Survey of the site, a Design Options Study, Preparation of the Preliminary Sketch Plan (PSP), Preparation of a Preliminary Assessment and Development Application, Economic Analysis.

This project is to upgrade a section of the Kings Highway that has a very high accident rate. The project objectives are as follows:

Complete the design (to Conceptual Design Stage) of the agreed geometric improvements, pavement widening and pavement rehabilitation works of the ACT section of the Kings Highway

Perform a detailed engineering survey of the site.

Perform a Design Options Study involving a review of previous studies, Preliminary Environmental Assessment, and Geometric Improvements Options.

Prepare a Concept Design Report entailing an Environmental Assessment, Public Consultation of stakeholders, and prepare a Design Report incorporating a whole life economic analysis for each of the project options. This included Preliminary Sketch Plans (PSP).

Conducting an economic feasibility study for the geometrical and structural improvements of three sections along Kings Highway. This is meant to assist in prioritizing improvement work in case of budget constraints i.e. to determine which section is more viable to start with.

Dr. Khaled Abbas (Transport/Traffic Specialist, Principal Transport Planner & Economist)

Concept Design and Preliminary Assessment Consultancy for ACT Dragway (2006)

Client: ACT Procurement Solutions

Services: environment/traffic/heritage/geotechnical/ecology/pavement design/safety/utilities

SMEC was commissioned to prepare a Preliminary Assessment (PA) for the proposed ACT dragway on block 51 Majura to identify potentially major impediments or detrimental issues which may affect the acceptability, viability, and budgeted cost of the project. Issues covered include: Financial - the cost of certain engineering works / Noise – comprehensive noise modelling / Pavement – design and cost / Ecology - preliminary assessment of fauna and flora / Contaminated Land – an initial search of possible contaminated sites / Drainage – including stormwater and pollution control / Geotechnical – depth and type of rock, cost implications, risk of ‘acid sulphate’ rock / Heritage – both Indigenous Australian and European / Traffic – access and egress, safety / Track Alignment – including sun glare and solar orientation / Safety - fire and emergency services / Air quality – modelling possible particulate and gaseous poll / Utilities – gas, electricity, potable water, stormwater, sewerage, communications.

Dr. Khaled Abbas (Transport & Traffic Specialist, Principal Transport Planner)

Lidcombe Town Centre Studies (2006)

Client: Auburn Council – Sydney - Australia

Undertaking the assessment of the Lidcombe Town Centre Studies to provide for the preparation of a Town Centre Development Control Plan (DCP). Assessments include traffic and transport assessment. The project also involves consultation and identification of a preferred development scenario for the next 30 years.

Dr. Khaled Abbas (Transport & Traffic Specialist, Principal Transport Planner)

Gateway Upgrade Project (2006)

Client: Main Roads, Queensland

Assessing level of service for Gateway bridge with entry and exit ramps both for the northbound and south bound directions. This was compared to the level of service computation for an alternative option for Gateway Bridge. This option involves a northbound bypass lane.

Dr. Khaled Abbas (Transport & Traffic Specialist, Principal Transport Planner)



Pialligo Avenue Upgrade – Airport Access (2005-2006)

Client: Procurement Solutions

Services provided: transport planning, stakeholder consultation, concept design, preliminary design, detail design, PARAMICS modelling, cost estimation, economic analysis, tender specifications, superintendence, safety auditing

The Pialligo Avenue Upgrade was developed in parallel with planning for the future connection between the Monaro Highway and the proposed Majura Parkway. Options for Parkway routes either side of the Royal Military College's historic No. 1 Oval were being considered using the Majura Parkway TransCAD model. While a decision on the route of the Parkway has not yet been taken, the duplication of Morshead Drive and Pialligo Avenue is compatible with either Parkway option. This independence arises from the Parkway vertical alignment being above Morshead Drive/Pialligo Avenue for both Parkway options. In addition, intersection layouts on Morshead Drive and Pialligo Avenue are compatible with future interchange options. SCATS loop count data was available for the signalised intersections of Fairbairn/Morshead and Fairbairn/Majura. Future traffic volumes were generated using TransCAD

A range of different short term and long term options were modelled in PARAMICS to evaluate the impact on the traffic of duplications, turn restrictions and signalling one or more of the roundabouts. The possibility of signal metering on of the roundabouts was also considered. Detailed analysis of each intersection for each option was performed in aaSIDRA so that queue data could be documented and as verification of the PARAMICS.

Based on this analysis a PSP was prepared detailing a road layout that would lower congestion through the network while fitting the prescribed budget. The study involves a micro simulation traffic modelling and an economic appraisal of a range of road network improvement options prior to finalising the Preliminary Sketch Plan submission for the duplication of Pialligo Avenue.

Dr. Khaled Abbas (Transport & Traffic Specialist, Principal Transport Planner & Economist)

Hastings Roads & Traffic Study (2000- 2006)

Client: Port Macquarie-Hastings Council

http://www.hastings.nsw.gov.au/resources/documents/0014387prelimroute_Annexure_C.pdf

http://www.hastings.nsw.gov.au/resources/documents/Outer_Link_Council_Report_18_12_06_Attachmen_t3_Pages_86-170.pdf

http://www.hastings.nsw.gov.au/resources/documents/Outer_Link_Rd_ERM_Final_Report_Part3of3.pdf

Services provided: transport planning, stakeholder consultation, concept design, strategic modelling, pedestrian movement, safety, intersection analysis.

This study included an assessment of the future needs for the whole Hastings road network for the next 20 years. The project involved:

- Stakeholder review; collection and collation of extensive traffic data;
- Integration of population, retail, commercial and industrial forecasts; assessment of the impacts of the Hastings Urban Growth Strategy on network needs;
- Development of a GIS network model using TransCAD; review of accident histories; and
- Development and creation of a prioritised implementation plan.
- Assessment of alternative ring road alignments in terms of Level of Service and changes in travel time.

This model has since been updated for use in several different projects for the Port Macquarie-Hastings council including assessments of road networks in new development and traffic impact studies for these developments along with evaluating the benefit of several more environmentally acceptable ring road alternatives. Most recently the Port Macquarie model has been revisited to assess the impacts of the proposed Thrumster development on proposed intersections along the existing Oxley Highway using aaSIDRA. The aim is to determine a timeline for the construction of the Oxley Highway Bypass.

Dr. Khaled Abbas (Transport & Traffic Specialist & Principal Transport Planner)



**CONTRIBUTION OF TPTEH STAFF IN PROJECTS
WITH INTERNATIONAL ORGANISATIONS:**

- **UNITED NATIONS**
- **EUROPEAN UNION**
- **WORLD BANK**
- **EMIRATES CENTRE FOR STRATEGIC STUDIES &
RESEARCH**
- **UNIVERSITY OF TEXAS AUSTIN**



Dr. Khaled A. Abbas

7th Framework Programme for Research FP7-PEOPLE-2013-ITN – Engineering Panel European Commission, Brussels, (2013)

Client: European Union, Belgium

Role: International Expert - Evaluating 10 Engineering Research Proposal (iTransNet 607006 - COST-NVH 606089 -EVmod 606698, WATERPACT 607651 - BOOST 608413 – CoffEng-ITN 608414 – PENCIL 608246 – TRAINHEAT 608036 – DEASLPOWER 607055 – ENERGISE 608226) Rapporteur for 4 Engineering Research Proposals (iTransNet 607006 -EVmod 606698, WATERPACT 607651 - CoffEng-ITN 608414)

Dr. Khaled Abbas - International Expert

Integetation of Railway Systems between Arab Countries and its Integetation with Aviation, Maritime & Road Transport Systems & Transport Agreements between Arab Countries, (2013)

Client: The Emirates Centre for Strategic Studies & Research, Abou Dhabi UAE

Role: International Expert - Conducted all study tasks as a special assignment contributing to a book chapter

Dr. Khaled Abbas - International Expert

Integrated Transport System in Arab Mashreq (ITSAM): An Integrated Information System (INFOSYS) – A Proposed Regional Road Transport Information System (2001)

Client: Subcontracted to Transport Committee – Economic and Social Commission for Western Asia (ESCWA) – UN.

Role: Transport Consultant - Design a road transport information system in a way that allows the input of data and information required to utilise transportation planning packages such as International Freight Simultaneous Transportation Equilibrium Model (IFSTEM) and highway design and evaluation packages such as Highway Design and Management model HDM-4. Also producing a set of data collection forms to be used by member countries in completing required data to operate IFSTEM and HDM-4 models as well as to conduct country based comparisons.

Dr. Khaled Abbas - Transport Consultant

Install, Test and Train on Traffic Engineering and Transportation Planning Software Models (2001)

Client: Cairo Traffic Engineering Bureau under a World Bank Grant No. TF 27279

Role: Traffic Consultant - As part of a team of Egypt National Institute of Transport in Association with Dowling Associates, Inc., USA shared in conducting training for traffic police officers and engineers on applying traffic software as well as in conducting a traffic study for Maadi district in Cairo.

Dr. Khaled Abbas - Traffic Consultant



Improvement of Pedestrian and Child Safety in Urban Areas - A Case Study of Cairo & Nairobi (1994) <http://repository.uneca.org/bitstream/handle/123456789/1739/Bib-13368.pdf?...>

Client: Transport, Communications & Tourism Division (TCTD) of United Nations Economic Commission for Africa (UNECA), Addis Ababa, Ethiopia

Role: Traffic Safety Consultant - Development of an Integrated Traffic Safety Management. Assessing & comparing traffic safety for pedestrian & children in the cities of Cairo (Egypt) and Nairobi (Kenya) as case studies. Improve understanding of pedestrians and children traffic safety problem in urban areas, its root, direct and post causes. Developing a comprehensive program of traffic safety in Africa meant to prevent & reduce potential of pedestrians and children in accidents in urban areas.

Dr. Khaled Abbas - Traffic Safety Consultant

Ad Hoc Expert Group meeting on Development of Urban Transport in Africa (1994)

Client: Transport, Communications & Tourism Division (TCTD) of United Nations Economic Commission for Africa (UNECA), Addis Ababa, Ethiopia

Role: Traffic Safety Consultant & Ad Hoc Expert Representative of Egypt - Present findings of the above mentioned study. Represent Egypt to come up with a road safety programme for UNECA to adopt within the framework of the United Nations Transport and Communications Decade in Africa (UNTACDA II)

Dr. Khaled Abbas - Traffic Safety Consultant

BTMS: A Generic Bus Transit Management System (1995)- Transportation Research Report.

Client: Center for Transportation Research, Bureau of Engineering Research, The University of Texas at Austin, Austin, Texas, USA.

Role: Senior Visiting Fulbright Scholar – Developing a generic Bus Transit Management System (BTMS). The BTMS contains seven subsystems namely: a vehicle maintenance management system, a vehicle operation management system, a new vehicles procurement management system, an operational cost accounting, fare determination and subsidy computation, travel demand prediction and performance evaluation. The BTMS is composed of three components: a user interface module, a time based simulation model and a time based output module. The simulation model contains principal dynamic feedback structural relationships that describe the bus transit system. These are mainly based on system dynamics equations, accompanied by deterministic specifications, empirical formulations and stochastic representations of some of the variables/parameters describing the activities/functions that constitute the management of a bus transit company. The BTMS is capable of quantifying the effects that might occur over time as a result of changes in the bus transit practices, procedures, policies, and exogenous key input parameters.

Dr. Khaled Abbas - Transport Consultant



**CONTRIBUTION OF TPTEH STAFF IN PROJECTS IN
UNITED ARAB EMIRATES**



Dr. Khaled A. Abbas

Effect of Transport on Dubai Economy (0.5 M. AED) (2008-2009)

The main objective of this report is to understand and quantify the contribution of transport to the economic development of Dubai. The study presents a literature review on the role and impact of transport on economic development. It identifies positive and negative transport impacts and concepts of the role of transport in development. The study acknowledges the concept of sustainable development and presents a definition of sustainable transport system and identifies a number of generic proxy indicators for the transport sector and the economy. Data and statistics on proxy indicators for the transport sector and the economy are compiled. The study presents a conceptualisation of the effect of transport system on Dubai economy. It conducts an analysis to demonstrate the contribution of the transport sector to the Gross Domestic Product in Dubai, formation of fixed capital, and employment. Finally the study presents a set of findings and conclusions

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning-Prepared the Study)

Pickup Transport In Dubai (0.30 M. AED) (2009)

Public transport in Dubai is concerned with passenger and freight movements. In this context, a number of vehicles are permitted for licensing under the union traffic law. One of these vehicles is known among the general public as “Pickup”. Several entities were identified as constituting the pickup transport system in Dubai. The interactions among all of these entities can either create favourable conditions or can substantially limit the efficiency and effectiveness of the Pickup transport system. A conceptualization of existing interactions was displayed. The current structure demonstrates clearly that there is a strong limitation in the Pickup transport industry in Dubai namely the nonexistence of a Transport regulator to set safety, environmental and operational standards for the pickup transport industry, and to monitor, inspect and enforce such standards. To overcome the limitations of the current structure governing the pickup transport industry in Dubai, a number of short, medium and long term recommendations were suggested in the report.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning – Prepared the Study)

Cost Benefit Analysis of Roads and Transport Projects in Dubai (2.0 M. AED) (2009-2010)

This study was concerned with the estimation of all costs as well as all benefits for the RTA investments in transport infrastructure and services in Dubai. Costs estimation includes all capital and operational and maintenance costs. On the other hand benefits estimated include savings in travel time costs, vehicle operational costs, accidents costs by severity and environmental pollution costs. The study was able to demonstrate the expected viability of the huge investments in the capital infrastructure of the Dubai metro project over the future expected years.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning- Study Technical Leader)

Audit of Serco Team Performance in Accordance with Bus Operations Management Office (OMO) (1.0 M.) (2009-2010)

This study was concerned with conducting a technical audit of Serco team performance in accordance with Bus Operations Management Office (OMO) between RTA/PTA and Serco. The audit included identifying the audit objectives, agreeing on the appropriate audit process, conducting the audit including data and document collection and inspecting, conducting interviews with SERCO staff, identifying strengths and limitations by area of technical support including planning, operation, maintenance etc.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning- Study Technical Leader)



RTA Policy on Public Private Partnerships for Transport Infrastructure & Services (English & Arabic Versions) (0.5 M.AED) (2010)

This 15 page document was concerned with the development and preparation of an RTA policy on Public Private Partnership for Transport infrastructure and services. Such policy document included answers to the classical questions of Why we need PPP, the definition of PPP, the advantages of PPP and who is involved in a PPP. The policy document also included PPP characteristics and basic principles, the main PPP modalities and finally the PPP policy framework and implementation process.

Dr. Khaled Abbas (Chief Transport Planner and Economist - Senior PPP Advisor – Prepared Documents)

RTA Procedures Manual on Public Private Partnerships for Transport Infrastructure (English) (1.5 M AED.) (2010)

This 130 page document was concerned with the development and preparation of an RTA procedures manual on Public Private Partnership for Transport infrastructure. Such manual included detailed description of the implementation process for the PPP policy framework and the PPP implementation process

Dr. Khaled Abbas (Chief Transport Planner and Economist - Senior PPP Advisor – Prepared the Documents)

Public Private Partnership (PPP) Projects Prioritisation Process (0.1 M. AED) (2010)

The main objective of this study was to develop a PPP project prioritisation process. This involved determining sources of project identification. It also involved identifying a set of criteria and sub criteria that can best represent the attractiveness and readiness to go for PP both from the public and private perspectives. Each of these criteria and sub-criteria was given a weight after discussion with several RTA experts. The list of sub-sector projects is then subjected to a multi criteria analysis. An initial prioritized list of PPP projects can be produced. It may be useful to divide the list into three categories; high, medium and lower priority according to the criteria applied. Naturally, projects with good PPP attributes such as manageable and transferable risks, probably financially viable and ‘most ready’ would be the highest priority.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning- Senior PPP Advisor)

Draft for a Public Private Partnership (PPP) Law for Dubai (1 M. AED) (2010)

A draft for the first Dubai level PPP law was prepared. This took into consideration the developed RTA PPP Policy and Procedures documents. It also relied on the United Nations Commission on International Trade Law (UNCITRAL-2004). Further improvements and modifications were also conducted taking into consideration comments received by a number of RTA experts.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning- Senior PPP Advisor – Reviewed the Draft Law)

Public Private Partnership PPP Business Model for Marine Projects (1 M. AED) (2010)

A number of PPP modalities that specifies the expected strategic partnership relations between RTA and the private sector was explored and assessed. These included options of marine vessel lease or sell as well as development of marine stations and possible benefit from retail space. All options considered operation and maintenance to be carried out by private sector with RTA as regulator. Routes were differentiated as strategic or non strategic and RTA would specify the fare structure for those strategic routes as for other routes the private sector can set the appropriate fare structure according to his market analysis studies. More than 35 components of the preferred business model was specified and presented and approved by the RTA PPP committee.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning- Senior PPP Advisor – Technical Team Leader)



Future Marine Service Expectations for PPP in Marine Projects (1 M. AED) (2010)

Internally Conducted

This study was concerned with determining the most appropriate future forecast scenario for marine transport demand in Dubai as well as with the identification of the appropriate marine supply parameters. Future 2015 marine routes were differentiated as strategic or non-strategic. For those strategic routes it was agreed that RTA would specify the fare structure for those strategic routes as well as other minimum operating requirements. As for other routes the private sector can set the appropriate fare structure and operational parameters according to his market analysis studies.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning- Senior PPP Advisor – Technical Team Leader)

Development of Request for Tender and Draft Concession Agreement for Public Marine Transport Services in Dubai (2010-2011) Conducted by Deloitte –DLA Piper & WorleyParsons

As part of the PPP process for Marine Transport Services, Deloitte –DLA Piper & WorleyParsons were commissioned by RTA to assist in the PPP process for this project up to the tendering and bid award stage. This involved Development of Request for Tender and Draft Concession Agreement for Public Marine Transport Services in Dubai. These documents were prepared by the consultants and thoroughly reviewed and discussed by RTA senior staff and was signed off by RTA technical staff.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning – Senior PPP Specialist – Reviewer & Signatory for both RFT and Draft Concession Agreement Public Marine Transport Services)

Financial Government Implications Resulting from Subsidising Fuel for Taxis in Dubai (0.1 M. AED) (2010)

The main objective of this study was to estimate for the taxi industry in Dubai the amount of fuel subsidy received and the financial implication of this for the government. The study obtained the amount of fuel gallons utilised in 2009 for each taxi company in Dubai. Based on this a computation of the fuel cost was conducted using both the fuel market price as well as the actual fuel price & difference was considered as a form of government subsidy. For each of six companies percentage of received fuel subsidy was computed.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning – Conducted the Study)

Financial Feasibility for Inter-emirates Bus Operation (2 M. AED) 2009-(2010)

This study was concerned with the estimation of required future (2011) public transport bus capacity in light of the current economic crisis. This was conducted by service type i.e. for urban services, feeder services and inter emirates services as well as taking into account the charter bus contracts. In doing this the expected passenger demand was obtained from the strategic transport model and compromised with current travel data. The current network restructuring as well as the delays in opening the Dubai metro stations was also taken into account. Based on this data and information the Peak Vehicle Requirement route by route was examined for the future year 2011.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning- Study Technical Leader)

Estimation of Public Transport Agency Bus Fleet Requirements (0.5 M. AED) (2010)

This study was concerned with the estimation of required future (2011) public transport bus capacity in light of the current economic crisis. This was conducted by service type i.e. for urban services, feeder services and inter emirates services as well as taking into account the charter bus contracts. In doing this the expected passenger demand was obtained from the strategic transport model and compromised with current travel data. The current network restructuring as well as the delays in opening the Dubai metro stations was also taken into account. Based on this data and information the Peak Vehicle Requirement route by route was examined for the future year 2011.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning – Conducted the Study)



Update Projects Portfolio Management System (2008-2010)

The main objective of the project is to update the comprehensive framework for the classification of projects and initiatives of the RTA as well as refining the integrated methodology for prioritizing projects and initiatives of the RTA, taking into account all relevant factors.

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning)

Development of Roads and Transport Authority Operations Control Centres Guidelines (0.5 M AED.) (2011)

The Operations and Control Centres (OCC) serve as command and control facilities for transport infrastructure and service operation in RTA. A typical transport OCC serves as the main location from which several aspects of the transport systems are controlled and decisions are made regarding normal and non-normal operations. The facility also serves as the primary, but not necessarily exclusive, point of coordination for all operational decisions affecting traffic and transportation infrastructure and services. The scope of this document is to provide a general operations guideline and a set of specific requirements for the RTA OCCs to assist these facilities and their staff to increase their level of work efficiency and productivity. There are 10 main components that this document focuses on. These components were discussed and approved during the ITS Master Plan Implementation committee meetings. These components are as follows: OCC Hierarchy Chart & Authority Matrix – Competencies - Staff Training - Managing shift work - OCC Security - HES Measures - OCC standard operating procedures (SOPs) – Databank -Risk Management - Manage warranties & System Maintenance>

Dr. Khaled Abbas (Chief Specialist Transportation Studies – ITS Committee Member and Guideline Technical Reviewer and Signatory)

Clean Transport System in Dubai: Achieving RTA Strategic Goals (0.5 M. AED) (2011)

The main objective of this project was to assess the potential impacts of RTA planned public transport projects (bus system improvements, red, green & purple lines and Al-Sofouh tram) on reducing air pollution emissions from the Dubai transport system. In addition the study assesses the potential impacts of RTA planned transport pricing policies (increase in parking fees, Salik fees etc..) on reducing air pollution emissions from the Dubai transport system. At a micro level the study also assesses the potential impacts of initiatives by RTA operating agencies especially the PTA utilization of Euro IV and V buses as well as the Dubai taxi experiment on using hybrid taxis and their effect on reducing air pollution emissions from the Dubai transport system. The study concludes by itemising other RTA projects, policies, measures that are currently practiced or are envisaged or under consideration that have potential for improving air quality through the reductions of air emissions from motorized vehicles. It suggests and examines the potential impact of other policies, measures and options, at the federal level, on reducing air emissions from motorised transport in Dubai

Dr. Khaled Abbas (Chief Specialist Transportation Studies & Planning & Study Team Leader)

Dr Khaled Abbas was also highly involved/responsible for the following studies as Senior Transport/Traffic Planner & Economist with DAR AL-HANDASAH Consultants (Shair & Partners) (1994- 1995 & 1997- 1999)

1. Traffic Impact Assessment & Parking Study for Bur Juman Center Extension Project, Dubai (D9825)
2. Traffic Study for Dubai Airport Free Zone, Dubai (D9716)
3. Design for Operation of a Shuttle Bus Service between Parking Areas and Dubai World Trade Center, Dubai (D9427)
4. Estimation of Equivalent Single Axle Loads for Dubai World Trade Center, Dubai (D9427)
5. Design of Signalized 4-arm Intersection at Al-Mankhoul Roads, Dubai (D9418)
6. Improvement of Al Ittihad Road and Interchanges at Al Qiyadah, Flame Roundabout Port Saeed and Airport Road, Dubai (D9413)
7. Traffic & Parking Study & Estimation of Equivalent Single Axle for Community No. 128 in Dubai (D9413)



Dr. Ahmed Sabry Hakim

<i>Project Advisor Senior Maintenance Highway Eng.</i>	<i>April. 2006 ~ Dec. 2007</i>	<i>AAW</i>	<i>Maintenance of Roads and Bridges in Al Ain Region, Municipalities and Agriculture Department, Al Ain Municipality, UAE.</i>	<i>Maintenance Manual, DD and CS</i>
--	------------------------------------	------------	--	--



CONTRIBUTION OF TPTEH STAFF IN PROJECTS IN SAUDI ARABIA



Dr. Khaled A. Abbas

Development of Local Area Plans and Action area Plans for Dammam, Qatif & Ras Tanura in Saudi Arabia (2004-2005)

Client: With Azmi Abdulhadi & Abdulla Al Moaibed Consulting Engineering Company & Parsons Brinckerhoff International UK for Dammam Metropolitan Authority, Saudi Arabia

Role: Transport Consultant – Responsible for Transportation & Traffic Analysis for Regional & Urban Road Networks in the study area as well as identifying Transportation Planning Issues. Additionally developing Regional & Urban Road Network, Traffic and Transportation Plan to Cater for Future Proposed Land Use Structural Plan.

Dr. Khaled Abbas - Transport Consultant

Traffic Impact Assessment for Proposed Dammam Hypermarkets (2005)

Client: Savola Development Company

Role: Traffic Consultant - Conducting 2 full-fledged Traffic Impact Assessment TIA for Savola Dammam Hypermarkets in Saudi Arabia. This involved site & Traffic Investigation for Proposed Dammam Hypermarket in Saudi Arabia as well as identifying & assessing options for entry, exit, parking , built up and service area locations

Dr. Khaled Abbas - Traffic Consultant

Dr Khaled Abbas was also highly involved/responsible for the following studies as Senior Transport/Traffic Planner & Economist with DAR AL-HANDASAH Consultants (Shair & Partners) (1994 to 1995 & 1997 to 1999)

- Traffic Impact Assessment for Jabal Al Kabah Development Project, Saudi Arabia (S9745)
- Traffic Study and Estimation of Equivalent Single Axle Loads for Yanbu-Rabigh-Thuwal Expressway, Saudi Arabia (S9730)
- Traffic Study and Estimation of Equivalent Single Axle Loads for Qassim-Madinah Expressway, Saudi Arabia (S9657)

Dr. Ibrahim Mabrouk

1994	SAUDI ARABIA	Transportation Master Plan Study of El-Taief Sub-urban Area
------	--------------	---



**CONTRIBUTION OF TPTEH STAFF IN PROJECTS IN
IN OTHER MIDDLE EAST, ASIAN & AFRICAN
COUNTRIES**

Dr. Ahmed Sabry Hakim

Position Held / Designation	Duration	Names of Employing Organization	Location and Client	Types of Service Rendered
Road Design and Road Institutional Dept.	Jan. 2004 ~ Jan. 2005	KEI	The Study on Road Network Development in the Sultanate of Oman, (MOT), JICA	MP/FS
Project Advisor and Traffic Management Planner	June 2006 ~ Dec. 2007	AAW	Shell Global Solutions International, B.V., And Al Jaber & Partners, Qatar.	DD and CS
Team Leader	Nov. 2005 ~ 2006	AAW	Al Salou and Al Dahaba Roads, Yemen.	FS/DD
Team Leader	Nov. 2005 ~ 2006	AAW	Zumar - Al Husinaiah Road, Yemen.	C/S
Team Leader	Dec. 2005 ~ 2006	AAW	Al Khartoum Intermediate Ring Road, Sudan.	DD
Team Leader	Dec. 2006 ~ 2007	AAW	Portal-Hima Road, Uganda	C/S
Drainage and Road Structure	Oct. 2001 ~ Dec. 2002	KEI	Pan-Philippine Highway (Plaridel, Cabanatuan and San Jose Bypasses, (DPWH), JICA Project	DD
Traffic Management and Institutional	Aug. 2000 ~ Aug. 2001	KEI	Tripoli, Lebanon, (CDR), JICA	MP/FS/BDD
Traffic Control and Institutional	Mar. 2000 ~ July 2001	KEI	Phnom Penh, Cambodia, Municipality of Phnom Penh, JICA	MP/FS/BDD
Sr. Highway Engineer	May 1999 ~ Dec. 2000	KEI	Visayas, Philippine, (DPWH), JIBC	DD/CS
Highway Design and Organization	Sept. 1998 ~ Mar. 1999	KEI	Damascus, Syria, Damascus Governorate & Ministry of Interior, JICA	MP/FS/BDD
Sr. Highway Engineer	May 1997 ~ Mar. 1998 (0.92 year)	KEI	Grenada, JICA, Ministry of Communications, Works and Public Utilities, JICA	FS
<p>NOTES: FS: Feasibility Study MP: Master Plan DD: Detail Design BDD: Basic Detail Design JICA: Japan International Cooperation Agency JBIC: Japan Bank for International Cooperation KEI: Katahira & Engineers International DPWH: Department of Public Works and Highways, Philippines MOT: Ministry of Transportation MOE: Ministry of Economic MOH: Ministry of Housing, MEA: Metropolitan Expressway Association</p>				



Dr. Khaled A. Abbas

Dr Khaled Abbas was also highly involved/responsible for the following studies as Senior Transport/Traffic Planner & Economist with DAR AL-HANDASAH Consultants (Shair & Partners) (1994 to 1995 & 1997 to 1999)

Country	Tasks/Projects/Proposals
Lebanon	<ol style="list-style-type: none"> 1. Economic Appraisal of Improvement of Ouzai Road and Construction of Khaldeh/Cocodi Road in Beirut, Lebanon (L9708) 2. Development of a Traffic Model for the City of Saida, Lebanon (L9414)
Algeria	<ol style="list-style-type: none"> 1. Economic Evaluation for Lakhdaria - Bouira Autoroute, Algeria (A9545) 2. Assessment of Tunnel Densities at Different Speeds for East-West Motorway - Section Lakhdaria - RN5 Connection, Algeria (A9545)
Morocco	<ol style="list-style-type: none"> 1. Traffic Study for Upgrading RP8 Casablanca/EL-Jadida Freeway & introduction of Toll, Morocco (MC9590) 2. Estimation of Traffic Turning Movements at Interchanges for the Rabat-Fes Motorway, Morocco (MC9316)
Jordan	<ol style="list-style-type: none"> 1. Estimation of Parking Requirement for Extension to Meridian Hotel in Amman, Jordan (J9847)
Yemen	<ol style="list-style-type: none"> 1. Estimation of Equivalent Single Axle Loads for Improvement of Taiz-Jabal Sabr Road, Yemen (Y9651)
Turkey	<ol style="list-style-type: none"> 1. Estimation of Equivalent Single Axle Loads for Glaxo/Wellcome Pharmaceutical Packing and Warehouse Facility , Turkey (TK9863) 2. Traffic Study for Bursa Ring Road, Turkey (TK9723) 3. Assessment of Tunnels Speed/Flow Relationship for Bursa Ring Road, Turkey (TK9723)
Qatar	<ol style="list-style-type: none"> 1. Traffic Study and Estimation of Equivalent Single Axle Loads for Al-Dukhan Residential Area, Qatar (Q9818) 2. Traffic Study for the Ras Laffan Housing Project, Qatar (Q9431)

Dr. Ibrahim Mabrouk

2011	KUWAIT:	<i>Traffic Impact Study for Hawalli Educational Building in Kuwait city .</i>
------	---------	---



CONTRIBUTION OF TPTEH STAFF IN PROJECTS IN EGYPT

Dr. Ahmed Sabry Hakim

Position Held / Designation	Duration	Names of Employing Organization	Location and Client	Types of Service Rendered
<i>Transport Planner Expert and Training Team Leader</i>	<i>Feb, 2013</i>	<i>Idom Consulting, Spain</i>	<i>Support to the Reform of the Egyptian Transport Sector, Technical Assistance Project EuropeAid, Ministry of Transport (Cairo, Egypt).</i>	<i>Theoretical, Practical, Case Studies and On Job Training</i>
<i>Privatization</i>	<i>Nov. 2009 ~ Mar. 2012</i>	<i>KEI Masakazu Ishigoru (President), 81-3-3563-4053</i>	<i>The Comprehensive Study on The Master Plan for Nationwide Transport System of Egypt, Cairo, MOT and JICA</i>	<i>MP</i>
<i>Transport Expert</i>	<i>Apr2011-on going</i>	<i>SETS</i>	<i>Cairo Congestion Study Phase 2, World Bank Study. Estimate of Direct loss due traffic congestion in Cairo.</i>	<i>WB Study</i>
<i>Transport Expert</i>	<i>July2010-Dec2010</i>	<i>Namaa</i>	<i>Cairo Congestion Study Phase 1, World Bank Study. Estimate of Indirect loss due traffic congestion in Cairo.</i>	<i>WB Study</i>
<i>Natural Condition Surveys</i>	<i>Oct. 2007 ~ Jan. 2009</i>	<i>KEI</i>	<i>Feasibility Study on High Priority Urban Toll Expressways in Cairo, MOT, JICA</i>	<i>FS</i>
<i>Transportation Facility Design (Road)</i>	<i>Feb. 2007 ~ Aug. 2008</i>	<i>KEI</i>	<i>The Strategic Urban Development Master Plan Study For A Sustainable Development of The Grater Cairo Region in Arab Republic of Egypt, MOH, JICA</i>	<i>MP and FS</i>
<i>Logistics infrastructure Planner II (Inland Transport)</i>	<i>Oct. 2006 ~ Oct. 2007</i>	<i>KEI</i>	<i>The Study on Multimodal Transport and Logistics System of The Eastern Mediterranean Region & Master Plan In The Arab Republic of Egypt, MOT, JICA</i>	<i>MP</i>
<i>Toll Operation, Maintenance and MEA Organization</i>	<i>Apr. 2005 ~ May 2006</i>	<i>KEI</i>	<i>Public-Private Partnership (PPP) Program for Cairo Urban Toll Expressway Network Development, (MOT), JICA</i>	<i>FS, PPP Program</i>



Supreme Court
القضاء
الدار

TRANSPORT PLANNING & TRAFFIC ENGINEERING HOUSE (TPTEH)

<i>Traffic Study Team Leader</i>	Nov. 2005 ~ 2007	AAW	Cairo Heights, Emaar Properties, Egypt.	M/P, F/S, DD, C/S
<i>Project Manager / Sr. Highway Engineer.</i>	Jan. 1996 ~ Mar. 1997	ECOGIM Consulting Office	Alexandria, Egypt, Alexandria Governorate	DD/CS
<i>Project Manager / Sr. Highway Engineer</i>	Apr. 1995 ~ Dec. 1995	ECOGIM Consulting Office	Alexandria, Egypt, Alexandria Governorate	DD/CS
<i>Sr. Highway Engineer</i>	Feb. 1994 ~ Mar. 1995	ECOGIM Consulting Office	Upper Egypt, Egyptian Highways & Bridges Authority	DD/CS
<i>Sr. Highway Engineer</i>	May 1993 ~ Jan. 1994	Egyptian Consultant Consortium	Fostat City, Egypt, Cairo Governorate	DD
<i>Sr. Highway Engineer</i>	May. 1992 ~ Apr. 1993	Egyptian Consultant Consortium	El-Shoroak City, Egypt, Cairo Governorate	DD
<i>Sr. Highway Engineer</i>	Mar 1991 ~ Apr. 1993	Egyptian Consultant Consortium	Alexandria, Egypt, Alexandria Governorate	DD/CS
<i>Sr. Highway Engineer</i>	May 1990 ~ Feb. 1991	Egyptian Consultant Consortium	15 th of May City, 2 ^{ed} . Stage, Egypt, Cairo Governorate	DD
<i>Sr. Highway Engineer</i>	Nov. 1984 ~ Dec. 1985	Wilbur Smith & Association / Egyptian Consultant Consortium	Cairo - Assuit, Egypt, Egyptian Highways & Bridges Authority	FS
<i>Sr. Highway Engineer</i>	Jan. 1984 ~ Oct. 1984	Maadi Consulting Group	Cairo, Egypt, Cairo Governorate / World Bank	DD/CS
<i>Sr. Highway Engineer</i>	July 1982 ~ Dec. 1983	Maadi Consulting Group	Giza, Egypt, Giza Governorate / World Bank	DD
<i>Sr. Highway Engineer</i>	Jan. 1981 ~ June 1982	Consulting Office of Gamial Kamal Hassan	Northern Coast, Egypt Ministry of Construction	DD/CS
<i>Sr. Highway Engineer</i>	Mar 1979 ~ Nov. 1980	Sapour Consulting Office	Beni Suif, Egypt Beni Suif Governorate	DD

NOTES: FS: Feasibility Study MP: Master Plan DD: Detail Design
BDD: Basic Detail Design JICA: Japan International Cooperation Agency
JBIC: Japan Bank for International Cooperation KEI: Katahira & Engineers International
DPWH: Department of Public Works and Highways, Philippines MOT: Ministry of Transportation MOE: Ministry of Economic MOH: Ministry of Housing, MEA: Metropolitan Expressway Association

Dr. Ibrahim Mabrouk

<i>Project manager of " Tunnel Planning underneath the railway in Fayyoun City ", EHAF Consulting Engineers. EGYPT, 2010,</i>		
<i>Project manager of " Abu Omar Tunnel planning in Ismailia Governorate", EHAF Consulting Engineers EGYPT, 2010</i>		
<i>Project manager of Al-Gammaleyyia-San Al-hagar Ring Road Study, EHAF Consulting Engineers The study dealt with the estimation of Trip generation, distribution, modal split and traffic assignment. Then designing road network through the city. At last, planning and design the necessary traffic safety devices on the road network.</i>		
2006	EGYPT :	<i>Transport Master Plan & Road Network Planning and design of Marryout area at Alexandria governorate, EHAF Consulting Engineers . The study dealt with the estimation of Trip generation, distribution, modal split and traffic assignment. Then designing road network through the city. At last, planning and design the necessary traffic safety devices on the road network.</i>
2005	EGYPT :	<i>Improving and redevelopment the High dam Road at Aswan, EHAF Consulting Engineers .</i>
2001	EGYPT :	<i>Study of Local , Regional and Int. Transpiration networks necessary for Constructing of Logistic Center at Suez canal Region.</i>
1995	EGYPT :	<i>Road Planning and Design of Shorouk City Northern Sector. International Company for Investment and Development.</i>
1993-1998	EGYPT :	<i>Highway Expert of the Highway Maintenance Committee for laying down the Highway Maintenance Code as part of the Egyptian Highway Code of Practice.</i>
1991-1992	EGYPT :	<i>Transport Sector Information System (second stage). Transport Planning Authority.</i>
1990	EGYPT :	<i>Feasibility Study of Constructing El-Warrak and El-Monieb Bridges On The River Nile . Funded by the United States Agency for International Development [AID].</i>
1988	EGYPT :	<i>Transport Master Plan & Road Network Planning and design for Settlement No. 1 Around The Ring Road.</i>
1986	EGYPT :	<i>Feasibility Study of Constructing New Highway Between Cairo and Assuit. Funded by the United States Agency for International Development [AID].</i>
1978	EGYPT :	<i>Cairo-Plaza Hotel Parking Study.</i>
1977-1978	EGYPT :	<i>Transport Master Plan & Road Network Planning and design for 10th of Ramadan City, Cairo.</i>
1976	EGYPT :	<i>Transport Master Plan & Road Network Planning and design for 15th of May City, Cairo.</i>
2012	EGYPT :	<i>Traffic Impact Study for Elab Petroleum Company at Alexandria .</i>
2012	EGYPT :	<i>Traffic Impact Study for Gulsan Plant .</i>
2011	EGYPT :	<i>Traffic Impact Study for 6 October Power Plant .</i>
2011	EGYPT :	<i>Traffic Impact Study for the extension of Marsa Alam Airport .</i>
2010	EGYPT :	<i>Traffic Impact Study for Helwan Power Plant .</i>
2010	EGYPT :	<i>Traffic Impact Study for Ismaieleya Power Plant .</i>
2010	EGYPT :	<i>Traffic Impact Study for Damietta Power Plant .</i>
2009	EGYPT :	<i>Traffic Impact Study for Giza Power Plant .</i>
2009	EGYPT :	<i>Traffic Impact Study for Benha Power Plant .</i>



2009	EGYPT :	<i>Traffic Impact Study for Sues Power Plant .</i>
2009	EGYPT :	<i>Traffic impact study of Nowaiba power plant (Technical Consultations Bureau & Applied Engineering Technology) TCB/AET.</i>
2008	EGYPT :	<i>Traffic Impact Study for Gabal El-Zeit Wind Farm Power Plant .</i>
2006	EGYPT :	<i>Road Network Planning and design for 21 villages at Minoufiaya governorate ,Ministry of Housing .</i>
2005	EGYPT :	<i>Planning of parking garage for Almahrousa Mole in Giza Governorate and Traffic Impact Study due to constructing this mole.</i>
1999	EGYPT :	<i>Planning of Taxi Service & Truck Terminals in Beni Sweaf Governorate .</i>
1997	EGYPT :	<i>Planning of Beni Sweaf Rail way station and surroundings .</i>

Dr. Khaled A. Abbas

Technical Advice & Support to Egypt Ministry of Transport: Various Studies – Research & Technical Advice – 4 Volumes (2013)

Client: Ministry of Planning and International Cooperation, Egypt

Dr. Khaled Abbas - Project Director & Consultancy Team Leader– All Study Tasks

Projects for Agencies & Authorities under Egypt Ministry of Transport Auspicious (2013/2014 Budget): Priorities & Recommendations - Technical Advice (2013)

Client: Ministry of Planning and International Cooperation, Egypt

Dr. Khaled Abbas - Project Director & Consultancy Team Leader– All Study Tasks

Prefeasibility Studies for Projects Suggested to be Financed through Public Private Partnership between Government & Private Sector – Initial Report – Technical Advice (2013)

Client: Ministry of Planning and International Cooperation, Egypt

Dr. Khaled Abbas - Project Director & Consultancy Team Leader– All Study Tasks

Options for Traffic Movements During Repair Works for Berkat Al-Sabah Bridge – Cairo Alexandria Agriculture Road - Technical Advice (2013)

Client: Transportation Planning Authority, Ministry of Transport, Egypt.

Dr. Khaled Abbas - Project Director & Consultancy Team Leader– All Study Tasks

Review of Traffic Impact Assessment Studies & Reports for Possible Construction of Macro Cash & Curry Whole Sale Store Along King Faisal Street in Giza – Greater Cairo – Technical Advice (2012)

Client: Transportation Planning Authority, Ministry of Transport, Egypt.

Dr. Khaled Abbas - Project Director & Consultancy Team Leader– All Study Tasks

Assessment of Transport Organisations Under Ministry of Transport Using Key Performance Indicators. (2011-2012)

Client: Transportation Planning Authority, Ministry of Transport, Egypt.

Dr. Khaled Abbas - Project Director & Consultancy Team Leader– All Study Tasks

Impact of Land Use Management Factors on Sustainability of Transport & Traffic System. (2012)

Client: Ministry of Planning and International Cooperation, Egypt

Dr. Khaled Abbas - Project Director & Consultancy Team Leader– All Study Tasks



Transport Economics under New Variables & Policies in Egypt. (2000-2002)

Client: Research Centre for Civil Engineering Studies- Faculty of Engineering - Cairo University for Transportation Planning Authority, Ministry of Transport, Egypt.

Role: Transport Consultant - Reviewing & developing manuals on:

- *Non-traditional financing methods for transport projects,*
- *Procedure for conducting economic & financial appraisals of transport projects*
- *Life cycle stages & steps of privately financed transport projects*

Dr. Khaled Abbas - Transport Consultant

Transport Economics under New Variables & Policies in Egypt. (2000-2002)

Client: Research Center for Civil Engineering Studies- Faculty of Engineering - Cairo University for Transportation Planning Authority, Ministry of Transport, Egypt.

Role: Transport Consultant - Reviewing & developing manuals on:

- *Non-traditional financing methods for transport projects,*
- *Procedure for conducting economic & financial appraisals of transport projects*
- *Life cycle stages & steps of privately financed transport projects*

Dr. Khaled Abbas - Transport Consultant

Household Survey conducted for the Cairo Regional Area Transportation Study (CREATS) (2001)

Client: Transportation and Traffic Engineering Research Unit - Faculty of Engineering, Ain Shams University for Japan International Cooperation Agency (JICA) & the Ministry of Transport. Egypt

Role: Transport Consultant - Responsible for supervision of household travel surveys in three districts in Greater Cairo as part of developing urban transportation plan for Greater Cairo.

Dr. Khaled Abbas - Transport Consultant

Impact Assessment of Reducing Weekly Working days on the Transport System in Egypt. (2000-2001)

Client: With Egypt National Institute of Transport for Ministry of Planning. Egypt

Role: Transport & Traffic Consultant - Drafting proposal and sharing in conducting assessment of reducing weekly working days on the intercity road & rail network in Egypt as well as on the metro and public transport systems in Cairo & Alexandria. Also co-authoring final report and a technical paper published in Arab Roads Journal

Dr. Khaled Abbas - Transport & Traffic Consultant

Environmental impact assessment of two road concessions (Kattamia-Ain El Sokhna Road and Helwan - Korimat Road). (2000)

Client: With Energy & Environment Services & Systems (Envionics) for United Group for Highways Development (UGHD), Egypt

Role: Environmental Impact Consultant - Assessing environmental impacts resulting of alignment, construction and operation of two road concessions namely Kattamia-Ain El Sokhna Road and Helwan - Korimat Road.

Dr. Khaled Abbas - Environmental Impact Consultant



Feasibility of relocating production and warehouse premises of the Eastern Company for Tobacco from Giza to 6th of October city (2000)

Client: With Energy & Environment Services & Systems (Environics) for United Group for Highways Development (UGHD), Egypt

Role: Environmental Impact Consultant - Assessing feasibility of relocating production and warehouse premises of the Eastern Company for Tobacco from Giza to 6th of October city with regards to environmental impacts caused by company related transport activities.

Dr. Khaled Abbas - Environmental Impact Consultant

Relationship between Accidents and Traffic Volumes at Main Road Intersections as well as at Rail Crossings in Greater Cairo (1999)

Client: With Transportation Research Unit - Faculty of Engineering, Ain Shams University for the Egyptian Academy of Scientific Research & Technology - Transport Research Council, Egypt

Role: Traffic Safety Consultant - Drafting proposal, sharing in laying down detailed study methodology, design of railroad grade crossing accident data collection forms and accompanying manual, classification of railroad grade crossings, supervision of collection of traffic and violations data. Also co-authoring several papers on the subject

Dr. Khaled Abbas - Traffic Safety Consultant

Impact of Metro Systems on Efficiency of Urban Transport for the Poor (1997-1999)

Client: With Egypt National Institute of Transport & University of Westminster for Department for International Development (DFID). UK

Role: Transport Consultant - Drafting proposal, designing a revealed preference questionnaire for metro passengers, sharing in supervision of questionnaire & travel time surveys and writing final report and 2 technical papers published in international conferences.

Dr. Khaled Abbas - Transport Consultant

Effect of General Agreement for Trade in Services on Inland Transport Sector. (1997-1999)

Client: With Technical Consultations Bureau for Transportation Planning Authority, Ministry of Transport, Egypt.

Role: Transport Consultant - Drafting proposal and initially Project Co-manager, Sharing in methodology development, Reviewing of performance indicators for inland transport sector, Analysis of performance indicators for intercity bus companies, Preparing a working paper on advanced technologies for inland transport sector

Dr. Khaled Abbas - Transport Consultant

Investigation of Traffic Accidents on Intercity Roads in Egypt. (1996-1999)

Client: With Egyptian Traffic Police Department for Egyptian Academy of Scientific Research and Technology - Transport Research Council, Egypt.

Role: Traffic Safety Consultant - Sharing in design of accident data collection form for rural roads, Description of accident data management, Analysis of accident causes, Comparative analysis of accident indicators over the years, Drafting recommendations of the study.

Dr. Khaled Abbas - Transport Consultant

Developing National Highway Maintenance Code (1993-1999)

Client: Ministry of Reconstruction and New Communities, Egypt

Role: Road Maintenance Consultant - Member of the road maintenance sub-committee and sharing in laying down the relevant Egyptian Highway Maintenance Code. 1993-1999

Dr. Khaled Abbas - Transport Consultant



Development of Traffic Stream Relationships for Rural Roads in Egypt (1998)

Client: With Transportation Program -Development Research & Technological Planning Center (DRTPC) - Cairo University for Egyptian Academy of Scientific Research & Technology - Transport Research Council.

Role: Traffic Consultant - Conducting comparison of traffic data collection methods.

Dr. Khaled Abbas - Traffic Consultant

Egyptian National Institute of Transport Training Needs Assessment (1993)

Client: With Egypt National Institute of Transport for Planning Transport Research & Computation (PTRC), UK

Role: Transport Consultant - Conducting organisational analysis of the transport sector in Egypt, and conducting interviews with decision makers, academics and training consultants to assess training needs for the transport sector in Egypt.

Dr. Khaled Abbas - Transport Consultant

Dr Khaled Abbas was also highly involved/responsible for the following studies as Senior Transport/Traffic Planner & Economist with DAR AL-HANDASAH Consultants (Shair & Partners) (1994 to 1995 & 1997 to 1999)

1. Estimation of Equivalent Single Axle Loads for Residential & Recreation Area - Pyramids Heights, Egypt (E9911)
2. Traffic and Toll Study for Investment Roads in Egypt (Upgrading of Kattamia-Ain El Sokhna Road and Construction of a new Helwan -Korimat Road), Egypt (E9908)
3. Traffic Impact Assessment and Parking Study for San Stefano Complex, Egypt (E9907)
4. Estimation of Equivalent Single Axle Loads for Office Park - Pyramids Heights, Egypt (E9870)
5. Estimation of Equivalent Single Axle Loads for New Amiryah Pharmaceutical Plant, Egypt (E9853).
6. Traffic Study & Estimation of Equivalent Single Axle Loads for Orouba (Abbassia-Airport) Road, Egypt (E9840)
7. Planning for a New Destination City, Egypt (E9835)
8. Estimation of Equivalent Single Axle Loads for Off-Site Area - Marsa Alam Resort, Egypt (E9787).
9. Transportation Study for the Northern Gulf of Suez Special Economic Zone, Egypt (E9778)
10. Traffic Study and Estimation of Equivalent Axle Loads for Taba Beach Resort, Egypt (E9738)
11. Traffic Study and Estimation of Equivalent Single Axle Loads for New Residential Area (Al-Ashgar District) in 6th of October City, Egypt (E9729)
12. Pre-Feasibility Study of Build, Own, Operate and Transfer (BOOT) of Road Projects in Egypt, (E9706)
13. Build, Own, Operate and Transfer (BOOT) Road Projects in Egypt: Technical Assistance for Contract Negotiation, Egypt (E9706/1)
14. Estimation of Equivalent Single Axle Loads for Al-Rehab City, Egypt (E9639)
15. Traffic Study and Estimation of Equivalent Single Axle Loads for New City Development serving Damietta New Port, Egypt (E9628)
16. Traffic and Parking Study and Estimation of Equivalent Single Axle Loads for Ain Al-Sokhna Touristic Village -Site C, Egypt (E9627)
17. Traffic and Parking Study for Moqbela Hotel - Taba , Egypt (E9613)

Dr. Mohamed Refae

- ☒ *Final design, detailed drawings and workshop Drawings for the 5th. Sector from Km. 126 to Km. 161 of the Construction and Developing Cairo – Alexandria desert freeway Executing by Orascom Company for road construction for the general authority; for the General Authority for Roads, Bridges and Land Transportation (GARBLT); 2009-till now.*
- ☒ *Final design, detailed drawings and workshop Drawings for the 3rd. Sector from Km. 76 to Km. 101 of the Construction and Developing Cairo – Alexandria desert freeway executing by El Nasr General Company (Hassan Allam Co.) for the general authority; for the General Authority for Roads, Bridges and Land Transportation (GARBLT); 2008-till now.*
- ☒ *Description and evaluation report for the existing road and traffic conditions for road and sub-regional links of the tree developmental sectors of Marriot Area within the project of Market Analysis, Land Use Planning, and Structuring the Development Process for a Mixed Use Land Development, Lake Marriot Basin, Alexandria, Egypt. (Consulting Engineers “EHAF”); 2006.*
- ☒ *Final design, detailed drawings and supervision for the 4th. Sector from Km. 75+000 to Km. 101+250 of the Construction and Developing Cairo – El Ain El Sokhnah investment highway Executing by The General Nile Company for Construction and Pavement by BOOT System (National Company for Roads Construction – Ministry of Defense); 2002-2005.*
- ☒ *Final design, detailed drawings and tender documents for the highway network of “El Malkia Resort “ Marsa Alam – Red Sea “. (Consulting Engineers “EHAF”); 2004.*
- ☒ *Planning, preliminary and final design work, and workshop drawings for TANTA Interchange Bridge crossing over the railways for the general authority; for the General Authority for Roads, Bridges and Land Transportation (GARBLT); 1998-2001.*
- ☒ *Technical report and evaluation of pavement works, design and quality control of highway network for the United Company for Flourmills and Complementary Industries in El - Nassriah (Engineering Consultant Office “ECOGEM” Prof. Dr. Gamal Sherif).*
- ☒ *Final design, detailed drawings and tender documents for the highway network of Al - Alamin Tourist Resort at North Coast. (Consulting Engineers “EHAF”)*
- ☒ *Preparing Specification, tender documents, typical cross-sections and pilot bills of qualities for the secondary highway network in Toshki Project. (Engineering Consultant Darweesh)*
- ☒ *Final design, detailed drawings and tender documents for the highway network of Golden Beach Tourist Village at North Coast. (Consulting Engineers “EHAF”)*
- ☒ *Preliminary Technical Studies of the construction and developing El Maadi – El Kattamiah – El Ain El Sokhnah investment highway (145 km and it's link roads) by BOOT System (Ben Hafeez Association for Road Projects).*
- ☒ *Preparing the studies and preliminary report for the General and hierarchy planning of the highway network for QENA City (General Authority for The Human Settlement Planning).*



- ☒ *Final design, detailed drawings and Specifications for the local road network of Arabia Housing Project in New Cairo. (Arabiah Company for building Investment).*
- ☒ *Preliminary Technical Studies and technical report of the Proposed Alexandria- El Fayoum Investment Highway by BOOT System. These studies included: Data collection, studying the topographical and contour maps, field studies, design criteria for geometric and structural design, preliminary design and drawings of the proposed highway and it's links with the national highway network, guiding bill of quantities, estimated cost and time schedules of the project. (ALDO Italian Association for Roads and Infrastructures projects).*
- ☒ *Preliminary Technical Studies and technical report of the Proposed El Fayoum- Dayrout Investment Highway by BOOT System. These studies included: Data collection, studying the topographical and contour maps, field studies, design criteria for geometric and structural design, preliminary design and drawings of the proposed highway and it's links with the national highway network, guiding bill of quantities, estimated cost and time schedules of the project. (ALDO Italian Association for Roads and Infrastructures projects).*
- ☒ *Final design, detailed drawings and Specifications for the local road network of Agriculture Landing Project in 6th. October City (Engineering Consultant Darweesh).*
- ☒ *Final design, detailed drawings and tender documents for the highway network of The Applied Engineers Tourist Village at North Coast. (Engineering consultant Office: Prof. Dr. Nabil Makhloof).*
- ☒ *Participation in the final design works and detailed drawings for the highways network of Sarab Tourist Village, 1987.(Consulting Office / Prof. Dr. Abdel Gawad Bahgat).*
- ☒ *Supervision of execution for the highways works of the Upgrading many Quarters in Giza City, Since 1987 till 1988. (Eng. Consulting Office / Prof. Dr. Nabil Bahgat Makhloof).*
- ☒ *Supervision of execution for the parking lots and local streets of many workshops and parking lots of the General Authority for Cleaning and Beautifying Cairo Citizenship, 1987.(Eng. Consulting Office / Prof. Dr. Nabil Bahgat Makhloof).*
- ☒ *Participation in re-planning and design works of the Alexandria / Matroh expressway, since 1985 till 1989. (Consulting Office / Prof. Dr. Abdel Gawad Bahgat).*
- ☒ *Participation in planning, designing and preparing contract documents for developing, improving, and resurfacing the two main runways 05L / 23R ; and 05R / 23L and all their taxiways, and exits for the Cairo International Authority; since 1986 till 1986 .(Consulting Office / Prof. Dr . Abdel Gawad Bahgat)*
- ☒ *Participation in design works and prepare both detailed drawing and contract documents for the main regional road to new Ameria City , 1980 (Consulting office /Prof. Dr. Adel Gawad Bahgat).*
- ☒ *Participation in design works and prepare both detailed drawing and contract documents for the main connecting road of the New Damiatta Port; 1980 (Consulting Office / Prof. Dr. Abdel Gawad Bahgat).*



- ☒ *Participation in planning and, supervision of the International Fair City of Cairo, Nasr City, Cairo, Egypt; since 1977 till 1980 (Consulting Office / Prof. Dr. Abdel Gawad Bahgat).*
- ☒ *Participation in planning and, design, works of the highway network for cooperative societies of building Houses and Reconstruction of pyramid desert; 1978. (Consulting Office / Prof. Dr. Abdel Gawad Bahgat).*
- ☒ *Participation in design works El-seada pump station road; 1977 (Consulting Office / Prof. Dr. Abdel Gawad Bahgat).*
- ☒ *Participation in design works and supervision of many projects; since 1977 till 1983 (Arabic Canadian Consulting Office / Prof. Dr. Mohamed Kassem El-Samny).*