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495854490f1c461f87d845188d39d3e9f8e1681e1add0aafbd7259d24a30816e

To view the reconstructed contents, please SCROLL DOWN to next page.
Course Title: Road Safety Engineering

1.0 Overview
The rapid development and expansion of the road network, along with an increase in the number of registered motor vehicles, led to a substantial rise in levels of both passenger and freight movement. Concomitantly, the number of road crashes and fatalities have increased at an alarming rate. The fatalities in road crashes was documented as the ninth leading cause of deaths, worldwide, in 2012. Over 1.3 million people were killed, worldwide, in road crashes during 2012. The economic losses associated with road crashes exceed $250 billion, annually, just in developed countries such as the United States. However, financial resources as well as manpower to collect adequate data, understand causal factors, identify countermeasures, and implement countermeasures to enhance safety (reduce the number of crashes and fatalities) have not increased at the same rate. The limited financial resources and manpower has made prioritization and allocation of resources efficiently even more important. Furthermore, the effort to enhance road safety is a multidisciplinary problem involving engineering, enforcement and education (3 Es). This course is designed for Executives, Engineers and Researchers of Transportation Engineering to identify and study the factors contributing to road crashes, its data collection, analysis using geospatial and statistical methods, prioritization, management and derivation of preventive countermeasures (3 Es), and, before-after evaluations. The before-after evaluations include behavioral studies (conflicts) at treatment sites or using historical crash data (say, three years before and three years after). Overall, the evaluation of planned/existing roadway facilities will be presented from a safety point of view while emphasising the need for consistent data collection standards (crash data, geometric features, traffic characteristics, environmental conditions and surrogate data).

2.0 Objectives:
The primary objectives of the course are as follows.
- Highlighting the need for road safety and identification of various factors contributing to road crashes.
- Exposing participants about road crash data collection procedure, its analysis, prioritization, management and derivation of preventive countermeasures, and, before-after evaluations.
- Explaining the procedure for evaluation of planned/existing roadway facilities from a safety point of view as well as emphasis on the need for consistent data collection standards (crash data, geometric features, traffic characteristics, environmental conditions and surrogate data).
- Training the participants related theoretical and practical concepts.

3.0 Teaching Faculty with Allotment of Lectures and Tutorials
1. Prof. Srinivas S. Pulugurtha (SP), 10 hrs lectures and 9 hrs tutorials
2. Prof. Akhilesh Kumar Maurya (AKM), 3 hrs lectures and 3 hrs tutorials
4.0 Course details

4.1 Tentative Duration: August 7-11, 2017 (5 days) : 13 hrs lectures and 12 hrs Tutorials

4.2 Contents Outline and Tentative Schedule:

Day 1

Lecture 1: 2 hrs: SP
Introduction to Road Safety Engineering: Road safety scenario, Road safety issues, Characteristics of road crashes, Factors contributing to road crashes; Crash data collection, standards and design of databases

Lecture 2: 2 hrs: AKM
Road safety scenario in India as well as in North Eastern Region and challenges in hilly roads

Tutorial 1: 1 hrs: SP
Problem solving session with examples on identification of factors, crash data collection and design of databases

Day 2

Lecture 3: 2 hrs: SP
Mapping, prioritization and allocation: Geospatial procedures and blackspots/hotspots/clusters identification, Performance metrics, Ranking

Tutorial 2: 3 hrs: SP
Problem solving session with examples on geocoding, crash concentration maps, computation of performance measures and ranking

Day 3

Lecture 4: 2 hrs: SP
Crash Investigation and analysis: Human/vehicular factors relating to crashes, Steps of crash investigation, Diagnosing the crash problem, Solutions/crash costs/economic appraisal

Tutorial 3: 3 hrs: SP + AKM
Problem solving session with examples on analyzing crash data, identifying causes and selection of countermeasures

Day 4

Lecture 4: 2 hrs: SP
Before-after Evaluations: Treatment and control site selection, Observational field studies, State-of-the-art methods
Tutorial 4: 3 hrs: SP
Problem solving session with examples on observational field studies and application of Empirical Bayes method

Day 5

Lectural 5: 2 hrs: SP
Road Safety Audit (RSA): Introduction to RSA, Feasibility stage audit, Design stage road safety audit, Construction stage audit, Pre- and post-opening stage audit, Audit report

Lecture 6: 1 hrs: AKM
Road Safety Audit as per current IRC Guidelines

Tutorial 5: 2 hrs: SP+AKM
Problem solving session with examples on RSA and conducting RSA of IIT G Roads

Date of Examination: August 11, 2017

5.0 Who Can Attend

- Executives, engineers and researchers from manufacturing, service and government organizations including R&D laboratories.
- Students at all levels (BTech/MTech/PhD) or Faculty from reputed academic institutions and technical institutions.

6.0 Detailed CV of Experts

6.1 CV of Prof. Srinivas S. Pulugurtha

6.2 CV of Prof. Akhilesh Kumar Maurya

7.0 PROPOSED BUDGET

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description of budgetary head per Course</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>International Expert Air Fare</td>
<td>1,50,000</td>
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<tr>
<td>2.</td>
<td>Honorarium to Expert</td>
<td>($300 X 10 + $250 X 9)*68</td>
</tr>
</tbody>
</table>
<pre><code>                       |                                                                           | = 3,857,000                   |
</code></pre>
<p>| 3.     | Lecture Notes / Video-learning Material Preparation               | 50,000                        |</p>
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
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<tr>
<td>4.</td>
<td>Video Recording Expenses</td>
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<td>5.</td>
<td>Contingency &amp; Miscellaneous</td>
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<td>GRAND TOTAL</td>
<td>6,57,000</td>
</tr>
</tbody>
</table>

Course Coordinator

(Akhilesh Kumar Maurya)

Prof. Akhilesh Maurya  
Principal Investigation  
Department of Civil Engineering, IIT Guwahati  
Guwahati 781039 Assam  
Tel: +91 – 9435733624  
Email: maurya@iitg.ernet.in; akmaurya@gmail.com
Akhilesh Kumar Maurya

Objective
Seeking to make movement of minds (i.e traffic) efficient and safe by contributing to science and technology.

Area of Expertise
- Microscopic Traffic Flow Modeling
- Driver Behaviour
- Traffic Data Collection and Analysis
- Vehicular Emission Modelling
- Road Safety Audit and Accident Analysis

Education
- Ph.D. Civil Engineering from Indian Institute of Technology Kanpur, India (2008)
- B.Tech. in Civil Engineering, Harcourt Butler Technological Institute, Kanpur, India (1999)

Professional Experience
- **Associate Professor** Indian Institute of Technology Guwahati, India (March 2014 to till date)
- **Assistant Professor** Indian Institute of Technology Guwahati, India (May 2008 to March 2014)
- **Senior Lecturer** Indian Institute of Technology Guwahati, India (Oct 2007 – April 2008)
- **Guest Lecturer** Motilal Nehru National Institute of Technology (MNNIT) Allahabad, India (July 2001 – June 2002)

Honors/Awards/ Medals
- **Vice President** of *Transportation Research Group (TRG)* of India from May 2016 onwards.
- **Member**, Special Interest Group (SIG) - H3: Infrastructure Operation and Traffic Management in Developing Countries (World Conference on Transport Research Society, WCTRS)
- **Chair of CTRG2015**, 3rd Conference of Transportation Research Group of India, 17-20 December, 2015
- **Young Teachers Excellence Award 2014** from IES Group of Institutions Bhopal.
- **Regional Coordinator of North East Region** in Development of Indo-HCM project funded by Planning Commission, GOI, under 12th Five Year Plan Period.
- Certified “**Road Safety Auditor**” through training and certification programme conducted by International Road Federation (India) and Australian Road Research Board at CRRI, New Delhi, from 21st to 25th Feb. 2011
- **Co-Cordinator**, State Technical Agency (STA) Team for Pradhan Mantri Gram Sadak Yojana (PMGSY)
- **Member of Executive Board**, Transportation Research Group of India (TRG) Since 2011.
- **Member of Special Interest Group (SIG) - H3**: Infrastructure Operation and Traffic Management in Developing Countries, World Conference on Transport Research Society
- Received **DAAD Fellowship** for one month visit to Technische Universität (TU) Darmstadt, Germany during June, 2009
- Selected for **WCTR 2007** fellowship to participate in WCTR 2007 conference held in University of California, Berkeley, USA on 24th – 28th June, 2007.
- **GATE** (Graduate Aptitude Test of Engineering) Scholarship by MHRD, Government of India from April 2001-January 2003.
- Received **National Scholarships** during Intermediate & B.Tech.

### Reviewer

- Current Science Journals
- Research in Transportation Economics, Elsevier
- International Journal for Traffic and Transport Engineering (IJTTE)
- Journal of Civil Engineering Research
- Transportation in Developing Economy (TiDE)
- Journal of Civil Engineering
- Research in Transportation Economics
- Journal of Transportation Engineering, ASCE
- Anais da Academia Brasileira de Ciências
- Cogent Engineering
- Transportation Letters
- Advances in Civil Engineering

### Keynote/Invited/Expert Lectures

- Invited lecture on "Road safety Issues in North Eastern Region", in seminar on “Key Challenges in Highways & Infrastructure Construction in the NE Region And Use of Innovative Technologies & Materials’ organized by NHIDCL during 30th June to 1st July 2015.
- Invited lecture on “Traffic Flow Modelling and Simulation” at Department of Civil Engineering, MANIT, Bhopal on 23rd September, 2013
- Invited lecture on “Road Safety Audit” at Department of Civil Engineering, MANIT, Bhopal on 18th March, 2013.
- Invited lecture on "Comprehensive Approach for Traffic Flow Modelling" at Department of Civil & Environmental Engineering, National University of Singapore (NUS) on 7th November, 2012.
- Expert Lectures in TEQIP sponsored Faculty Development Programme on "Advances in Traffic Flow and Environmental Management", organized by North Eastern Regional Institute of Science and Technology, Nirjuli (NERIST), Itanagar during 17th to 21st April, 2012.
- Expert Lectures in Workshop on Advances in Transportation Engineering (under TEQIP-II) at National Institute of Technology Silchar during 16-18 April, 2012
- Keynote Lecture on "Rural Roads in India", in International Conference On Emerging Frontiers in Technology for Rural Area (EFITRA-2012), Wardha, Maharashtra, India, 17 -18 March 2012.
- Expert Lectures in Training programme on "Road Safety Management for North Eastern States" Sponsored by the Ministry of Road Transport and Highways, Govt. of India, New Delhi at Institution of Engineers, Guwahati during 8-12 November, 2011.
- Invited lecture on "Comprehensive approach of driver behaviour modelling", at Technische Universität Darmstadt on 26th June, 2009.
- Invited lecture on "Microscopic Simulation Model for Weak Lane Discipline Traffic", at University of Duisburg-Essen on 29th June, 2009.
- Invited lecture on "Comprehensive Microscopic Model for Simulation of Large Uninterrupted Traffic Streams" at Technische Universität Berlin on 3rd July 2009.

### Professional Membership

- Life member of Indian Roads Congress (IRC)
- Board Member and Life member of Transportation Research Group (TRG) of India
- Eastern Asia Society for Transportation Studies (EASTS)
- Member of World Conference on Transport Research Society (WCTRS)
Publication Details:

**Books/Monographs**

**International Journals/Conferences**

1. Suresh Nama, AKhilesh Kumar Maurya, Avijit Majhi,Prasanta Sahu (2016), "Vehicle Speed Characteristics and Alignment Design Consistency for Mountainous Roads", Transportation in Developing Economies 2(2) · October 2016
3. Arunabha Banerjee, A. K Maurya, (2016),"Comparison of pedestrian behaviour on different types of facilities for a commercial area in North Eastern India", Transportation Planning and Implementation Methodologies for Developing Countries, IIT Bombay,19-21 December 2016 (Abstract Accepted)
4. Anuj Kishor Budhkar, Nilanjan Adhikari and Akhilesh Kumar Maurya, (2016),"Lateral gap maintained by vehicles under constrained conditions", Transportation Planning and Implementation Methodologies for Developing Countries, IIT Bombay,19-21 December 2016 (Abstract Accepted)
5. Anuj Kishor Budhkar and Akhilesh Kumar Maurya, (2016),"Modeling Gap-Maintenance in Heterogeneous No Lane-Discipline Traffic” International Conference on Transportation Infrastructure and Materials July 16 - 18, 2016, Xian, China
6. P.S. Bokare, A.K. Maurya, (2016),"Study of acceleration-deceleration behavior of various vehicle types in India", 14th World Conference on Transport Research, 10-15 July 2016, Tongji University, Shanghai, China
7. S. Das, A.K. Maurya, (2016), "Time headway analysis for four-lane and two-lane roads", 14th World Conference on Transport Research, 10-15 July 2016, Tongji University, Shanghai, China
8. S. Dey, A.K. Maurya, (2016),"Vehicle category-wise speed-volume relationship under heterogeneous traffic condition for two-lane bidirectional traffic", 14th World Conference on Transport Research, 10-15 July 2016, Tongji University, Shanghai, China
9. G. Mahapatra, S. Das, A.K. Maurya (2016),"Effect of sample size and bin size variation on traffic speed study", 14th World Conference on Transport Research, 10-15 July 2016, Tongji University, Shanghai, China
10. A.K. Budhkar, A.K. Maurya (2016),"Study of inter-vehicular lateral gaps in mixed traffic stream with weak lanediscipline",14th World Conference on Transport Research, 10-15 July 2016, Tongji University, Shanghai, China


Planning and Implementation Methodologies for Developing Countries (TPMDC 2012) held at Indian Institute of Technology, Bombay during 12-14 December, 2012.


### Courses taught / teaching

#### Under Graduate Level
- CE 304 – Transportation Engineering – I (Theory & Lab)
- CE 310 – Transportation Engineering – II (Theory & Lab)
- ME 111 – Engineering Graphics (Instructor and Tutor)
- CE252M - Infrastructure and Transportation Systems Planning

#### Post Graduate Level
- CE 584 - Traffic Engineering
- CE 581 – Urban Transportation Systems Planning
- CE 626 - Economic Evaluation and Analysis of Transportation Projects

#### Course/Training Program Conducted

- **QIP Short Term Course on "Innovative Technologies in Transportation Engineering (ITTE 2015)"** during February, 23-27, 2015 Coordinators : Dr. Rajan Choudhary & Dr. Akhilesh Kumar Maurya
- **Third National Workshop cum Review meeting (RIHCAM-2015) and 5th Task Force Meeting of the project titled, "Development of Indian Highway Capacity Manual (Indo-HCM)" held at IIT Guwahati, during February, 20-22, 2015 Coordinators : Dr. Akhilesh Kumar Maurya & Dr. Rajan Choudhary**
- **Training Program for Pradhan Mantri Gram Sadak Yojana (PMGSY) Officers** on 13-15 September, 2010, Sponsored by NRRDA, New Delhi (Coordinators :Dr. Rajan Choudhary & Dr. Akhilesh Kumar Maurya)
- **Training Program for Pradhan Mantri Gram Sadak Yojana (PMGSY) Officers** on 18-20 October, 2010, Sponsored by NRRDA, New Delhi (Coordinators :Dr. Rajan Choudhary & Dr. Akhilesh Kumar Maurya)
- **QIP Short Term Course on Road Maintenance & Safety** on 11 - 15 Oct 2010 (Coordinators : Dr. Akhilesh Kumar Maurya & Dr. Rajan Choudhary)
- **QIP Short Term Course on Computer Aided Traffic Engineering Analysis and Design** on 24-28 November, 2008 (Dr. Akhilesh Kumar Maurya, Dr. Ashish Verma and Dr. C. Mallikarjuna)

### Project/Thesis Guidance

**Ph.D. Students**
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of student</th>
<th>Topic</th>
<th>Date of Joining</th>
<th>Expected date of Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P.S. Bokare</td>
<td>Modelling of Acceleration and Deceleration Behaviour of Vehicles</td>
<td>Jan, 2009</td>
<td>July, 2013 (completed)</td>
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<tr>
<td>2</td>
<td>Geetimukta Mohapatra</td>
<td>Study of lateral clearance of vehicles with Road Furniture in heterogeneous Traffic with Weak Lane discipline</td>
<td>July, 2012</td>
<td>2016</td>
</tr>
<tr>
<td>3</td>
<td>Anuj Budhkar</td>
<td>Study of Longitudinal and Lateral Gap Maintaining Behaviour of Vehicles in heterogeneous Traffic with Weak Lane discipline</td>
<td>July 2013</td>
<td>2017</td>
</tr>
<tr>
<td>4</td>
<td>Arunabha Banerjee</td>
<td>Pedestrian behavior modelling over different facilities</td>
<td>July 2014</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Lokesh H</td>
<td>Road Safety in Hilly region</td>
<td>Jan 2015</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Sanhita Das</td>
<td></td>
<td>July 2015</td>
<td></td>
</tr>
</tbody>
</table>

**M. Tech. Students**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of student</th>
<th>Topic</th>
<th>Year of Completion</th>
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<tbody>
<tr>
<td>1</td>
<td>S. K. Jha</td>
<td>Study of acceleration noise behavior in Indian traffic condition</td>
<td>June, 2009</td>
</tr>
<tr>
<td>6.</td>
<td>Anusha Kumari Adavikottu</td>
<td>Traffic Characteristicis and Emission at Road Intersection (Co-Guide:Dr. S. Ghokhale)</td>
<td>June, 2012</td>
</tr>
<tr>
<td>7.</td>
<td>Sabyasachi Biswas</td>
<td>Road Safety Audit of Guwahati City Roads</td>
<td>June, 2012</td>
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<tr>
<td>8.</td>
<td>Sreekumar M.</td>
<td>Development of Car-following Model in Heterogeneous Traffic with No Lane Discipline</td>
<td>June, 2012</td>
</tr>
<tr>
<td>10.</td>
<td>Anuj Kishor Budhkar</td>
<td>Development of Bidirectional Traffic Flow Model for Indian Scenario</td>
<td>July 2013</td>
</tr>
<tr>
<td>11.</td>
<td>Metkari Mahendrakumar A.</td>
<td>Evaluation of Driver Behaviour Model for Heterogeneous Traffic with No Lane Discipline</td>
<td>May 2013</td>
</tr>
<tr>
<td>12.</td>
<td>B. B. N. Kishore</td>
<td>Safety Indicators for Heterogeneous Non Lane Based Traffic</td>
<td>June 2013</td>
</tr>
<tr>
<td>13.</td>
<td>Pankil Khandelwal</td>
<td>Effect of vehicle and traffic parameters on lateral and longitudinal clearances maintained by vehicles in Indian Traffic</td>
<td>June 2014</td>
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<tr>
<td>15.</td>
<td>Arvind Kumar</td>
<td>Critical gap study at unsignalised intersection in Indian Scenario</td>
<td>June 2014</td>
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<tr>
<td>16.</td>
<td>Harsh J Amin`</td>
<td>Delay study at unsignalised intersection in Indian Scenario</td>
<td>June 2014</td>
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<tr>
<td>17.</td>
<td>Shreya Dey</td>
<td>Time headway Analysis of Vehicles on Indian Roads</td>
<td>June 2015</td>
</tr>
<tr>
<td>19.</td>
<td>Suresh Nama</td>
<td>Study of Vehicles Speed on Curves in Hilly Terrain</td>
<td>June 2015</td>
</tr>
<tr>
<td>S. No.</td>
<td>Name of student</td>
<td>Topic</td>
<td>Year of Completion</td>
</tr>
<tr>
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<tr>
<td>1</td>
<td>Akshay Kumar</td>
<td>Study of fundamental characteristics of mix traffic streams without lane discipline in Guwahati city</td>
<td>April 2009</td>
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<tr>
<td>2</td>
<td>Sujeet Modi</td>
<td>Determination of more realistic PCU values for Indian traffic</td>
<td>April, 2010</td>
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<tr>
<td>3</td>
<td>Sail Sharma</td>
<td>Calibration and validation of VISSIM for simulation of Indian traffic</td>
<td>April, 2010</td>
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<td>4</td>
<td>Mohit Shah</td>
<td>Comprehensive approach for microscopic simulation of uninterrupted traffic</td>
<td>April, 2011</td>
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<td>5</td>
<td>Parag Raiipuria</td>
<td>Traffic Signal Coordination in Guwahati city using VISSIM</td>
<td>April, 2011</td>
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<tr>
<td>6</td>
<td>Abhinav Singh</td>
<td>Determination of PCU of Vehicles Under Heterogeneous Traffic Conditions</td>
<td>April, 2012</td>
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<tr>
<td>8</td>
<td>Sarang Adgokar</td>
<td>Analysis of Headway Distributions in Heterogeneous Traffic Stream</td>
<td>April, 2013</td>
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<td>9</td>
<td>Vivek Garg</td>
<td>Analysis of Lateral Clearance in Heterogeneous Traffic Stream</td>
<td>April, 2013</td>
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<tr>
<td>10</td>
<td>Manish Kumar</td>
<td>Development of sensor based assembly for measurement of speed and lateral clearance of vehicles</td>
<td>April, 2014</td>
</tr>
<tr>
<td>11</td>
<td>J Indra Kiran Kumar Reddy</td>
<td>Estimation of Annual Average Daily Traffic (AADT)</td>
<td>April, 2015</td>
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<td>12</td>
<td>Keshav Kothari</td>
<td></td>
<td>July 2016</td>
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<td>13</td>
<td>Aditya R. Chhaochharia</td>
<td></td>
<td>July 2016</td>
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<tr>
<td>14</td>
<td>Pranav Patni</td>
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<td>July 2016</td>
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**Research/Consultancy Projects**

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<tr>
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<th>Title</th>
<th>Sponsoring Agency</th>
<th>Period</th>
<th>Status</th>
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<tbody>
<tr>
<td>1</td>
<td>&quot;Measurement of Indian Traffic Flow Quality Using GPS Data&quot;</td>
<td>IIT Guwahati</td>
<td>2008-12</td>
<td>Completed</td>
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<tr>
<td>2</td>
<td>Web-Course on Transport Economics</td>
<td>National Programme on Technology Enhanced Learning (NPTEL)</td>
<td>2011-13</td>
<td>Ongoing</td>
</tr>
<tr>
<td>3</td>
<td>Dynamic Behavioural Data Collection using an Instrumented Vehicle</td>
<td>Department of Science and Technology</td>
<td>2012-15</td>
<td>Ongoing</td>
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<td>4</td>
<td>Development of Indo-Highway Capacity Manual (HCM)</td>
<td>CSIR - CRRI, New Delhi</td>
<td>2012-17</td>
<td>Ongoing</td>
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<tr>
<td>5</td>
<td>Use of Industrial Waste Steel Slag in the Design of Open graded Asphalt Friction Courses</td>
<td>DST, New Delhi</td>
<td>Nov, 2015</td>
<td>Ongoing</td>
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### Major Consultancy Projects

<table>
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<tr>
<th>S. No.</th>
<th>Title</th>
<th>Sponsoring Agency</th>
<th>Period</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Traffic study and traffic management plan for the expansion and development project of Calcom Cement India Ltd</td>
<td>Calcom Cement India Ltd</td>
<td>Aug 2008 to Dec. 2008</td>
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<tr>
<td>5.</td>
<td>Pre-opening Safety audit of Shillong Bypass Connecting NH-40 and NH-44</td>
<td>National Highways Authority of India</td>
<td>April 2013 to June 2015</td>
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<td>6.</td>
<td>Safety audit for grade separator at barapani</td>
<td>Jorabat Shillong Expressway Limited (JSEL)</td>
<td>Sept to Nov 2014</td>
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<tr>
<td>7.</td>
<td>Riding quality test of all lanes of the carriage way of jorbat-shillong (barapani) section</td>
<td>Jorabat Shillong Expressway Limited (JSEL)</td>
<td>April to June 2015</td>
</tr>
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</table>

### Other Activities

- Member of **Institute Research and Development Committee (IRDC)**, IIT Guwahati, from Dec. 2016 onwards till date
- **Member, DPPC** (Departmental Postgraduate Programme Committee) Department of Civil Engineering, IIT Guwahati from 2016 onwards till date
- **Lab in-charges**, (Transportation Engg.), Department of Civil Engineering, IIT Guwahati During 2014-July 2016

- **Member, Departmental Library Committee**, Department of Civil Engineering, IIT Guwahati during 2012-2014
- **Member, DPPC** (Departmental Postgraduate Programme Committee) Department of Civil Engineering, IIT Guwahati during 2010-2012
- **Member, DUPC** (Departmental Undergraduate Programme Committee) Department of Civil Engineering, IIT Guwahati during 2008-2010
- **Lab in-charges**, (Traffic Engg.), Department of Civil Engineering, IIT Guwahati During 2008-2010
- **Faculty Advisor** for B. Tech. (Civil Engineering) 2009 Batch.

**Date:** 17th February 2017

**Associate Professor**

---

(Dr. Akhilesh Kumar Maurya)
Curriculum Vitae

SRINIVAS S. PULUGURTHA, PH.D., P.E., F.ASCE
8914 Landsdowne Avenue, Harrisburg, NC 28075
Telephone: (704) 454-8936
E-mail: sspulugurtha@gmail.com

EDUCATION

<table>
<thead>
<tr>
<th>Degree</th>
<th>Year</th>
<th>Field of Study</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Ph.D.</td>
<td>1998</td>
<td>Civil Engineering</td>
<td>University of Nevada, Las Vegas (UNLV)</td>
</tr>
<tr>
<td>M.Tech.</td>
<td>1995</td>
<td>Civil Engineering</td>
<td>Indian Institute of Technology Kanpur, India</td>
</tr>
<tr>
<td>B.Tech.</td>
<td>1992</td>
<td>Civil Engineering</td>
<td>Nagarjuna University, India</td>
</tr>
</tbody>
</table>

Registrations / Licenses

Registered Professional Engineer – North Carolina (License #: 031890)
Registered Professional Engineer - Nevada (License #: 016501; EIT #: OT3626; Not Active)

EXPERIENCE

July 2014 - Present  
Professor & Graduate Program Director of Civil & Environmental Engineering, Director of Infrastructure, Design, Environmental and Sustainability (IDEAS) Center, Assistant Director and Senior Research Associate of Center for Transportation Policy Studies (CTPS); UNC Charlotte

Nov. 2013 - June 2014  
Associate Professor & Graduate Program Director of Civil & Environmental Engineering, Director of IDEAS Center, Assistant Director and Senior Research Associate of CTPS; UNC Charlotte

July 2012 - Oct. 2013  
Associate Professor & Graduate Program Director of Civil & Environmental Engineering, Assistant Director and Senior Research Associate of CTPS, Faculty Fellow of IDEAS Center; UNC Charlotte

July 2009 - June 2012  
Associate Professor of Civil & Environmental Engineering, Assistant Director and Senior Research Associate of CTPS, Faculty Fellow of IDEAS Center, Faculty Associate of Center for Applied Geographic Information Science (CAGIS); UNC Charlotte

July 2005 - June 2009  
Assistant Professor of Civil & Environmental Engineering, Assistant Director and Senior Research Associate of CTPS, Faculty Associate of CAGIS; UNC Charlotte

July 2002 - July 2005  
Assistant Director & Assistant Research Professor of Transportation Research Center (TRC), Adjunct Faculty of Civil, Environmental and Construction Engineering; UNLV
Sep. 1998 - June 2002  Assistant Research Professor of TRC; UNLV
Sep. 1995 - May 1998  Graduate Assistant, Department of Civil & Environmental Engineering and Transportation Research Center; UNLV
Jan. 1995 - Aug. 1995  Transportation Analyst, Consulting Engineering Services (India) Private Limited, New Delhi, India
July 1993 - Dec. 1994  Graduate Assistant, Department of Civil Engineering; Indian Institute of Technology Kanpur, India

AWARDS, HONORS & RECOGNITIONS

1. **Best Research Paper Award** (Paper Title: Spatial Variations in Pedestrian and Bicycle Level-of-Service (LOS) for Infrastructure Planning and Resource Allocation) by American Society of Civil Engineers (ASCE) Transportation & Development Institute hosted Green Streets, Highway, and Development Conference, Austin, TX (2013)
3. Nominated for the **Harshini de Silva Graduate Mentor Award, UNC Charlotte** by the Department of Civil & Environmental Engineering (in 2009, 2012 & 2014)
5. **Best Paper Award** (Paper Title: Evaluating Ground Holding Policy Implications in Real-Time Using Genetic Algorithms), Student Paper Competition held in Conjunction with the 25th American Society of Civil Engineers (ASCE) International Air Transportation Conference, Austin, TX (1998)
6. **Barrick Summer Session Scholar**, Graduate College, UNLV, 1997
SYNOPSIS OF ACCOMPLISHMENTS

Research & Scholarly Activity

1. Grants & Contracts Awarded
   a. Principal Investigator (PI) or co-PI on 69 grants & contracts that were funded - 31 as PI and 38 as co-PI
   b. Total funding value received is $7.2M
      i. Funding value received as PI is ~$2.5M
      ii. Funding value received as co-PI is ~$4.7M

2. Publications
   a. Authored / co-authored 52 peer reviewed journal papers
   b. Authored / co-authored 88 peer reviewed conference papers
   c. Authored / co-authored 26 non-peer reviewed conference papers
   d. Authored / co-authored 32 technical / project reports
   e. Editor / co-Editor of 3 conference proceedings / books
   f. Authored / co-authored 5 other articles / technical notes / keynotes
   g. Three “Best Paper” awards

3. Presentations
   a. Authored / co-authored 59 presentations based on peer reviewed papers
   b. Authored / co-authored 153 presentations based on peer reviewed abstracts
   c. 17 invited presentations
   d. 7 workshop presentations and 1 presentation as a Panelist
   e. Moderated or Chaired 23 technical sessions
Service

1. **University Committees**
   a. Served on the UNC Charlotte Graduate Program Director Advisory Council
   b. Served on one campus executive committee
   c. Served on one UNC Charlotte committee as a member and two UNC Charlotte committees as an alternate member

2. **College of Engineering (COE) Committees**
   a. Served / serving on three different COE committees
   b. Served as Parliamentarian for the College of Engineering Faculty Organization (CEFO)
   c. Chaired three COE committees: Graduate Teaching Award Committee in 2011 & 2015, College Review Committee (referred to as CRC) during 2011 - 2012 fiscal year, and Engineering Graduate Committee during 2016 - 2017 fiscal year

3. **Civil & Environmental Engineering (CEE) Department Committees**
   a. Served on 10 different CEE committees
   b. Focus Area Improvement Team (FAIT) Coordinator / Leader since 2006
   c. Faculty Advisor of ITE Student Chapter 2006 - 2016
   d. Chaired 2012 - 2013 Transportation Engineering Faculty Search Committee
   e. Served on IDEAS Center Internal Advisory Board

4. **CEE Graduate Program Director since July 2012**
   a. Responsible for all aspects of CEE Graduate Program

5. **Professional Organizations / Societies and Committees**
   a. Member of seven different professional organizations / societies (in various capacities)
   b. Served as a member of ten professional committees and 3 task force committees
   c. Served as a member of 15 conference organizing / steering / scientific committees (Chaired or co-Chaired seven of them)
   d. Chaired ASCE T&DI Planning, Finance & Economics Committee from fall 2007 to August 2016

6. **Editorial / Advisory Board and Reviewer**
   a. Served on Editorial Board of a Journal, Executive Committee of a Journal, International Advisory Board of a Transportation Research Group, Advisory Council of an Alliance (non-profit) as well as Assistant Editor-in-Chief of a Journal
   b. Reviewed 296 journal papers for 30 different journals, 45 conference papers for 20 different conferences, several abstracts, and seven proposals for six different agencies

7. **Other Activities**
   a. Presentation judge
      i. 3rd Conference of Transportation Research Group, Kolkata, India, December 18, 2015
      ii. Graduate Research Symposium, UNC Charlotte, April 11, 2015
   b. Poster Judge
      i. Undergraduate Research Conference Sustainability Awards, UNC Charlotte, April 25, 2014
      ii. Graduate Research Symposium, UNC Charlotte, March 22, 2014
      iii. Engineering and Technology Section, Charlotte Summer Research Symposium, July 24, 2013
c. Host of Spelling, Math, Geography and Science Competitions for K-8 grade students (2010 - present; every spring)
d. Coordinated efforts pertaining to transportation lab renovations and design of new facilities
e. Procurement of several equipment and software (driving simulator, three traffic signal controllers, traffic sign retro-reflectometer, Bluetooth detectors, and several traffic counters; software such as PTV Vissim, PTV Visum, PTV Vistro, TransModeler SE and TransCAD)
Teaching and Advising

1. Courses & Teaching
   a. Recipient of UNC Charlotte 2010 William States Lee College of Engineering Teaching Excellence Award at Graduate Level
   b. Introduced or developed curricula for six courses (one course for both undergraduate & graduate students and five courses for graduate students)
   c. Taught 47 semester- / summer session-long courses
   d. More than 90% of students who have taken my courses “strongly agree” or “agree” that my teaching style and methods are effective (rating ≥ 4 out of 5); About an equal percent of students “strongly agree” or “agree” that they learned a lot from taking my courses
   e. Nominated thrice by CEE Department for the Harshini V. de Silva Graduate Mentor Award (in 2009, 2012 & 2014)

2. Student Advising / mentoring
   a. Served as Chair of 5 Ph.D. Dissertation, 31 M.S. Thesis and 18 M.S. Project committees
   b. Served as a member of 8 Ph.D. Dissertation, 12 M.S. Thesis and 9 M.S. Project committees
   c. Currently serving as a Chair of 6 Ph.D. Dissertation and 2 M.S. Project committees
   d. Served as the External Examiner of 7 Ph.D. Dissertation committees
   e. Served as the Graduate Faculty Representative of 1 Ph.D. Dissertation
   f. Supervised / advised / mentored 33 individual study / projects at undergraduate- and graduate-level
   g. Three papers based on research efforts by students under my supervision were awarded the “Best Student Paper” by professional organizations
   h. Three students who submitted extended abstracts to present their Dissertation at “Doctoral Research in Transportation Modeling Seminar” held in conjunction with Transportation Research Board Annual Meeting were selected for presentation; Two made the presentations at the meeting
   i. Advised / mentored 53 undergraduate students, at least once
   j. Average # of undergraduate students advised / mentored per year since fall 2008 is ~10
   k. Advised / mentored one Senior Design Team Project in Spring 2006 and one High School Senior Project in fall 2008
RESEARCH & SCHOLARLY ACTIVITY

Grants and Contracts Awarded (Total: ~$7.2M)

65. CRS & SI Technologies for Reliable Transportation Systems Planning. Funded by United States Department of Transportation - Research and Innovative Technology Administration Program; Matching funds from Department of Civil & Environmental Engineering at the University of North Carolina at Charlotte, North Carolina Department of Transportation and City of Charlotte Department of Transportation. PI: Srinivas S. Pulugurtha. Sep. 15, 2012 - Feb. 28, 2015. $788,155.


52. Evaluating the Effectiveness of Pedestrian HAWK Signals. Funded by Charlotte Department of Transportation; Matching funds from the College of Engineering, The University of North Carolina at Charlotte. PI: Srinivas S. Pulugurtha. August 2007 - December 2010. $50,792.


41. Development of Tools for Intersection Infrastructure and Safety Management - Demonstration of Technology Transfer. Funded by Clark County Department of Public Works; Matching


15. Pedestrian Safety Engineering and Intelligent Transportation System Based Countermeasure Program for Reducing Fatalities, Injuries, Conflicts, and Other Surrogate Measures - Phase 1. Funded by Federal Highway Administration; Matching Funds from Regional Transportation Commission of Southern Nevada, City of Las Vegas, Clark County Department of Public Works, Nevada Office of Traffic Safety, Nevada Department of Transportation. PI: Shashi S. Nambisan, co-PI: Srinivas S. Pulugurtha. October 2001 - May 2002. $173,172.


Note 1: Involved on #s 41 through 44 till Spring 2006.
Note 2: Proposals initiated, under review or denied are not listed.
Grants & Awards Sponsors (in alphabetical order)

1. Argonne National Laboratory
2. California State Automobile Associations (CSAA)
3. City of Charlotte Department of Transportation (CDOT)
4. Clark County Department of Air Quality and Environmental Management
5. Clark County Department of Public Works
6. Holman's of Nevada, Inc.
8. Nevada Agency for Nuclear Projects
9. Nevada Department of Transportation (NDOT)
10. Nevada Housing and Neighborhood Development (Nevada H.A.N.D.)
11. North Carolina Department of Transportation (NCDOT)
13. Orth-Rodgers & Associates
14. Parson's Transportation Group
15. Regional Transportation Commission of Southern Nevada
16. Renaissance Computing Institute, UNC Chapel Hill
17. Sierra Transportation Engineers, Inc.
18. Station Casinos
19. Town of Cornelius, NC
20. Town of Stallings, NC
21. United States Department of Energy (DOE)
22. USDOT / FHWA
23. USDOT Research and Innovative Technology Administration (RITA)
24. UNLV
Publications  (Grant total: 208)

Note: Papers in review or under preparation are not listed.

Peer Reviewed Journal Papers  (Total: 52)


Peer Reviewed Conference Papers (Total: 88)


64. Pulugurtha, Srinivas S. and Md. Shah Imran. (2013). Spatial Variations in Pedestrian and Bicycle Level-of-Service (LOS) for Infrastructure Planning and Resource Allocation (Received Best Research Paper Award from ASCE T&DI Green Streets, Highways and
Development Conference Committee, 2013). 2nd T&DI Green Streets, Highways and Development Conference, Austin, TX, November 3-6.


Non-peer Reviewed Conference Papers (Total: 26)


**Project / Technical Reports (Total: 32)**


Dissertation and Thesis (Total: 2)


Books & Proceedings (Total: 3)


Articles, Technical Notes, & Keynotes (Total: 5)


Presentations (Grand total: 260; includes 23 moderated / chaired sessions)

Presentations Based on Peer Reviewed Papers (Total: 59)


46. Pooya Najaf and Srinivas S. Pulugurtha. (2014). Efficiency and Safety Evaluation of Unconventional Intersections. 8th National Congress on Civil Engineering, Babol Noshirvani Univ. of Technology, Babol, Iran, May 7-8.


Presentations Based on Peer Reviewed Abstracts (Total: 153)


149. Synthia Tagar, Preethi Goverdhanam and Srinivas S. Pulugurtha (2016). Operational and Safety Effects of Reduced Cycle Length Strategy. 2016 International Conference on Transportation and Development, Houston, TX, June 26-29. (Accepted for presentation)

148. Yashaswi Kotagiri and Srinivas S. Pulugurtha (2016). Modeling Bus Travel Delay and Travel Time for Improved Arrival Prediction. 2016 International Conference on Transportation and Development, Houston, TX, June 26-29. (Accepted for presentation)


System Accessibility Using GIS. 1998 GIS for Transportation Symposium, Salt Lake City, 
UT, April.
Destination Trip Tables for Intelligent Transportation System (ITS) Applications. Third 
Annual Public / Private ITS Conference, Las Vegas, NV, March.
Time Traveler Information Systems. 1997 Fall Transportation Conference, UNLV, Las Vegas, 
NV, September.
Link Volumes in Urban Areas. Second Annual Public / Private ITS Conference, Las Vegas, 
NV, July.
from Accident Data Using a GIS Model. 1996 Fall Transportation Conference, UNLV, Las 
Vegas, NV, September.

Workshops / Invited Presentations / Demonstrations / Exhibits (Total: 25)

Safety Analysis (P15-6281). TRB 2015 Workshop 181 on Modeling Pedestrian Behavior and 
Capacity Analysis in Multimodal Environments. Transportation Research Board 94th Annual 
Tools for Reliable Transportation Systems Planning (P15-6517). TRB 2015 Workshop 110 on 
Sensing Technologies for Transportation Applications. Transportation Research Board 94th 
22. Agustin Rodriguez and Srinivas S. Pulugurtha. (2014). VMT and Vehicle Weight Based Fee 
Estimation Method to Mitigate Budget Deficit. 2014 ASCE Spring Technical Seminar, 
Charlotte, NC, April 25, 2014.
Information Technologies for Reliable Transportation Systems Planning (P14-6326). TRB 
2014 Workshop 148 on Sensing Technologies for Transportation Applications. Transportation 
Research Board 93rd Annual Meeting, Washington, DC, January 12-16.
Maintenance Prioritization Tool, and Performance Measures. North Carolina Department of 
Transportation (NCDOT) Operations and Safety Technical Roundtable, Raleigh, NC, 
September 17-19.
Transportation System Reliability: Current Trends and Future Challenges. ASCE Southern 
Branch Meeting, Charlotte, NC, July 23.


Sessions Moderated (Total: 23)

SERVICE

University / College / Department Committee Assignments

University (UNC Charlotte)

1. UNC Charlotte Sustainability Executive Committee (2014 - present)
2. UNC Charlotte Graduate Program Director Advisory Council (2013 - 2015)
3. UNC Charlotte Faculty Information and Technology Services Advisory Committee
   • Alternate Member (2011 - 2012)
4. UNC Charlotte Faculty Competitive Grants Committee
   • Member (2012 - 2014)
   • Alternate Member (2008 - 2010)

College of Engineering (COE)

2. Engineering Graduate Committee (2012 - present)
3. COE Graduate Teaching Award Committee (2011, 2013 - 2016)
4. COE Review Committee (Promotion, Tenure & Reappointment Committee) (2011 - 2012)

Civil & Environmental Engineering (CEE) Department

1. CEE PhD Proposal Committee (2015 - 2016)
2. CEE Strategic Planning Committee (2014 - present)
3. CEE Search Committee for Department Chair (2013 - 2014)
4. CEE Department Review Committee (Promotion, Tenure & Reappointment Committee)
   (2012 - 2013) & (2015 - 2016)
5. CEE Search Committee for Transportation Engineering Faculty position (2012 - 2013)
6. CEE Sustainability Committee (2011 - present)
7. CEE Graduate Committee (2010 - present)
8. CEE Focus Area Improvement Team (FAIT), Transportation Engineering Area (2006 - present)
9. CEE Computing Committee (2006 - present)
10. CEE Lab / Equipment Committee (2006 - 2011)
11. CEE Workload Committee (2006 - present)
12. CEE Writing Committee (2006 - 2011)

Internal Advisory Board

1. Internal Advisory Board, IDEAS Center (2010 – 2011)
UNC Charlotte / COE / CEE Committee - Chair, Team Leader or Advisor

1. Chair, Engineering Graduate Committee (2016 - 2017)
2. Chair, Transportation Engineering Faculty Search Committee (2011 - 2013)
3. Chair, UNC Charlotte College of Engineering Review Committee (2011 - 2012)
5. Faculty Advisor, UNC Charlotte ITE Student Chapter (2006 - 2016)
6. FAIT Transportation Engineering Area Coordinator / Leader (2006 - present)

Professional and Scholarly Organizations / Societies

Memberships

1. American Society of Civil Engineers (ASCE)
   a. Fellow, ASCE (2017 - present)
   b. Member, ASCE North Carolina Section (2006 - present)
   c. Member, ASCE (2004 - 2016)
   d. Charter Member, ASCE Transportation and Development Institute (T&DI) (2003 - present)
   e. Member, ASCE Nevada Section (1998 - 2005)
   f. Associate Member, ASCE (1998 - 2004)
2. Member, American Society for Engineering Education (ASEE) (2005 - present)
3. Member, American Transportation Professionals of Indian Origin (2012 - 2013)
4. Member, Chi Epsilon, National Civil Engineering Honor Society (2005 - present)
5. Institute of Transportation Engineers (ITE)
   a. Member, North Caroline Section ITE (NCSITE) (2005 - present)
   b. Member, Southern District ITE (SDITE) (2005 - present)
   c. Member, ITE (2003 - present)
   d. Associate Member, ITE (1998 - 2003)
   e. Member, District 6 ITE (WESTERNITE) (1998 - 2005)
   f. Student Member, ITE (1995 - 1998)
7. Transportation Research Board (TRB)
   a. University Representative, TRB (2012 - present)
   b. Individual Affiliate Member, TRB (1998 - present)
8. Member, Transportation Research Forum (2015 - present)
Professional Committee - Chair / Vice-Chair

1. Chair, ASCE T&DI Planning, Economics & Finance Committee (2007 - present)
2. Vice-Chair, ASCE T&DI Planning, Economics & Finance Committee (2006 - 2007)

Professional Committee - Member

1. Member, TRB Transit Management and Performance (AP010) (2017 - present)
2. Member, TRB Safety Data, Analysis and Evaluation Committee (ANB20) (2014 - present)
3. Member, NCSITE Transit Council (2012 - present)
4. Member, NCSITE Scholarship Committee (2006 - 2016)
5. Member, Charlotte Lunch 'n' Learn Organizing Committee (2005 - present)
6. Member, TRB Geospatial Information Science and Applications Committee (ABJ60) (2005 - 2011)
7. Member, TRB New Public Transportation Systems and Technology Committee (AP020) (2004 - 2013)
8. Member, Regional Transportation Commission of Southern Nevada Travel Demand Forecasting and Modeling Subcommittee (2001 - 2003)
9. Member, ASCE T&DI Planning, Economics & Finance Committee (2001 - present)
10. Member, ASCE Urban Planning Committee, Urban Transportation Division (2001 - 2002)

Also, served as a friend or reviewed papers for several TRB committees.

Professional Task Force Committees

1. ASCE T&DI Task Force Committee on Memberships (2012)
2. ASCE T&DI Task Force Committee on Development (2007 - 2008)

Professional Conference - Chair / Co-Chair

2. Co-Chair, Transportation Land Use Planning Air Quality Conference
   a. Charlotte, NC (2012 - 2014)
   b. San Antonio, TX (2010 - 2011)
   d. Orlando, FL (2006 - 2007)

Professional Conference Committee Member

1. Fourth Conference of Transportation Research Group (CTRG) of India Scientific Committee, Mumbai, India (2017)
2. NCSITE Annual Meeting Agenda Committee, Raleigh, NC (2014)
3. ASCE T&DI Second World Congress Steering Committee, Orlando, FL (2012 - 2014)
4. Second Conference of Transportation Research Group (CTRG) of India Scientific Committee, Agra, India (2012 - 2013)
6. Southern District ITE Meeting Technical Program Committee, Charlotte, NC (2012 - 2013)
7. NCSITE Student Led Annual Meeting Organizing / Steering Committee, Charlotte NC (2008; 2011; 2014)

Other Service Activities

2. Presentation judge
   i. 3rd Conference of Transportation Research Group, Kolkata, India, December 18, 2015
   ii. Graduate Research Symposium, UNC Charlotte, April 11, 2015
3. Poster Judge
   i. Undergraduate Research Conference Sustainability Awards, UNC Charlotte, April 25, 2014
   ii. Graduate Research Symposium, UNC Charlotte, March 22, 2014
   iii. Engineering and Technology Section, Charlotte Summer Research Symposium, July 24, 2013
4. North South Foundation Math, Spelling and Geography Bee Competitions for K-8 grade students, Charlotte, NC (2010 to present; every spring)
5. Served as one of the judges for the 2002 Future City Competition, Las Vegas, NV

Editorial / Advisory Board

1. International Advisory Board, International Conference on Trends and Recent Advances in Civil Engineering, Amity University, India (2016)
2. Member, Sustain Charlotte Transportation Choices Alliance Advisory Council (2014 - present)
5. International Advisory Board, Conference of Transportation Research Group of India (2011 - 2012)
Referee and Peer Review Activities

**Journal Papers** *(Total: 296 papers for 30 different journals)*

1. Accident Analysis & Prevention Journal (2007 - 2016); reviewed 35 papers
2. Advances in Civil Engineering (2013); reviewed 1 paper
3. Advances in Mechanical Engineering (2015); reviewed 1 paper
4. Canadian Journal of Civil Engineering (2015 - 2016); reviewed 3 papers
5. Case Studies on Transport Policy (2014 - 2016); reviewed 4 papers
8. Injury Control and Safety Promotion (2012, 2015 & 2016); reviewed 6 papers
9. International Journal of Environmental Research and Public Health (2014); reviewed 1 paper
10. International Journal of Rail Transportation (2016); reviewed 1 paper
11. International Journal of Sustainable Transportation (2012); reviewed 1 paper
12. Injury Prevention Journal (2011); reviewed 1 paper
13. Journal of Advanced Transportation (2009, 2010); reviewed 4 papers
14. Journal of Soil and Water Conservation (2004); reviewed 1 paper
17. Journal of Transportation Technologies and Systems (2011 & 2012); reviewed 3 papers
19. Modern Traffic and Transportation Engineering Research (2016); reviewed 1 paper
20. Open Journal of Civil Engineering (2016); reviewed 1 paper
21. Pavement Engineering (2011 & 2016); reviewed 3 papers
22. Sustainability (2015 - 2016); reviewed 2 papers
23. Transport Geography (2014 - 2015); reviewed 3 papers
24. Transportation in Developing Economies (2015 - 2016); reviewed 5 papers
26. Transportation Letters (2010, 2015 & 2016); reviewed 4 papers
27. Transport Policy (2013); reviewed 2 papers
28. Transportation Research Record (2000 - 2016); reviewed 150 papers
29. Transportation Research Part D (2015 - 2016); reviewed 3 papers
30. Transportation Research Part F (2012); reviewed 3 papers
Professional Conference Papers (Total: 45 papers for 20 different conferences; Excludes TRB Annual Meeting Papers which is same # 28 under Journal Papers)

2. Conference of Transportation Research Group of India (2011 & 2013)
5. International Conference on Road and Airfield Pavement Technology (2015)
8. ITE 1999 Annual Meeting and Exhibit (1999)
12. TRB 3rd International Conference of Road Safety and Simulation (2011)

* In parenthesis is year reviewed.

Professional Conference Abstracts

3. Green Streets Highways Development Conference, Austin, TX (2013)

* In parenthesis is year reviewed.

Proposals (Total: 7 proposals for 6 different agencies)

4. FHWA Exploratory Advanced Research (EAR) Program (2008)
5. HRB Health Services Research Fellowships (2008)
6. METRANS Transportation Center 2009-2010 Research Program (2009)

* In parenthesis is year reviewed.
TEACHING & ADVISING

Courses Developed (Total: 6)

- CEGR 6090 / INES 8090: Railway Engineering (Spring 2014)
- CEGR 6162 / INES 8090: Computer Applications for Transp. Engineers (Fall 2009)
- CEGR 6163 / INES 8090: GIS Applications for Civil Engineers (Fall 2007)
- CEGR 6090: Air Transportation (Spring 2007)
- CEGR 6164 / INES 8090: Traffic Safety (Fall 2006)
- CEGR 4162/5162: Transportation Planning (Spring 2006)

Courses Taught (Total: 47 semester- or summer session-long courses)

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AT is Air Transportation (CEGR 6090)*
ATE is Advanced Traffic Engineering (CEGR 4161/5161)**
CATE is Computer Applications for Transportation Engineers (CEGR 6162 / INES 8090)*
EE is Engineering Economy (equivalent to CEGR 2102)*** - Ratings not available.
GIS4CE is GIS Applications for Civil Engineers (CEGR 6163 / INES 8090)*
RE is Railway Engineering (CEGR 6090 / INES 8090)*
TCO is Traffic Control and Operations (CEGR 6161 / INES 8090)**
TE I is Introduction to Transportation Engineering I (CEGR 3161)****
TP is Transportation Planning (CEGR 4162 / 5162)** - also a new course
TS is Traffic Safety (CEGR 6164 / INES 8090)*

Note 1: * indicates new course
Note 2: ** indicates "core/required graduate course"
Note 3: *** indicates "core/required undergraduate course"
Note 4: 3/4000-level are for B.S. students; 5/6000-level are for M.S. students; 8000-level are for Ph.D. students
Note 5: Numbers in the table indicate the semester the course was taught and instructor's overall effectiveness / performance rating in the course (from end of the semester course evaluations by students). Score out of 5

Other Special Courses Taught Before Joining UNC Charlotte

Adobe Acrobat for WWW Designers
- September - October 2000 (New Course)

JavaScript for WWW Designers
- October - November 2001
- September - October 2000
- April - May 2000 (two sections) (New Course)

Fundamentals of Engineering Exam Review Session (Total: 17 sessions; each ~2.5 hours)

- Transportation Engineering
  - Spring / Fall 2007; Spring / Fall 2008; Fall 2009; Spring 2010; Spring / Fall 2011; Spring / Fall 2012; Spring / Fall 2013; Spring / Fall 2014; Spring / Fall 2015; Spring / Fall 2016

- Computing
  - Spring 2009

Students Advised / Mentored (Major advisor of 5 Ph.D. and 49 M.S. students - graduated)

Ph.D. Dissertation Committee Chair (Total: 5)


**M.S. Thesis Committee Chair (Total: 31)**


20. Harini Mangilipally - Thesis Title: Modeling Travel time and Average Speed to Evaluate Urban Arterial Performance (completed May 2012).


1. Nagaswetha Pasupuleti - Thesis Title: Using GIS to Measure Reliability of Links for Travel on Roads: An Illustration (completed Dec. 2007). Current Position: Assistant Professor of Civil Engineering & Transportation Engineering Research Coordinator, Amity University, New Delhi, India.

M.S. Project Committee Chair (Total: 18)


15. Justin Beaver - Project Title: Comparison of Crash Rates between Virginia Geometric Design Standards (GS) and “Resurfacing, Restoration, and Rehabilitation (RRR)” Standards (completed Aug. 2015). Current Position: Associate Engineer, Virginia Department of Transportation (VDOT) Staunton Location & Design.

14. Christopher Palmer - Project Title: Predicting Transit Bus Ridership based on Geographical Features of a Region (completed May 2015).


**Current Graduate Students (Major Advisor of 6 Ph.D. and 2 M.S. students)**

Ph.D. Dissertation Committee Chair
6. Lakshmi Prasanna Srirangam (expected to complete December 2018)
5. Venumadhav Kukkapalli (expected to complete May 2018)
4. Ajinkya Mane (expected to complete May 2018)
3. Synthia Tagar (expected to complete Dec. 2017)
2. Praveena Penmetsa (expected to complete May 2017)
1. Kanya Mukoko (expected to complete May 2017)

M.S. Project Committee Chair
2. Nutan Teketi (expected to complete May 2017)
1. Venkata S. Sudheendra Yesentarao (expected to compete May 2017)