



TABREZ ALI SYED

Transportation Engineer

Parsons Corporation

Riyadh, KSA

+966558361077

er.tabrez@yahoo.com

Summary of Experience

- Transportation professional having experience in developing micro-simulation models, conducting strategic modeling and junction modeling, suggesting traffic mitigation strategies, analyzing parking and access arrangement and producing traffic impact study reports. Associated with Indore City Transport Company where responsible for overseeing bus operations, reviewing ticketing data and developing performance monitoring system.
- Excellent skills in transport modeling packages (VISUM and TransCAD). Extremely proficient in micro-simulation software (VISSIM and VISWALK) and junction modeling tools (SYNCHRO, SIDRA and HCS).
- Experience of working with public authorities such as Public Investment Fund (PIF), Saudi Arabia, Musanada (Abu Dhabi), Dubai Road and Transport Authority (RTA), Qatar Ministry of Municipality and Urban Planning (MMUP), Indore City Public Transport Agency, etc.

Skills

- Specialized in transportation modeling, traffic simulation, traffic signal design and road marking and signage.
- Experienced in public transport planning, analyzing transit routes and preparing deployment plans for buses.
- Able to work proficiently with various transportation software - VISUM, VISSIM, VISWALK, SYNCHRO, SIDRA, HCS, TransCAD, Traffix, CORSIM, ArcGIS, Maptitude, QGIS and AutoCAD.

Education

- Master of Science, Civil Engineering (Transportation Systems), Clemson University, Clemson, SC, USA - 2008.
- Bachelor of Engineering, Civil Engineering, SGSITS, University of Madhya Pradesh, India - 2006.

Experience Record

October 2017 – Present, Transportation Engineer, Parsons Corporation, Riyadh, KSA

- **Third Party Review Infrastructure Consultant for Al Wedyan Development Project**
Saudi Real Estate Co. (Al Akaria) selected Saudi Arabian Parsons Limited (SAPL) as a third party reviewer for Al Wedyan Development Project. The Master Plan consists of 16 districts with a total GFA of approximately 8 million SqM.
Responsible for reviewing Traffic Impact Study (TIS), which covers all the major elements such as proposed land use details, travel characteristics, modeling methodology and factors adopted for model adjustments, proposed public transport schemes external and internal road network analysis tested and approved mitigation measures and parking strategies. Moreover, carried out comprehensive review for road marking and signage drawing submitted as a part of preliminary design.

➤ **Road Improvements to King Khalid International Airport, Riyadh**

Parsons has been selected as a design consultant by Riyadh Airport Company (RAC) to review and design the junctions within the King Khalid Airport.

Responsible for analyzing subjected junctions, terminals and road sections based on collected traffic data. Prepared micro-simulation models to replicate vehicular and pedestrian movements within the terminal areas for existing and proposed plans by using dynamic assignment technique. Undertook signal warrant analysis for the junctions falling under the study area. Identified mitigation measures to enhance LOS and presented various design options to client for approval.

➤ **Qiddiya Master Plan – Largest Cultural, Sports and Entertainment City in Saudi Arabia**

Public Investment Fund (PIF), appointed Parsons as a PMO for developing largest cultural, sports and entertainment city in Saudi Arabia.

Responsible for attending traffic related queries at pre-bid stage of master planning proposal and reviewing transportation aspect for technical submissions received from various consultants as a part of their proposal. Developed wind rose diagram to determine airstrip orientation by analyzing wind data collected from government agency. Supervised construction of 3.2 kms of access road which connects newly constructed Temporary Experience Center (TEC) building with Dhurma Highway.

April 2017 – September 2017, Senior Traffic Engineer, Tatweer LLC, Abu Dhabi, UAE

➤ **Upgrading Roundabouts to Signalized Junctions, Al Ain UAE**

Musanada awarded Tatweer two different projects in Al Ain, design cost for both projects were more than AED 3.2M. The project scope was to convert un-signalized roundabouts to at-grade and grade separated signalized junctions.

Responsible for preparing technical and financial bids for the projects. As a Project Coordinator accountable for liaising with client (Musnada) and other key stakeholders, communicating with sub-consultants, survey agencies and other team members. Prepared project management plans, undertook traffic analysis and coordinated with different design departments in order to compile technical reports.

➤ **Review of Salam Street, Abu Dhabi Micro-Simulation Model**

In order to develop a micro-simulation model in VISSIM for Salam Street, the strategic model for entire Abu Dhabi City was used to generate a sub-area network. The sub-area network in ANM format was imported in VISSIM and linked with zone matrices to carry out the dynamic assignment. The operational analysis for the junctions, critical links and weaving segments falling under the study area was carried out based on HCM requirements.

➤ **Active Participation in Business Development**

Responsible for preparing technical proposal, preparing project schedule and coordinating and negotiating with sub-consultants in order to finalize financial proposal. Attended pre-bid meeting and submitted tender queries to the client. Provided support to business development team during final submission.

➤ **Study of DIFC Roads & Landscaping at Zone I & II, Dubai, UAE**

Dubai International Financial Centre awarded the project to LBG in December 2016. The scope includes preparation of interim access strategy, concept design of internal roads, concept design of parking lots and developing parking circulation study.

Responsible for identifying traffic survey locations, analyzing existing traffic count data, parking lots circulation and existing parking ramps operations. Undertook micro-simulation modelling exercise for existing situation and preferred options after mitigation. The model was developed using static assignment method in VISSIM, the drop off facility and pelican crossing were also modeled. The options were evaluated on reduction of travel time, queue length, junctions delay and overall network performance.

➤ **Jubail Master Plan, Abu Dhabi, UAE**

Scope of the project includes preparation of concept master plan, schematic and detailed design of infrastructure and utility works, preparation of tender documentation and construction supervision.

Responsible for estimating trips and parking demand based on proposed land use. Distributed generated trips initially using excel spreadsheet based on logical assumption and engineering judgment in order ensure realistic travel pattern. Analyzed junctions falling under study area and the overall network. Based on different phasing schemes defined road hierarchy and connection to the external road network. Prepared various cross-section templates by utilizing Urban Street and Utility Design (USDm) tool, by incorporating pedestrian and bicycle facility as per requirements. Undertook parking strategy study, identified parking shortfall and worked out schemes to accommodate required parking demand.

➤ **R1011 – Upgrade Junctions at Airport Road, Dubai, UAE**

RTA awarded LBG project R1011 to conduct detailed traffic study and provide mitigation measures to improve the traffic condition in the area.

Assisted in producing traffic diversion and cost sharing reports. Prepared micro simulation models for temporary road works. Updated RTA VISUM model and extracted traffic flow. Prepared micro-simulation model in VISSIM using VisVAP technique for signal control in order to analyze weaving sections and queuing length for different options. Carried out junction analysis using SYNCHRO, SIDRA and HCS to propose mitigation measures. Reviewed temporary traffic management plan prepared by contractor. Identified critical issues and advised preventive measures in accordance to enhance traffic safety as per the Work Zone Traffic Management Manual.

➤ **R1005 – Improvement of Al Awir Road and International City Access, Dubai, UAE**

RTA awarded LBG project R1005 to improve Al Awir Road and International City Access.

Updated RTA VISUM model for various scenarios, extracted traffic flow for the junctions falling within the study area and performed junction capacity analysis using SYNCHRO, SIDRA and HCS. Prepared VISSIM model with static traffic assignment method for analyzing traffic operation at

weaving sections and intersections and to determine overall network performance parameters. Assisted in preparation of cost estimates for different design options.

➤ **E199 – Khorfakkan West Ring Road Preliminary Study, Khorfakkan, UAE**

Ministry of Public Works (MOPW) awarded LBG project E199 to provide design services for Khorfakkan West Ring Road.

Responsible for projecting future traffic from existing traffic counts. Preparing micro-simulation model in VISSIM with dynamic traffic assignment method and studying traffic operation at mid-block sections, weaving segments, intersections and assessment of the overall network performance. Undertook junction capacity analysis using SYNCHRO, SIDRA, and HCS. Developed suitable mitigation measures ranging from adding additional lanes for through/left turn traffic and converting roundabouts to signalized junctions, etc. Design traffic signs, directional sign and road marking for proposed new corridor. Coordinated with different design departments and compiled detailed reports at preliminary and detailed design stages.

➤ **Transportation Modelling Work for Fahaheel Proposal, Kuwait**

An elevated corridor over the existing Route 30 was coded in New Traffic Model (NTM) 2030 AM & PM peak hour. The elevated corridor begins at intersection of route 306 and route 30 in south and ends at 1st Ring Road close to the city centre. The interchange configurations at 1st, 6th and 7th Ring Road were coded as recommended by highway designer. The traffic demand entering and exiting to/from Route 30 for all crossroads were extracted from the model for further analysis.

➤ **Micro-Simulation Model to Study Access Arrangement for Ali Al-Sabah Military Academy, Kuwait Regional Road, North Part Proposal**

Developed a Micro-Simulation Model for AM and PM peak to analyze access arrangement from Jahra Road (Route 80) to Ali Al Sabah Military Academy. The weaving segment between the intersection of 6th Ring Road and Jahra Road (Route 80) and Military Access was analyzed in VISSIM, using static assignment method.

January 2014 – January 2015, Junior Transport Planner, Arab Engineering Bureau , Doha, Qatar

➤ **Salwa Road Shopping Center – Traffic Impact Assessment, Doha, Qatar**

Responsible for liaising with MMUP officials. Analyzed parking requirements, designed parking facility inside the shopping center and performed Auto Turn analysis of critical parking lots. Determine number of access/egress and their connectivity with surrounding road network. Performed traffic operation analysis of roads and junctions falling under study area for existing and proposed scenario. Prepared micro-simulation model using VisVAP technique for signal control with dynamic traffic assignment method. Identified issues and proposed mitigation measures. Involved in writing technical reports.

➤ **Messila Hyper Market and Clinic – Traffic Impact Assessment, Doha, Qatar**

Undertook parking demand management, prepared traffic circulation plans, and analyzed access arrangements by determining number of access/egress and their connectivity with surrounding road network. Updated the Qatar Strategic Transport Model (QSTM). Evaluated mitigation measures by preparing VISSIM micro-simulation model with dynamic assignment method. Performed traffic analysis using HCS, SIDRA and SYNCHRO software.

- **Underground Metro Station, Qatar University – Pedestrian Simulation Model, Doha, Qatar**
Developed pedestrian simulation model using PTV-VISWALK software with static traffic assignment method. Performance indicators like travel time, flow rate, density and level of service were calculated and analyzed at different sections of the platform.

January 2013 – December 2013, Transport Planner, Mehta and Associates, India

- **Riverside Corridor Bus Rapid Transit System (BRTS) Project, Indore , India**
Identified key issues based on encroachment and land acquisition to finalize required Right of Way (ROW) width. Assisted in development of proposed BRTS alignment to reduce adverse impact to the properties along the corridor.
- **Transit Oriented Development (TOD) Master Plan for 5 cities of Madhya Pradesh (MP), India**
Worked as a project coordinator, responsible for liaising with Urban Administration and Development Department (UADD), MP. Assessed traffic conditions for 5 key cities. Determined transit corridor and classified them based on typology. Demarcated corridor planning area and station planning area.
- **City Development Plan (CDP), Bhopal, India**
Carried out comprehensive traffic analysis for Bhopal city. Conducted infrastructure gap assessment and identified short term, medium term and long term goals for upgrading infrastructure requirements. Prepared cost estimates for road infrastructure projects.

August 2010 – April 2012, Consultant – Urban Transport, EMBARQ, India

- **City Bus System, Indore, MP**
Analyzed existing public transportation system, identified major activity locations and identified bus routes to be modified to meet future demand. Prepared route rationalization by analyzing city bus ticketing data, conducting field surveys and interacting with various stakeholders. Populated transit routes and stops on map using TransCAD and prepared density maps for bus stops based on boarding and alighting data. Developed data management and performance monitoring system for bus services based on identified key performance indicators for each bus route. Prepared bus deployment plan for various routes, based on the demand estimated by analyzing authorized and unauthorized (para-transit) public transport routes.
- **AB Road Bus Rapid Transit System (BRTS), Indore, MP**

Provided technical support in identifying station location, design and assisted in safety audit conducted by external agency. Provided inputs in preparing BRTS operational plan.

➤ **Non – Motorized Transport (NMT), Indore, MP**

Responsible for coordinating with Indore Municipal Corporation (IMC) in preparing framework for evaluating pedestrian accessibility. Organized meetings with various stakeholders and conducted pedestrian interviews. Carried out comprehensive study on existing bicycle sharing system and summarized finding in the technical report.

August 2009– July 2010, Engineer – Transportation, AECOM India Pvt. Ltd.

➤ **Preparation of Development Plan for Nashik-Sinnar-Igatpuri Investment Region & Dighi Port Industrial Area in Maharashtra sub region of Delhi-Mumbai Industrial Corridor (DMIC), India**

Prepared preliminary perspective transportation connectivity plan for proposed Dhule/Aurangabad investment region. Carried out travel demand assessment for proposed development.

➤ **Chennai Metro Rail Project, Tamil Nadu, India**

Supervised field surveys and was extensively involved in data collection. Identified land parcels required for acquisition during construction and prepared AutoCAD drawings.

August 2007 – December 2008, Graduate Research Assistant, Clemson University, USA

➤ **Guide Line for Pavement Marking Applications- Sponsored by South Carolina Department of Transportation**

Responsible for conducting inventory of pavement marking retro reflectivity on selected primary and secondary roads in South Carolina (SC), USA. Developed conclusions based on collected data on the general performance of various types of pavement markings.

➤ **Clear Zone Safety Project - Sponsored by South Carolina Department of Transportation**

Analyzed highway crashes related to fixed objects using South Carolina crash database. Developed countermeasures based on the type and severity of crashes.

Academic Projects

- Developed a Travel Demand Forecasting Model of the City of Clemson using TransCAD.
- Prepared Traffic Impact Study report for proposed Lowes Home Improvement Center on Road, Clemson, USA.
- Designed a Semi-Actuated Signal Plan at the T-intersection between Old Greenville Highway and Williamson Road in Clemson, USA.
- Performed capacity analysis for planned/existing roadways and intersections using Highway Capacity Manual and Highway Capacity Software, Clemson, USA.