

## Roopa Rekha Anjanappa

Aurora, IL- 60504

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### Key Experience

- Traffic Modelling using SYNCHRO 7 to assess the feasibility of the Road Network.
- Transport/Network Modelling using TRANSYT (TRL Software) to assess and optimize the performance of networks of road junctions (with and without traffic signals) for which the average traffic flows are known.
- Road Junction Modelling using LINSIG Software (JCT consultants Ltd,UK) for the assessment and design of traffic signal junctions either individually or as a network comprised of a number of junctions.
- Signal Designing (Phase/Stage Diagrams, Interstage and Intergreen time) for use in Linsig software.
- Assessing Priority Junctions/Roundabouts using PICADY & ARCADY (TRL Software)
- Analysis of the survey data(Traffic Volume Counts)
- Deriving Trip Rate/Growth Factors using TRICS and TEMPRO
- Have been involved in Travel Demand Forecasting
- Preparation of Transport Statements and Transport Assessments.

### Professional Training

- Introduction to ArcGIS 9 for Version 9.3
- Working with ArcGIS Network Analyst ( from IGIS Centre(ESRI India Authorised Learning Centre, Chennai)
- Cube Base and Voyager (Basics) (from Citilabs, Delhi)
- PTRC (Training for Transport) – 20 week evening course in Traffic and Transportation.

### Education Background

#### **MSc in Transportation Engineering and Operations (2005)**

University of Newcastle Upon Tyne, England (UK).

**Dissertation:** Modelling Accessibility for Physically Challenged and Wheelchair users around the University Campus using VISSIM (Dynamic Assignment) Microsimulation Software.

#### **BE in Civil-Transportation Engineering (2002)**

BMS College of Engineering, Bangalore University (India)

### Professional Experience

#### Current Work Experience

Designation : Traffic Engineer  
Employer : Public Works, City of Aurora, Aurora, Illinois, USA  
Duration : November 2013 to Present

**Key Experience:** Traffic Modelling and Simulation work using Synchro and SimTraffic. The Modelling software was used to assess One-Way traffic system into Two-Way system along the corridor, to study the feasibility of a Roundabout in place of an All-way stop controlled intersection. Use of Centralized Traffic Management System that comprises Centrac, used to monitor traffic movement (Live video footage), traffic data and handle traffic signal issues in house. Security Desk software used for traffic studies to view live and recorded traffic video footage for use in traffic assessments and crime detection. Involved in bikeway projects, both on-street and off-street paths. Familiar with Phase I study process involved in federal funding for projects.

#### 1. Previous Work Experience

Designation : Traffic Engineer  
Employer : Traffic Engineering Department, City of Fort Wayne, Indiana, USA

Location/Duration : Fort Wayne, Indiana – Year 2011.

**Key Experience:** Traffic Modelling using Synchro to assess the Level of Service for various City Road Intersections, Estimating Trip Generation and Traffic Distribution for a City project, Designing Roundabouts (preliminary designs) for feasibility studies on several signalized Intersections that are over capacity resulting in Queuing and Accidents. Road Diet projects which helps in regulating traffic thereby creating safe and sound environment for everyday commuting.

## **2. Previous**

Designation : Assistant Transport Planner  
Employer/Department : WS Atkins - Development & Regeneration  
Location/Duration : Manchester, United Kingdom - Apr-05 to Oct-07

### **SELECTED TRANSPORT PLANNING/ENGINEERING PROJECT EXPERIENCE**

#### **Experience with Atkins (04/05 to 10/07)**

**Ditton Rail freight Park, Halton:** As a member of the team my job involved in forecasting the travel demand for the proposed Rail Freight Park in the Widnes area, involved in deriving Trip Generation, Distribution and assigning the traffic to the network. Assessing the existing/proposed junctions using ARCADY, PICADY and LINSIG-V2 for its feasibility.

**Park & Ride, Belfast:** Involved in designing several Park & Ride sites as part of a Belfast wide study into bus based Park & Ride schemes.

**Northamptonshire Schools:** Assisted the Project Manager during on-site audit for five school sites in Northamptonshire and producing the Transport Assessments for the proposed Residential Developments at each site.

**Hall Lane Gateway Scheme, Liverpool:** The scheme aimed at improving the image of the city and assisting its regeneration by creating a satisfactory highway environment and 'Gateway' on the highway approach. Key responsibilities involved in modelling various scheme options using TRANSYT & LINSIG. Had been involved in the accident analysis for the proposed network and in visually summarising the modelled outputs for client liaison.

**East Lancashire Waste Management Strategy:** Assisting a multi-disciplinary team in Junction Assessment and looking at the feasibility and transport implications associated with the development of a Waste Transfer Station in Darwen. Had been responsible for analysing Trip Generation using TRICS.

**Area 10 – DDA Audits:** My job involved in conducting DDA (Disability Discrimination Act) Audits in Area 10 (M60,M6) on accessibility and safety measures for the disabled road users. A detailed audit was conducted in checking the standards of the existing facilities for crossing roads and also proposals were made for the future development.

**Motorway Access Management(Ramp Metering):** The project aimed at improving the traffic flow on the main line carriageway of a motorway in the vicinity of an entry merge from a slip road or interchange link at grade separated junctions by placing traffic signals on the slip road thereby minimizing and regulating the entry flow at merges. My job involved in extracting the traffic data and converting them into a readable format to further assess the before and after scenarios. Data was analyzed and charts were prepared to bring comparison between the scenarios using the key parameters like the traffic volume, journey speed and journey time on the mainline carriageway and thus assessing its performance.

## **Computing Skills**

Network Modelling – Synchro,Transyt and Linsig ; Microsimulation – Vissim  
Roundabouts/Junction Modelling – Arcady, Picady  
MS-Office – Microsoft word, Excel, PowerPoint.

**Interest and activities** Athletics - Running, Long Jump, Kho-Kho, Volley Ball etc representing the school. Marathon participation representing the Company (UK). **Others** - Reading Books (Health, Personality development, novels etc.), Dancing (Indian & Western Style)