

Cellphone : 9443409511

e-Mail ID : kgunasekaran@annauniv.edu

Address : 1A Ananya Apartment 41, I Avenue, Indira Nagar,
Adyar, Chennai 600020



Present Position

Professor, Department of Civil Engineering, College of Engineering Guindy, Anna University, Chennai from August-2009.

Present Additional Responsibility

- Professor and Estate Officer, , Anna University, Chennai from January-2019.
- Head of the Division, Division of Transportation Engineering, Anna University, Chennai from June-2016.

Previous Positions

- Associate professor, Division of Transportation Engineering, College of Engineering Guindy, Anna University, Chennai during August-2006 and August-2012.

Previous Additional Responsibility

- , , Anna University, Chennai.

Other Employment

- Associate Professor, Institute of Road and Transport Technology, Erode for 0.5 years.
- Lecturer, Institute of Road and Transport Technology, Erode 638316 for 6.5 years.
- Senior Lecturer, Institute of Road and Transport Technology, Erode 638316 for 9 years.
- Selection Grade Lecturer, Institute of Road and Transport Technology, Erode 638316 for 2 years.
- Assistant Professor, Institute of Road and Transport Technology, Erode 638316 for 1.25 years.

Degree

- ❖ M.E. in Urban (Transportation) Engineering, College of Engineering, Guindy, Anna University (1989 - 1991).

- ❖ B.E. in CIVIL ENGINEERING , Government College of Engineering, Salem, University of madras (1982 - 1986).

Research Degree

- ❖ Ph.D. in Transportation Engineering from Faculty of Civil Engineering, College of Engineering, Anna University (1998 - 2003).
Title: Congestion Modelling for a Heterogeneous Traffic - A Case Study .

Area of Specialisation

- > Transportation Engineering

Membership in Professional Organization

- > Indian Roads Congress
- > Institute of Urban Transport
- > ISTE
- > Fellow Institution of Engineers

Research Guidance

Number of Ph.D Scholars Guided	: 2
Number of Ph.D Scholars Guiding	: 6
Number of M.E./ M.Tech. Projects Guided	: 30
Number of M.E./ M.Tech. Projects Guiding	: 5

Papers Published in Journals

Research Papers Published in International Journals	: 9
Research Papers Published in National Journals	: 2

1. K.Gunasekaran, Dr J vasudevan and Dr A M Thirumurthy, " Bus drivers and Bus Accidents – A Case study in Tamil Nadu ", Indian Highways, published by Indian Roads Congress. (1993).
2. K.Gunasekaran and Dr A M Thirumurthy, "The Environmental Impact of Traffic heterogeneity in Urban Areas – A Case Study Chennai, India", International Journal for Environmental Creation, Japan, (2007).
3. M.Muthukannan and K.Gunasekaran, " Demand Estimation of MRTS Operated in Highly Patronaged Bus Transport Network", International Journal for Environmental Creation, Japan, (2009).

4. Oliver Jayaprakash, P. and Gunasekaran, K., "Application of Quantitative models, MNL & ANN in Short term forecasting of Ship data", International Journal of Computer Science Issues, Vol. 8, Issue 2, (2011).
5. Oliver Jayaprakash, P., Gunasekaran, K. and Muralidharan, S., "Data mining applications in modeling Transshipment delays of Cargo ships", International Journal of Computer Science and Information Security, , Vol. 9, Issue 10, (2011).
6. Oliver Jayaprakash, P., Gunasekaran, K. and Muralidharan, S., "Comparison of Artificial Neural network Models and Multiple Linear regression models in Cargo Port performance prediction", International Journal of Advanced Materials Research, Vol. 403, pp. 3570-3577 (2012).
7. Oliver Jayaprakash, P. and Gunasekaran, K., " Measurement of port performance utilising service time of vessels", International Journal of Civil Engineering and Building Materials , Vol. 2, Issue 2, (2012).
8. Nithya. S, D. Senthurkumar K. Gunasekaran, " Evaluation of Grade Separation at Intersections using Simulation", European Journal of Scientific Research, Vol. 80, Issue 4, pp. 540-551 (2012).
9. Nithya Swaminathan, Nithyanandhan Rathinavel, Senthurkumar Duraisamy and Gunasekaran Karuppanan, "Design of vehicle actuated signal using simulation", Građevinar Journal , Issue 7, pp. pp 635-64 (2014).
10. S. Nithya, D. Senthurkumar, and K.Gunasekaran, "Delay Measurement of Manually Controlled Intersection Using GPS", The Open Civil Engineering Journal, Vol. 8, pp. pp 130-135 (2014).
11. Hemavathy M, Kalanidhi S, Gunasekaran K, Mukti Advani and Velmurugan S, " Assessment of Critical gap at Uncontrolled Intersections Under Hetrogeneous Traffic Conditions", Indian Journal of Transport management, pp. pp242- 254 (2015).

Papers Presented in Programmes

Research Papers Presented in International Programmes : 11
Research Papers Presented in National Programmes : 10

1. "Travel Time Measurement using ROMDAS" presented in a International level conference on International ROMDAS User Conference , organised by Data Logistics Limited, New Zealand from 04-Oct-2007 to 05-Oct-2007.
2. "Dynamic Fleet Management of Buses with Vehicle tracking facility", International Conference on Best Practices to relieve congestion in Developing Countries" presented in a International level seminar on International Seminar on Best Practices to relieve Congestion on Mixed Traffic Urban Streets in Developing Countries, organised by IITM, Chennai, India from 12-Sep-2008 to 14-Sep-2008.
3. "Modelling Pedestrian flow on Urban footpaths – A case study Madurai" presented in a International level seminar on International Seminar on Best Practices to relieve Congestion on Mixed Traffic Urban Streets in Developing Countries, organised by IITM, Chennai, India from 12-Sep-2008 to 14-Sep-2008.

4. "Issues and challenges in freight travel forecast modeling" presented in a International level conference on 12th International Conference on Travel Behaviour and Research , organised by International Association for Travel Behaviour and Research , USA from 13-Dec-2009 to 18-Dec-2009.
5. K.Gunasekaran and Dr A M Thirumurthy, "Use of VTCS Data for Study of Schedule Adherence and its Impact on Bus Transit Performance" presented in a International level conference on 51st Annual Forum of the Transportation Research Forum (TRF), organised by Transportation Research Forum, USA from 10-Mar-2010 to 13-Mar-2010.
6. "Introduction of Low Floor AC Bus Operation in Chennai and the Impact on Urban Travel" presented in a National level conference on Urban Mobility India Conference 2010, organised by Institute of Urban Transport and Ministry of Urban Development, India from 03-Dec-2010 to 04-Dec-2010.
7. S. Nithya , D. Senthurkumar, Dr. K. Gunasekaran, "Optimisation of Bus Transit operation through Automatic Data Collection Systems" presented in a National level conference on 2nd National conference on ITS, organised by IIT Mumbai and CDAC, Trivandrum, India from 26-Aug-2011 to 27-Aug-2011.
8. "Evaluation of Bus Operations with ETM and GPS data" presented in a National level conference on National Conference on Urban Mobility - Challenges, Solutions and Prospects, organised by IITM, Chennai, India from 13-Jul-2012 to 14-Jul-2012.
9. "Study on Traffic Flow Characteristics at Work Zones Using Simulation" presented in a National level conference on National Conference on Urban Mobility - Challenges, Solutions and Prospects, organised by IITM, Chennai, India from 13-Jul-2012 to 14-Jul-2012.
10. "Evaluation of Grade Separation Arrangement on Rajiv Gandhi Salai using Simulation " presented in a National level conference on National Conference on Urban Mobility - Challenges, Solutions and Prospects, organised by IITM, Chennai, India from 13-Jul-2012 to 14-Jul-2012.
11. "• Design Of Vehicle Actuated Signal For A Major Corridor In Chennai Using Simulation " presented in a National level conference on Urban Mobility India Conference 2012 , organised by Institute of Urban Transport and Ministry of Urban Development, India from 05-Dec-2012 to 06-Dec-2012.
12. "Devising Traffic Management for Congested Mesolevel Network using Simulation" presented in a National level conference on Urban Mobility India Conference 2012, organised by Institute of Urban Transport and Ministry of Urban Development, India from 05-Dec-2012 to 06-Dec-2012.
13. "Before And After Evaluation Of Treatment At Signalized Urban Intersections" presented in a National level conference on Urban Mobility India Conference 2012, organised by Institute of Urban Transport and Ministry of Urban Development, India from 05-Dec-2012 to 06-Dec-2012.
14. Kalanidhi S and Gunasekaran K, "Vulnerability of pedestrian to road traffic accidents within urban limits – a case study" presented in a National level conference on 73rd Annual Session of Indian Road Congress, organised by Indian Road Congress, India from 07-Jan-2013 to 09-Jan-2013.

15. "Signal Coordination of Major Arterial Road of Chennai City" presented in a National level conference on 73rd Annual Session of Indian Road Congress, organised by Indian Road Congress, India from 07-Jan-2013 to 09-Jan-2013.
16. "Design and Coordination of Vehicle Actuated Signals on Kamarajar Salai in Chennai City" presented in a International level conference on Indo-US symposium on Intelligent Transportation System, organised by IITM, Chennai, India from 09-Dec-2013.
17. "Estimation of Bus Transport Ridership Accounting Accessibility" presented in a International level conference on Conference of Transportation Engineering Group of India, organised by Transportation Engineering Group of India, India from 12-Dec-2013 to 15-Dec-2013.
18. Hemavathy M, S.Kalaanidhi, Dr.K.Gunasekaran, "A Concept of Platoon Flow Duration in Data Aggregation for Urban Capacity Estimation" presented in a International level conference on Computers in Urban Planning and Urban Management (CUPUM 2015), organised by MIT, USA, USA from 07-Jul-2015 to 10-Jul-2015.
19. "Study on Traffic Flow Characteristics using Probe Vehicles" presented in a International level conference on Computers in Urban Planning and Urban Management (CUPUM 2015), organised by MIT, USA, USA from 07-Jul-2015 to 10-Jul-2015.
20. Elangovan E, Jebaselwin Gladson Kalaanidhi S, Karthiga K Gunasekaran K, "Use of traffic sensor data for estimating multilane highway capacity" presented in a International level conference on 3 rd Conference of Transportation Research Group of India, organised by TRG of India, India from 23-Dec-2015 to 25-Dec-2015.
21. "Study on Traffic Flow Characteristics at Work Zones with the Aid of Simulation" presented in a International level conference on 3 rd Conference of Transportation Research Group of India, organised by TRG of India, India from 23-Dec-2015 to 25-Dec-2015.

Current Sponsored Projects

1. "Evaluation of Traffic Flow to Chennai International terminals Pvt Ltd (CITPL) Container Terminal", funded by PSA CITPL Chennai (July-2016 - December-2017). Project Cost: 12.90.
2. "Preparation of Comprehensive mobility Plan for Madurai Local Planning Area", funded by DTCP Chennai (September-2015 - December-2017). Project Cost: 43.50.
3. "Traffic studies and projection for Andaman and Nicobar islands ", funded by MIR Consultants & Projects Pvt Ltd (June-2015 - December-2017). Project Cost: 9.00.
4. "Study on Accidents and role of drivers in SETC Bus accidents", funded by M/s SETC Chennai (May-2013 - December-2017). Project Cost: 4.50.
5. "Preparation of Detailed Project Report for Development of Kathipara Multimodal Urban Square", funded by M/s CMRL Chennai (April-2017 - December-2017). Project Cost: 5.85.
6. "Feasibility study to assess the demand for parking of vehicles at Industrial Estate Guindy", funded by M/s TANSIDCO Ltd Chennai (June-2017 - December-2017). Project Cost: 6.50.

Sponsored Projects Completed

1. "Study on Bus Priority Lane", funded by UGC (April-2008 - December-2013). Project Cost: 8.00.
2. "Decision Support System for Safety Evaluation of Urban Intersections ", funded by AICTE (April-2010 - October-2013). Project Cost: 14.00.
3. "Improving Transit System Performance through Automatic Data Collection Systems", funded by CoEUT IITM (January-2011 - June-2013). Project Cost: 12.00.
4. "Study on Safety at Work Zones in Urban Areas", funded by CoEUT IITM (January-2011 - June-2013). Project Cost: 12.75.
5. "Development of Indian Highway Capacity manual (Indo HCM)", funded by CSIR-CRRRI New Delhi (January-2013 - March-2014). Project Cost: 100.45.
6. "Traffic study for Metro Rail Section ECV 07 (OTA to Airport)", funded by M/s Lanco (January-2012 - September-2013). Project Cost: 5.00.
7. "Parking Study for sathangadu Iron and Steel Market", funded by Chennai Metropolitan Development Authority (January-2012.. Project Cost: 2.50.
8. "Operation of mini Buses in Chennai City and Suburban Areas", funded by Metropolitan Transport Corporation Ltd (January-2011.. Project Cost: 9.00.
9. "Planning of Grade Separators along Anna Salai", funded by Highways Department (February-2011.. Project Cost: 1.80.
10. "Traffic Study for Development of Road Infrastructure and De-congestion Planning for All the Gates in Tuticorin Port", funded by M/s RITES (July-2009 - December-1969). Project Cost: 12.60.
11. "Traffic study for Proposed Shopping Mall at Adyar", funded by M/s True value Homes.. Project Cost: 3.20.
12. "Traffic Study for Proposed Shipyard at Silambimangalam", funded by M/s.Goodearth Ltd, Chennai.. Project Cost: 2.70.
13. "Assessment of Passenger Traffic for a Combined Ashok Nagar – KK Nagar Metro Station Near Ashok Pillar", funded by M/s CMRL Chennai.. Project Cost: 1.35.
14. "DPR for purchase of Buses for MTC, TNSTC(M) and TNSTC (C)", funded by Tamilnadu Urban Infrastructure Financial Services Ltd.. Project Cost: 45.00.
15. "DPR II for purchase of Buses for MTC, TNSTC(M) and TNSTC (C)", funded by Tamilnadu Urban Infrastructure Financial Services Ltd.. Project Cost: 6.00.
16. "Development Plan for Least Urbanised Taluks", funded by M/s DTCP (July-2009.. Project Cost: 6.00.
17. "Study on Traffic Impact due to the Proposed Assembly and Secretariat Complex to Government Estate", funded by M/s Archivista and PWD, Chennai (August-2009.. Project Cost: 10.68.

18. "Study on Traffic Impact due to the Proposed Medical College at Villupuram", funded by M/s PWD, Chennai.. Project Cost: 5.00.
19. "Study on Traffic Impact due to Proposed state Modern Library at Kotturpuram", funded by M/s C R Narayana Rao (July-2009.. Project Cost: 2.00.
20. "Customer Satisfaction of Vehicle Tracking Control System", funded by M/s IIITB,Bangalore (June-2008.. Project Cost: 2.00.
21. "Pre-Feasibility Study on the Proposed Road Alignment along Water Courses of Chennai", funded by Tamilnadu Urban Infrastructure Financial Services Ltd (July-2007.. Project Cost: 5.75.
22. "Planning and Design of Terminals and Depots for MTC, Chennai", funded by Tamilnadu Urban Infrastructure Financial Services Ltd (November-2007.. Project Cost: 70.00.
23. "Planning and Design of Grade Separator at Perambur", funded by Chennai Corporation (July-2007.. Project Cost: 81.00.
24. "Planning of Grade Separator at Chamiers Road Intersection", funded by Chennai Corporation (January-2008.. Project Cost: 3.50.
25. "Proof checking of Grade Separator at North Usman Road", funded by M/s Gammon India (October-2007.. Project Cost: 8.00.
26. "Study on Improving the accessibility and circulation to IT Corridor ", funded by Chennai Metropolitan Development Authority (September-2006.. Project Cost: 13.85.
27. "Design of Extended bus stand at Poonamallee", funded by Commiosionarate of Municipal Administration (December-2006.. Project Cost: 7.00.
28. "Comprehensive Traffic and Transportation Study for Port Blair", funded by Andaman PWD (March-2007.. Project Cost: 24.00.
29. "Traffic study near Toll plazas on National Highways", funded by NHAI (May-2007.. Project Cost: 6.00.
30. "Methodology to Devise Traffic management Measure during the construction of Metrorail station in the Airport premises", funded by URC Constructions Pvt Ltd (January-2013 - March-2013). Project Cost: 0.25.
31. "Design of Intersection at Entry to Rajparis property at Pallavaram", funded by Raj Paris Constructions Pvt Ltd (April-2013 - April-2013). Project Cost: 0.30.
32. "Traffic Impact study for Chennai One IT Park - Phase II building", funded by IG3 Infra Ltd (April-2016 - December-2016). Project Cost: 3.77.
33. "Study on Passenger Travel Characteristics and Identification of Measures for Improvement of Patronage of TNSTC(Villupuram) Buses ", funded by TNSTC Villupuram Ltd (September-2014 - September-2015). Project Cost: 7.00.

34. "Study on Commuters Travel Characteristics along Chennai Metro Rail Corridors", funded by M/s CMRL Chennai (March-2013 - June-2013). Project Cost: 5.00.

Programme Chaired

1. Chairman, National level conference titled "National Conference on Urban Mobility-Challenges, Solution and Prospects" conducted by IITM , Chennai from 13-Jul-2012 to 14-Jul-2012.
2. Chairman, National level conference titled "Urban Mobilty India 2012" conducted by Institute of Urban Transport from 05-Dec-2012 to 06-Dec-2012.

Programme Organized

1. Coordinator, National level Short Course on "FDP on Traffic Engineering" from 22-Jun-2009 to 28-Jun-2009.
2. Coordinator, National level Short Course on "Introduction to CUBE Base " from 01-Sep-2010 to 03-Sep-2010.
3. Co-ordinator, National level workshop on "Multimodal Transport Planning" from 10-Jan-2012.
4. Co-ordinator, National level workshop on "Strategies to Improve Bus Transport Ridership" from 28-Jan-2013.
5. Local Organising Secretary, National level workshop on "Review worshop of Indian Highway CAcapacity manual 2014" from 28-Mar-2014 to 30-Mar-2014.
6. Organising Secretary, National level conference on " Conference on Transportation Systems Engineering and Management CTSEM 2017" from 12-May-2017 to 13-May-2017.
7. Coordinator, National level Short Course on " 5 days Training Program on Road Safety Engineering Measures" from 14-May-2018 to 18-May-2018.

Programme Attended

1. Participated in a International level conference on "International ROMDAS User Conference" , India from 04-Oct-2007 to 05-Oct-2007.
2. Participated in a National level workshop on "Improving Traffic Flow on Streets of Chennai" organized by IITM, Chennai, India from 27-Feb-2008.
3. Attended a National level Short Course on "Introduction to CUBE Base" organized by M/s Citilabs Inc, India from 09-Sep-2008 to 11-Sep-2008.
4. Attended a International level seminar on "International Seminar on Best Practices to relieve Congestion in Developing Countries" organized by IITM, India from 12-Sep-2008 to 14-Sep-2008.

5. Participated in a National level workshop on "UTOPIA and the City" organized by Max Muller Bhavan & IIT, India from 14-Nov-2008 to 15-Nov-2008.
6. Participated in a International level workshop on "WORKSHOP ON EMERGING TRENDS IN INTELLIGENT TRANSPORT SYSTEM PLANNING" organized by IITM, Chennai, India from 10-Mar-2010 to 13-Mar-2010.
7. Participated in a National level workshop on "Workshop on Bus Operations planning " organized by Center for Sustainable Transport – India, India from 11-Jan-2011 to 12-Jan-2011.
8. Participated in a International level conference on "1st Conference of Transportation Research Group of India" organized by Transportation Research Group of India, India from 08-Dec-2011 to 09-Dec-2011.
9. Attended a International level Short Course on "Training program on Vissim" organized by M/s Sanovatech, India from 07-Feb-2012 to 08-Feb-2012.
10. Participated in a International level conference on "2nd Conference of Transportation Engineering Group of India" organized by Transportation Engineering Group of India, Agra, India from 12-Dec-2013 to 15-Dec-2013.
11. Participated in a International level conference on "Computers in Urban Planning and Urban Management (CUPUM 2015)" organized by MIT, USA, USA from 07-Jul-2015 to 10-Jul-2015.
12. Participated in a International level conference on "3 rd Conference of Transportation Research Group of India" organized by TRG of India, India from 23-Dec-2015 to 25-Dec-2015.

Special Representations

1. Steering Committee Member in ISATS2010- First International Symposium on Advances in Tran from 17-Nov-2010 to 20-Nov-2010.
2. Expert Member in Tamilnadu Urban Infrastructure Limited from 02-May-2012 to 28-Dec-2012.
3. Expert Member in Tamilnadu Urban Infrastructure Limited from 02-May-2012 to 28-Dec-2012.
4. Expert in Road safety Cell of Tamil Nadu State from 02-May-2011
5. University Representative in Tender Evaluation Committee for Highways Department from 02-May-2011

Honours

1. "Active Consultant Award" given by CTDT Anna University from India (2011).

Experience Abroad

1. Visited University of Canterbury, Christchurch, NZ from 05-Sep-2005 to 04-Mar-2006. Purpose of visit :Visiting.

2. Visited Transport Research Forum, Washington from 10-Mar-2010 to 13-Mar-2010. Purpose of visit :Paper Presentation.
3. Visited Plymouth University, Imperial College and Nottingham University, Plymouth, London and Nottingham from 29-Jan-2013 to 06-Feb-2013. Purpose of visit :Visit to Universities for Research Collaboration.
4. Visited Purdue University, USA from 01-Jul-2015 to 05-Jul-2015. Purpose of visit :Paper Presentation.
5. Visited MIT, USA from 06-Jul-2015 to 12-Jul-2015. Purpose of visit :Paper Presentation.

Invited Lectures

1. Delivered a Lecture on "Traffic Management For safe movements" in Road Safety Workshop organized by Tamil Nadu Police, Cuddalore, Cuddalore (08-Sep-2006).
2. Delivered a Lecture on "Road Accident Analysis using GIS" in Road safety seminar series organized by Institution Of Engineers Chennai Chapter, Chennai (22-Dec-2008).
3. Delivered a Lecture on "Planning of Multilevel Parking Systems at Bus Term" in Planning and Design Studio organized by IIT, Chennai (09-Aug-2010).
4. Delivered a Lecture on "Rationalisation of Bus Routes and Scheduling" in National Seminar on Advancements in Public Transportation organized by IRTT, Erode, Erode (17-Sep-2010).
5. Delivered a Lecture on "Traffic and Transport Management Measures in Urban" in Training program on Traffic and Operation management organized by Institute of Road Transport, Chennai (09-Apr-2013).