

Gaurang J Joshi,Ph.D. Professor Transportation Engineering& Planning Civil Engineering Department, SVNIT, Surat.

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EDUCATIONAL QUALIFICATIONS

Diploma in Civil Engg.	1988	Government Polytechnic, Ahmedabad		
B.E. (Civil)	1991	L.D. College of Engineering, Ahmedabad Gujarat University, Ahmedabad		
M.E. (Civil)	1993	Sujarat Shiversity, Annicausaa		
Ph.D. (Civil)	2006	V.N. South Gujarat University, Surat		

MAJOR AREAS OF RESEARCH

- Travel Behaviors Analysis
- ICT applications in Mixed Traffic Flow Modeling
- Inter-regional travel demand modeling
- Pedestrian traffic flow modeling
- Low carbon mobility
- Non-Conventional Materials for Highway Pavements
- Framework for sustainable urban transport systems

COURSES TAUGHT / TEACHING

Under Graduate Level:

CE 401 Highway Engineering

CE413 Urban Transportation Planning

CE 414 Traffic Engineering

Post Graduate Level:

CE 691 Research Analytical Methods

- CE 693 Transport Economics
- CE 697 Urban Transport System Planning
- CE 698 Regional Transport System Planning
- CE 702 Public Transport Planning

PRIZES, AWARDS, DISTINCTIONS

1. Secured FIRST RANK at B.E. (Civil) examination of Gujarat University in 1991. Following gold medals were awarded.

(i) The New High School, Ahmedabad, Silver Jubilee Medal

(ii) Smt. ManigauriHimatlalBapalal Parikh Medal

- (iii) Shri Natwarlal Balubhai Shah Medal
- (iv) IchchhashankerDurlabhram Vyas Medal
- 2. ShrinivasDivetia Scholarship for further study of M.E. (Civil)
- in Gujarat University.
- 3. MHRD Scholarship for M.E. (Civil W.R.M.) at L.D. College of Engineering, Ahmedabad. (GATE 92 score: 94.33 percentile)

4. ISTE, New Delhi National award for guiding best M. Tech. thesis in civil engineering (First Prize), 2008.

5. Commendation Certificate awarded by Indian Roads Congress for outstanding work as Member Secretary, Technical Committee H8 at 73rd Annual Session on 10-1-2013 held at Coimbatore.

MEMBER OF TECHNICAL SOCIETIES:

- 1. Life member, Indian Society for Technical Education(ISTE), New Delhi
- 2. Member, Institute of Engineers (India)
- 3. Life Member, Institute of Urban Transport (India), New Delhi
- 4. Life Member, Indian Roads Congress (IRC), New Delhi
- 5. Member, Eastern Asia Society for Transport Studies (EASTS), Japan.
- 6. Life member, Transport Research Group of India (TRG).
- 7. Member, World Conference on Transport Research Society (WCTRS)

RESEARCH PROJECTS

S.No.	Name of the Project & amount	Sponsoring Authority
1	Study on Mass Housing Scheme for Urban Poor	MHRD New Delhi
	in Metropolitan Cities (Rs.7 lacs)	
2	Study of Speed – Flow Characteristics and Flow	IRC - SVNIT
	Behaviour under Mixed Traffic Condition in	
	Indian Context (Rs.35.10 lacs) (2008-2012)	
3	Development of Indo- Highway Capacity Manual	CSIR, Planning Commission
	(Rs. 100.450 lac) (2012-2017)	of India
4	Development of Framework to Measure	Ministry of Housing and
	Sustainability Index of Transportation Systems in	Urban Affairs (On going)
	Indian Metropolitan Cities. (82.30lakhs) (2019-	
	2021).	

JOURNAL REVIEWER

- Journal of Indian Roads Congress
- J. Indian Highways
- Int. J. Case Studies on Transport Planning, Elsevier Pub.
- Int. J. Travel Behaviour and Society, Elsevier Pub.
- Int. J. Transportation Letters, USA
- Int.J., Transportation Engineering: Part A: Systems, ASCE
- Journal of Urban Planning and Development, ASCE.
- IET-Intelligent Transport Systems
- Int. J. Transport Geography, Elsevier Pub., Taylor & Francis Pub.

RESEARCH PUBLICATIONS:

Publications in National Journals:

- Gaurang Joshi and B.K. Katti "Dynamic Trip Distribution of Workers for a Metropolitan City through Implicit Gravity Modeling" Journal of Urban Transport Journal Institute of Urban Transport (India), 2010, 9:2
- Gaurang Joshi and Dinesh Vagadia "Dynamic Vehicle Equivalent Factors for Mixed Traffic Conditions for Multilane Metropolitan Arterials in India" Journal of Indian Roads Congress, July-Sept 2013, 74-2
- 3. Joshi, G., Vagadiya, D., Guzzarlapudi, S. D. (2013) "Impact of Proposed River Bridge on Level of Service of Existing Bridge and Linked Corridors: A Case Study of Surat City" Urban Transport Journal Institute of Urban Transport (India), August, 2013, 12:1
- 4. Patel, D. A., Joshi, G. J. (2013) "Selection of A Water Pipe Through MADM Approach" Journal of Construction Management NICMAR Pune (ISSN.0970-3675), Page.33-42 April-June.13 No. II, Volume XXVIII
- 5. Nipa A Desai, Joshi G. J. "Geographical & Cultural Variations in Factors Affecting Travel Mode Choice: An Analysis of Travelers' behavior" journal of Indian Journal of Transport Management, July-Sept, 2013
- 6. Krishna S., B.K.Katti ,JoshiG.J. "Measures of Travel Time Variability and Reliability and Its Improvement" journal of Strategies Urban Transport Journal Institute of Urban Transport (India), Oct., 2015, Vol.14 No.1
- 7. RupaliZope, Shriniwas Arkatkar, Gaurang Joshi "Key Challenges to Urban Transport Sustainability: Case Study Of Indian Cities" in Urban Transport Journal, Institute of Urban Transport (India), Accepted for publication

Publications in International Journals:

 Gaurang Joshi, V.K.Sinha, JigneshkumarPatel "Heterogeneous Traffic Characterization and Flow Behavior Modeling for Metropolitan Arterial in India (pp1684-1699)" Journal of Eastern Asia Society for Transport Studies, Japan, 2010,

- Patel Chetan R., Joshi G J "Capacity and LOS for urban arterial road in Indian mixed traffic condition (pp 527-534)" journal of Procedia-Social and Behavioral Sciences Transport Research Areana-Europe 2012 Elsevier Pub., 2012, 48
- 3. Jiten Shah, G.J.Joshi, Purnima Parida, "Behavioral Characteristics of Pedestrian Flow on Stairway at Railway Station" journal of Procedia-Social and Behavioral Sciences, 2nd CTRG, Elsevier Pub., Dec., 2013, 104
- Cheeti Sai Abhishek, MuktiAdvani, Pradeepkumar P.V., Velmurugan S., Joshi G.J. "An Assessment of the Gap Measurement Phenomenon at Typical Three Armed Intersections on Indian Inter-Urban Roads" Research Journal of Sustainable Science & Engineering (ISSN:2347-6176), Feb., 2014, 2:2
- 5. Shah Jiten, Joshi Gaurang, Parida Purnima, and Arkatkar Shriniwas "Impact of Train Schedule on Pedestrian Movement on Stairway at Suburban Rail Transit Station in Mumbai, India" Journal of Advances in Civil Engineering, Hindawi Pub.(doi.org/10.1155/2015/297807),2015.
- 6. Krishna Saw, B. K. Katti , G. Joshi "Literature Review of Traffic Assignment: Static and Dynamic" Journal of International Journal of Transportation Engineering ISSN 2322-259X, Autumn 2014, Volume 2, Issue 4.
- Chetan R. Patel, G. J. Joshi "Mixed Traffic Speed-Flow Behaviour under Influence of Road Side Friction and Non-Motorised Vehicles: A Comparative Study of Arterial Roads in India"journal of International Science Index, Nov., 2014, 8:11.
- 8. Jiten Shah, Gaurang Joshi, Purnima Parida, and Shriniwas Arkatkar "Analysis Of Commuter Flow Behaviour On Stairways At Metropolitan Transit Station In Mumbai, India" journal of International Journal for Traffic and Transport Engineering, 2015, 5(4), 451-457.
- 9. Saw, Krishna, Katti, Bhimaji K., Joshi Gaurang J "AB Temporal Trip Generation Modeling for Primary Activities: A case Study of Fast Growing Metropolitan City" journal of Indian Journal for Traffic and Transport Engineering, June,2015, Vol. 5 (2), P: 120-133.
- Krishna Saw, B. K. Katti , G. Joshi "Activity Based Spatial and Temporal Trip Generation Computation and Validation: A Quick Analysis Approach" journal of International Journal of Intelligent Transportation and Urban Planning (ITUP), 2015, Vol. 3 No.3.
- 11. Jabeena M, Joshi G. J., Arkatkar S., Ravinder K. "Traffic Characteristics Study Through Processing of Video Image For Expressway in India" Journal of Society of Traffic and Transportation Studies, 2015,6(2), 1-12.
- 12. Chetan Patel , Gaurang Joshi "Equivalency Factor Using Optimization for Indian Mixed Traffic Condition" journal of International Journal for Traffic and Transport Engineering, 2015, Vol.5 (2), 210-224.
- 13. Nipjyoti B., Pallav Kumar, ShriniwasArkatkar, AkhileshMaurya and Gaurang Joshi, (2016) "Traffic Data Analysis using Image Processing Technique on Delhi-Gurgaon Expressway", Current Science, 110(5), 808-822.

- 14. Mathew Sonu, Ashish Dhamaniya, ShriniwasArkatkar and G J Joshi (2016) "Time Occupancy as Measure of PCU at Four Legged Roundabouts", Transportation Letters: the International Journal of Transportation Research, Taylor and Francis (DOI:10.1080/19427867.2016.1154685).
- Jiten Shah, Gaurang Joshi, Purnima Parida, and ShriniwasArkatkar(2016) "Effect of Directional Distribution on Stairway Capacity at Suburban Railway Station in India", Transportation Letters: the International Journal of Transportation Research. Taylor and Francis (DOI:10.1080/19427867.2016.1166689).
- 16. S. Jiten, J. Gaurang, P. Purnima & S. Arkatkar "Effect of Stairway Width on Pedestrian Flow Characteristics at Railway Stations (DOI:10.1179/1942787515Y.0000000012) Transportation Letters". Journal of Transportation Research, USA, 2016, Vol. 8(2) P-98-112
- Jiten Shah, Gaurang Joshi, Purnima Parida, and ShriniwasArkatkar. (2016) "Determination of pedestrian level of service for undivided stairways at suburban rail station in developing countries" Transportation Research Record (TRR), Transportation Research Board, (DOI:10.3141/2581-15)
- Mathew Sonu, Ashish Dhamaniya, Shriniwas Arkatkar and G J Joshi "Conceptual approach of estimating PCU at roundabouts" Transportation Letters: the International Journal of Transportation Research. Taylor and Francis(Under Review).
- 19. ChatraliShirke , G. J. Joshi , V. Kandalac , S. S. Arkatkar "Transit oriented development and its impact on level of service of roads & Metro: A case study of Mumbai metro line 1" journal of 14th World Conference on Transport Research Transportation Research Procedia (TRPRO), July, 2016,Vol.25,3035-3054.
- 20. Jiten Shah, Gaurang Joshi, Purnima Parida and ShriniwasArkatkar(2017) "Comparative Study of Macroscopic Pedestrian Flow Characteristics on Stairways at Rail Transit Stations", Transportation in Developing Economies (TiDE) Journal of the Transportation Research Group of India. Springer Vol:3:1(DOI:10.1007/s40890-016-0030-9)
- Nipa A. Desai, G. J. Joshi "Database Development Approach and Survey Design for Travel Mode Shift Behavior Study with Respect to Mass Transit in a Metropolitan Context" Journal of Transportation in Developing Economies (TiDE) (Springer Pub.), Sept,2016, Vol.2(2) 1-16(DOI:10.1007/s40890-016-0026-5)
- 22. Jiten Shah, Gaurang Joshi, Purnima Parida and ShriniwasArkatkar "Estimation of free speed of pedestrian flow on stairways at busy suburb rail transit station in India" journal of Current Science, Under publication
- 23. Krishna Saw, B. K. Katti , G. Joshi "Impact of Socio-Economic Variables and Travel Environment on Perception of Travel Time: A case Study of Surat,

India" journal of International Journal For Traffic And Transport Engineering, Feb., 2017, 6(4):444-452, 2016

- NipJyoti B., Pallav Kumar, Ajinkya Mane, Shriniwas Arkatkar, Ashish Bhaskar and Gaurang Joshi (2017)"Comparative evaluation of density estimation methods on different uninterrupted roadway facilities: Few case studied in India" Transportation in Developing Economies, SpringerPub.Vol. 3:3 (DOI:10.1007/s40890-016-0031-8)
- 25. ChaitraliShirke, Nikhil Sumanth, Shriniwas Arkatkar, Ashish Bhaskar& Gaurang Joshi "Modeling Expressway lane Utilisation and Lane Choice Behaviour: A Case Study on Delhi-Gurgaon Expressway" Journal of Transportation Letters, I.J. of Transportation Research, USA, 21,June,2017.(DOI: 10.1080/19427867.2017.1336859)
- 26. R ZOPE, S ARKATKAR, G JOSHI "Benchmarking for Sustainable Urban Transport Systems: A Comparative Study in Indian Metro Cities" Journal of the Eastern Asia Society for Transportation Studies 2017
- 27. N RAJU, P KUMAR, C REDDY, S ARKATKAR, G Joshi"Examining Smoothening Techniques for Developing Vehicular Trajectory Data under Heterogeneous Conditions" Journal of the Eastern Asia Society for Transportation Studies 2017
- 28. P Kumar, N RAJU, S Arkatkar, G JoshiNovel Methodology To "Estimate Homogeneous Equivalent For Heterogeneous Traffic Flow On Multilane Urban Roads"Journal of the Eastern Asia Society for Transportation Studies 2017
- 29. N RAJU, A Mishra, A Chepuri, S ARKATKAR, G Joshi"A Simulation Approach for Examining Designed Truck Terminal Operations for Forecasted Demand at Busy Sea Port"Journal of the Eastern Asia Society for Transportation Studies 2017
- 30. A CHAUDHARI, J SHAH, S ARKATKAR, G JOSHI, M PARIDA"Effect of Approaching Vehicle Type on Pedestrian Flow Characteristics on Crosswalks at Mid-block Section in India"Journal of the Eastern Asia Society for Transportation Studies 2017
- 31. Akhilesh CHEPURI, Manjunath BORAKANAVAR, Rushikesh AMRUTSAMANVAR, Shriniwas ARKATKAR, Guarang JOSHI "Examining Travel Time Reliability under Mixed Traffic Conditions: A Case Study of Urban Arterial Roads in Indian cities" Asian Transport Studies
- AkhileshChepuri, AmolWagh, Shriniwas S. Arkatkar, Gaurang Joshi. "Study of Travel Time Variability Using Two-Wheeler Probed Data – An Indian Experience". Proceedings of the Institution of Civil Engineers journal-Transport 0 0:0, 1-17, (DOI: 10.1680/jtran.16.00101).
- 33. Shah Jiten, Joshi Gaurang, Arkatkar Shriniwas and ParidaPurnima (2017) "Estimation of free speed of pedestrians flow on stairways at busy suburb rail transit station in India" Current Science, Vol.113,2017.

- 34. Pallav Kumar, Krinshnanunni, Shriniwas Arkatkar, Gaurang Joshi (2016) "Examining Microscopic and Macroscopic Traffic Flow Parameters at Diverging Section on Multi-Lane Urban Roads in India" European Transport\TrasportiEuropei,
- 35. AkhileshChepuri, Sanskruti Joshi, Shriniwas S. Arkatkar, Gaurang Joshi. "Travel Time Reliability Analysis on Selected Bus Routes in India: A Case Study in Mysore City ". Journal of Transportation Letters, I.J. of Transportation Research, USA, Taylor and Francis
- 36. AkhileshChepuri, Jairam R, Shriniwas Arkatkar, Gaurang Joshi and Srinivas S. Pulugurtha. "Examining Travel Time Reliability-Based Performance Indicators for Bus Routes Using GPS-Based Bus Trajectory Data in India", ASCEJournal of Transportation Engineering, Part A: Systems, Vol. 144, No. 5, May 2018.
- Krishna Saw, Aathira K. Das, Bhimaji K. Katti, Gaurang J. Joshi. "Travel Time Estimation Modelling under Heterogeneous Traffic: A Case Study of Urban Traffic Corridor in Surat, India", PeriodicaPolitechnicaTransportation Engineering.
- Boski P. Chauhan, G.J. Joshi, Purnima Parida." Driving cycle analysis to identify intersection influence zone for urban intersections under heterogeneous traffic condition", I.J. Sustainable Cities and Society, Vol.41, August 2018, Page 180-185.
- 39. N Raju, P Kumar, A Jain, SS Arkatkar, G Joshi. "Application of Trajectory Data for Investigating Vehicle Behavior in Mixed Traffic Environment", Transportation Research Record: Journal of the TRB, 2018.
- 40. P Kumar, S Arkatkar, G Joshi, "New Approach for Estimating Passenger Car Units on Multilane Urban Roads with Heterogeneous Traffic Conditions", Journal of Transportation Engineering, Part A: Systems (ASCE), 2018.
- 41. A Chepuri, N Raju, MS Bains, S Arkatkar, G Joshi. "Examining Performance of an Urban Corridor Using Microscopic Traffic Simulation Model under Mixed Traffic Environment in India", European Transport\TrasportiEuropei", Scopus, Vol. 24(69), 2018.
- 42. P Kumar, S Arkatkar, G Joshi, "Calibration of traffic stream models on highspeed urban roads with heterogeneous traffic conditions", Institution of Civil Engineers-TransportUk, 2018.
- 43. P Kumar, N Raju, A Mishra, SS Arkatkar, G Joshi, "Validating Area Occupancy– Based Passenger Car Units and Homogeneous Equivalent Concept under Mixed Traffic Conditions in India', Journal of Transportation Engineering, Part A: Systems (ASCE) 144 (10), 04018064,2018.
- 44. P Kumar, MS Bains, N Bharadwaj, S Arkatkar, G Joshi, "Impact assessment of driver speed limit compliance behavior on macroscopic traffic characteristics under heterogeneous traffic environment', Transportation Letters (in press),2018.
- 45. N Bharadwaj, S Mathew, A Pani, S Arkatkar, G Joshi, K Ravinder, "Effect of traffic composition and emergency lane on capacity: a case study of intercity

expressway in India", Transportation Letters, Vol.10 (6), Page no.316-322, 2018.

- 46. C Avinash, S Jiten, S Arkatkar, J Gaurang, P Manoranjan, "Investigating effect of surrounding factors on human behavior at un-controlled mid-block crosswalks in Indian cities", Safety Science, 2019.
- 47. C Avinash, S Jiten, S Arkatkar, J Gaurang, P Manoranjan, "Evaluation of Pedestrian Safety margin at mid-block crosswalks in India", Safety Science, 2019.
- 48. R Zope, N Vasudevan, SS Arkatkar, G Joshi, "Benchmarking: A tool for evaluation and monitoring sustainability of urban transport system in metropolitan cities of India", Sustainable cities and society Vol. 45, Page no. 48-58, 2019.
- 49. C Avinash, S Arkatkar, J Gaurang, P Manoranjan, "Exploring Stage-Wise Pedestrian Crossing Behavioral Patterns at Vulnerable Urban Mid-Blocks: A Perspective Under Heterogeneous Traffic Conditions", Journal of Transportation Safety & Security, 2019.
- 50. N Bharadwaj, P Kumar, S Arkatkar, G Joshi, "Deriving capacity and level of service thresholds for intercity expressways in India', Transportation Letters (in press), 2019.
- 51. N Raju, P Kumar, S Arkatkar, G Joshi, "Determining risk-based safety thresholds through naturalistic driving patterns using trajectory data on intercity expressways", Safety Science, 2019.
- 52. S Mathew, A Dhamaniya, S Arkatkar, G Joshi, "Conceptual Approach of Estimating PCU at Roundabouts", Transportation Letters (in press), 2019.
- 53. Srinivasula Reddy, A Chepuri, S Arkatkar, G Joshi, "Developing proximal safety indicators for assessment of un-signalized intersection A case study in Surat city", Transportation Letters (in press), 2019.
- 54. P Kumar, S Arkatkar, G Joshi, "Examining traffic flow parameters at merging section on high speed urban roads", Current science (in press), 2019.
- 55. BP Chauhan, GJ Joshi, P Parida "Car following model for urban signalised intersection to estimate speed based vehicle exhaust emissions" Urban Climate 29, 2019.
- 56. SM Dave, GJ Joshi, K Ravinder, N Gore "Data monitoring for the assessment of on-street parking demand in CBD areas of developing countries" Transportation Research Part A: Policy and Practice 126, 152-171,2019.
- 57. D Parikh, GJ Joshi, DA Patel "Development of Prediction Models for Claim Cause Analyses in Highway Projects" Journal of Legal Affairs and Dispute Resolution in Engineering and Construction ASCE 2019.
- 58. N Raju, S Arkatkar, G Joshi. "Evaluating Performance of Selected Vehicle Following Models Using Trajectory Data under Mixed Traffic Conditions". Journal of Intelligent Transportation Systems: Technology, Planning and Operations, 1-18.

- 59. A Chaudhari, N Gore, S Arkatkar, G Joshi, S Pulugurtha. "Pedestrian crossing warrants for urban midblock crossings under mixed traffic environment. Journal of Transportation Engineering, Part A: Systems (ASCE)(In press).
- 60. N Gore, S Arkatkar, G Joshi, ABhaskar. Exploring credentials of Wi-Fi sensors as a complementary transport data: An Indian experience. IET-Intelligent transportation systems (In press).
- 61. N Raju, S Arkatkar, G Joshi. "Replicating Driving Behavior Under Heterogeneous Non-Lane-Based Traffic Environment: A Supervised Machine Learning Based Methodology". Journal of EASTS (In press).
- 62. N Vasudevan, N Gore, R Zope, S Arkatkar, G Joshi. "Re-orientation of Para-Transit When Confronted by Mass Transit System: An approach through user's and operator's perception". Journal of EASTS (In press).
- 63. V Singh, N Gore, AChepuri, S Arkatkar, G Joshi, S Pulugurtha. "Examining Travel Time Variability and Reliability on an Urban Arterial Road Using Wi-Fi Detections- A Case Study". Journal of EASTS (In press).
- 64. A Chepuri, C Kumar, P Bhanegaonkar, S Arkatkar, G Joshi. "Travel Time Reliability Analysis on Selected Bus Route of Mysore using GPS Data". Transportation in Developing Economies, 5(2), 13.
- 65. S Dave, G Joshi, K Ravinder N Gore. "Formulation of performance based onstreet parking policies for CBD areas of developing economies". Journal of Urban Planning and Development (ASCE). (In press).
- 66. BP Chauhan, GJ Joshi, P Parida "Car following model for urban signalised intersection to estimate speed based vehicle exhaust emissions" Urban Climate 29, 2019.
- 67. D Parikh, GJ Joshi, DA Patel "Development of Prediction Models for Claim Cause Analyses in Highway Projects" Journal of Legal Affairs and Dispute Resolution in Engineering and Construction ASCE 2019.
- 68. S Dave, N Dawada, GJ Joshi "Modelling on-street parking scenario and response to paid parking policy using Statistical Techniques for CBD area of Vadodara city". Transportation Research, 169-183, Springer, Singapore, 2020.
- 69. R Pitroda, D Chauham, N Gore, S Dave , GJ Joshi "On-Street Parking Demand Assessment in CBD Area using Different Data Frequency". Transportation Research, 137-150. Springer, Singapore, 2020
- 70. R Kulakarni, AChepuri, S Arkatkar, GJ Joshi "Estimation of Saturation Flow at Signalized Intersections Under Heterogeneous Traffic Condition". Transportation Research, 591-605, Springer, Singapore, 2020.
- 71. P Kumar, J Chakraborty, S Arkatkar, GJ Joshi "Effect of Shoulder Width on traffic flow parameters on two-lane undivided roads". Transportation Research, 579-589, Springer, Singapore, 2020.
- 72. D Chauhan, R Pitroda, N Gore, S Dave, GJ Joshi "Comparative Study of Legal and Illegal On-street Parking Behaviour in CBD Area- A case study of Surat city". Transportation Research, 125-136, Springer, Singapore, 2020.

- 73. K Saw, BK Katti, GJ Joshi "Urban Corridor Travel Time Estimation Modelling using Fuzzy Logic Technique: A Case Study of Indian Metropolitan City"Transportation Research, 475-490, Springer, Singapore, 2020.
- 74. VS Vinayaraj A Chaudhari, S Arkatkar, GJ Joshi, M Parida "Comparative Study of Pedestrian Critical Gap Estimation Methods at Un-Signalized Midblock Crosswalks". Transportation Research, 151-167, Springer, Singapore, 2020.
- 75. BP Chauhan GJ Joshi P Purnima "Candidate Driving Cycle Construction for Emission Estimation" Transportation Research, 85-97, Springer, Singapore, 2020.
- 76. N Vasudevan, N Gore, R Zope, S Arkatkar, GJ Joshi "Determining Mode Shift elasticity based on household income and travel cost". Research in Transportation Economics, 100771.
- 77. K Saw, GJ Joshi, BK Katti "Travel Time variability based on level of service: A case study of mixed traffic urban arterial corridors" World Review of Intermodal Transportation Research 8(3), 195-208.
- 78. N Raju, S Arkatkar, G Joshi "Effect of construction work zone on traffic stream parameters using vehicular trajectory data under mixed traffic conditions". Journal of Transportation Engineering, Part A: Systems (ASCE)(In press).

International Conference (After 2010)

- DevendraMokal, G.J.Joshi"Mode Shift Behavior Study of Low Income Group Travelers With Respect To Patna Bus Rapid Transit System" 9th International Workshop on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2010), Transportation Systems Engineering, Department of Civil Engg, IIT Bombay, 15-17 Dec., 2010
- Joshi G.J., Katti B.K. "Mixed Traffic Headway Distribution Modeling on a Multilane Metropolitan Arterial in India" 9th International Workshop on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2010), Transportation Systems Engineering, Department of Civil Engg, IIT Bombay, 15-17 Dec., 2010
- Joshi G.J. "Land use Change Estimation for a Metropolitan City Through Integrated Household Growth Travel Demand Modeling in Fuzzy Environment (Invited Presentation)" 9th International Workshop on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2010), Transportation Systems Engineering, Department of Civil Engg, IIT Bombay, 15-17 Dec., 2010.
- Gaurang Joshi, V.K.Sinha, Jigneshkumar Patel "Heterogeneous Traffic Characterisation and Flow Behaviour Modeling for Metropolitan Arterial in India" 9th EASTS conference on "Green Growth & Transport", Jeju, Korea, Eastern Asia Society for Transport Studies, 19-23 June, 2011.
- 5. Rinkal Patel, Chetan Patel, G J Joshi "Estimation of Macroscopic Stream Parameters for Performance Evaluation of Undivided Collector Street in India"

International Conference on Innovative Technologies in Engineering & Sciences in association with GTU, VVP ITS Conference-2012, 22-23 Dec., 2012

- RushikeshAmrut, Ravisekhar Ch., Gaurang Joshi "Relation between Travel Time Reliability and Space Mean Speed for Mixed Traffic Conditions - A Case Study of Urban Road Corridor in India" 10th EASTS conference on "Towards a harmonized transport society", Taiwan, 9-12 September 2013.
- 7. Jiten Shah, Gaurang joshi, Purnima Parida, "Walking Speed of Pedestrians on Stairways at Intercity Railway Station in India" 10th EASTS Conference on "Towards a harmonized transport society", Taiwan, 9-12 September 2013.
- 8. Jabeena M, Joshi G. J., Arkatkar S., Ravinder K. "Traffic Characteristics Study Through Processing of Video Image For Expressway in India" 9th Asia Pacific Conference on Transportation and the Environment, Colombo during 6-8 August, 2014.
- Shah Jiten, Joshi Gaurang, Arkatkar Shriniwas and Parida Purnima "Analysis of Pedestrian Flow Characteristics on Stairways at Busy Suburban Railway Station in India" International Conference on Traffic and Transport Engineering Belgrade, Serbia, 27-28 November, 2014.
- RushikeshAmrutSamanvar, Ravi SekharChalumuri, Gaurang Joshi and Shriniwas Arkatkar "Relation between travel time reliability and space mean speed for mixed traffic conditions - a case study of urban road corridors in India" 11th TPMDC conference on Transportation Planning and Implementation Methodologies for Developing Countries, IIT Bombay,10-12 December, 2014.
- 11. Ajinkya Mane, Pallav Kumar, Shriniwas Arkatkar, Ashish Bhaskar and Gaurang Joshi, "Comparative evaluation of the density estimation models on Indian Expressway" 11th TPMDC conference on Transportation Planning and Implementation Methodologies for Developing Countries, IIT Bombay, 10-12 December, 2014.
- Chetan R. Patel, G. J. Joshi "Mixed Traffic Speed–Flow Behavior under Influence of Road Side Friction and Non-Motorized Vehicles: A Comparative Study of Arterial Roads in India Vol 8 No 11 pp 480-487", 16th International Conference on Traffic and Transportation Engineering (ICTTE), Venice, Italy, 13- 14 Nov., 2014.
- 13. Jiten Shah, G J Joshi, P. Parida and S. Arkatkar, "Empirical Study of Bidirectional Movement on Stairway at a Suburban Railway Station in India" Accepted for presentation in the 94rd Annual Transportation Research Board (TRB) meeting at Washington DC, USA, 11-15January, 2015.
- 14. AkhileshChepuri, Rakesh Kulakarni, Manraj Singh Bains, Shriniwas Arkatkar, Gaurang Joshi, "Evaluation of BRTS Corridor in India Using Microscopic Simulation: A Case Study in Surat City" 11th International Conference of Eastern Asia Society of Transportation Studies at Cebu, Philippines, 11-14 Sept., 2015.

- 15. Jabeena M, Joshi G. J., Arkatkar, S., Ravinder, K. "Study of flow Characteristics and traffic stream modelling on Indian Expressway - A Case Study Of Mahatma Gandhi Expressway" 11th International Conference of Eastern Asia Society of Transportation Studies at Cebu, Philippines, 11-14 Sept., 2015.
- 16. AkhileshChepuri, Rakesh Kulakarni, Manraj Singh Bains, Shriniwas Arkatkar, Gaurang Joshi "Evaluation of BRTS Corridor in India Using Microscopic Simulation: A Case Study in Surat City" 11th International Conference of Eastern Asia Society for Transportation Studies at Cebu, Philippines, 11-14 Sept., 2015
- "Time Choice Model for Non-Mandatory Activities: A Case Study of Fast Growing Metropolitan City", 20th International Conference of The Hong Kong Society For Transportation Studies, Hong Kong, Accepted for Presentation, 12-14 Dec., 2015
- Nipjyoti B., Pallav Kumar, Ajinkya Mane, Shriniwas Arkatkar, Ashish Bhaskar and Gaurang Joshi, "Comparative evaluation of density estimation methods on different uninterrupted roadway facilities: Few case studied in India", 3rd CTRG at Kolkata, 17-20 December, 2015
- 19. Prasad H, A. Mane, S. Arkatkar, G. Joshi, "Study of Operating speeds on twolane hilly roads in India", 3rd CTRG at Kolkata, 17-19 December, 2015
- 20. A. Wagh, A. Chepuri, S. S. Arkatkar and G J Joshi, "Study of Travel Time Variability using Two-wheeler probed data: A case study of Urban Arterial in Surat." 3rd CTRG at Kolkata, 17-19 December, 2015
- 21. MaulikBagadiya, Shriniwas Arkatkar and Gaurang Joshi, "Disaggregate Mixed Traffic Flow Characteristics and Headway Distribution Study for Multilane Metropolitan Arterials", 3rd CTRG at Kolkata, 17-19 December, 2015
- 22. Jiten Shah, Gaurang Joshi, PurnimaParida, and Shriniwas Arkatkar (2016) "Determination of pedestrian level of service for undivided stairways at suburban rail station in developing countries" Transportation Research Record (TRR), Transportation Research Board, USA, Washington DC, Jan-2016,
- MannilthodiJabeena, Mathew Sonu, Shriniwas Arkatkar, Gaurang Joshi and Kayitha Ravinder, "Effect of Traffic Composition and Emergency Lane on Capacity: A Case Study of Intercity Expressway in India", 14th World Conference on Transport Research, Tongji University, Shanghai, China, 10-15 July, 2016.
- 24. AkhileshChepuri, Sanskruti Joshi, Shriniwas Arkatkar, Gaurang Joshi and Ashish Bhaskar, "Travel time reliability analysis of public transport system in India: A case study of bus routes in Mysore city", 14th World Conference on Transport Research, Tongji University, Shanghai, China, 10-15 July, 2016
- 25. Vasudevan N., Shriniwas S. Arkatkar and Gaurang J. Joshi, "Travel demand elasticity analysis for non-voluntary purpose trips by heterogeneous travellers in Indian metropolitan city, Surat" 14th World Conference on Transport Research, Tongji University, Shanghai, China, 10-15 July, 2016.

- 26. Shah Jiten, Joshi Gaurang, Arkatkar Shriniwas and Parida Purnima, "Estimation of free speed of pedestrians flow on stairways at busy suburb rail transit station in India", 14th World Conference on Transport Research, Tongji University, Shanghai, China, 10-15 July, 2016.
- ChaitraliShirke, G. J. Joshi, V. Kandala and S. S. Arkatkar, "Transit Oriented Development and Its Effect on Mode Choice Behaviour of People: A Case Study of Mumbai Metro Line – I", 14th World Conference on Transport Research, Tongji University, Shanghai, China, 10-15 July, 2016.
- 28. Srinivas Reddy, AkhileshChepuri, Shriniwas Arkatkar and Gaurang J. Joshi, "Developing proximal safety indicators for assessment of un-signalized intersection - a case study in Surat", 14th World Conference on Transport Research, Tongji University, Shanghai, China, 10-15 July, 2016.
- Mathew Sonu, Ashish Dhamaniya, Shriniwas Arkatkar and G J Joshi "Conceptual Approach of Estimating PCU at Roundabouts", 14th World Conference on Transport Research, Tongji University, Shanghai, China, 10-15 July, 2016
- 30. Pallav Kumar, Manraj S. Bains, NipjyotiBharadwaj, Shriniwas S. Arkatkar, GaurangJoshi "Effect of driver compliance with varying traffic composition on roadway capacity of Expressways in India", 14th World Conference on Transport Research, Shanghai, China, July, 2016. Accepted for presentation
- 31. "Mixed traffic characteristic study for capacity assessment on urban arterial midblock", 14th World Conference on Transport Research, Shanghai, China, July, 2016. Accepted for presentation
- 32. Chaudhari A., Jiten Shah, Gaurang Joshi, and ShriniwasArkatkar (2016) "Study of Pedestrian flow characteristics on crosswalk at mid-blocks in India" in proceedings of 12th Conference of Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), Mumbai, India.
- 33. Narayana Raju, AkhileshChepuri, Vinayaraj VS, Shriniwas S. Arkatkar, Gaurang Joshi (2016) "A Simulation Study for Improving the Traffic Flow Efficiency at an Oversaturated Intersection Coupled with BRT" in proceedings of 12th Conference of Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), Mumbai, India.
- 34. Vinayaraj V S, Chaudhari A, Shriniwas Arkatkar and Gaurang Joshi (2016) "Comparitive Study of Pedestrian Flow Characteristics at Selected Midblock Crosswalks in India" in proceedings of 12th Conference of Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), Mumbai, India.
- 35. Pallav Kumar, Joyjeet Chakraborty, Ayush Mishra, Shriniwas Arkatkar, Gaurang Joshi, Ashish Bhaskar (2016) "Comparative study of PCU estimation methods on Multilane Urban roads in India" in proceedings of 12th Conference of Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), Mumbai, India.

- 36. Chetan Kumar, AkhileshChepuri, Shriniwas Arkatkar, Gaurang Joshi(2016) "Travel Time Reliability Analysis on selected bus routes of Mysore public transportation system using GPS data" in proceedings of 12th Conference of Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), Mumbai, India.
- 37. NipjyotiBharadwaj, Shriniwas S. Arkatkar, Ashish Bhaskar, Gaurang Joshi (2016) "Expressing Traffic flow on Intercity Expressways in India: lane vs. directional traffic flow behaviour" in proceedings of 12th Conference of Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), Mumbai, India.
- 38. "Concept of flow equivalency factor under heterogeneous traffic condition for urban arterial midblock", 96th Annual Meeting of Annual Transportation Research Board, USA, Washington DC, Jan., 2017.
- 39. Pallav Kumar, Shriniwas S. Arkatkar, Gaurang Joshi, Ashish Dhamaniya"New Methodology for Estimating PCU on Multi Lane Urban Roads under Mixed Traffic Scenario Based on Area Occupancy", 96th Annual Transportation Research Board (TRB) meeting at Washington DC, USA, 8-12 January, 2017
- 40. Jiten H. Shah, Gaurang J. Joshi, Shriniwas S. Arkatkar, ManoranjanParida" Impactof Human Factors and Functional Characteristics of Location on Walking Speed at Stairway Facility", 96th Annual Transportation Research Board (TRB) meeting at Washington DC, USA, 8-12 January, 2017.
- 41. Avinash R. Chaudhari, Jiten H. Shah, Shriniwas S. Arkatkar, Gaurang J. Joshi, ManoranjanParida "Examining Effect of Individual Characteristics on Walking Speed at Un-Signalized Mid-Block Crossings" 96th Annual Transportation Research Board (TRB) meeting at Washington DC, USA, 8-12 January, 2017
- 42. Pallav Kumar, Krishnanunni, Shriniwas S. Arkatkar, Gaurang Joshi"Examining Microscopic and Macroscopic Traffic Flow Parameters at Diverging Section onMultilane Urban Roads in India", 96th Annual Transportation Research Board (TRB) meeting at Washington DC, USA, 8-12 January, 2017
- 43. Narayana Raju, Pallav Kumar, AkhileshChepuri, Shriniwas S. Arkatkar, Gaurang Joshi"Calibrationof Vehicle Following Models Using Trajectory 2 Data Under Heterogeneous Traffic Conditions", 96th Annual Transportation Research Board (TRB) meeting at Washington DC, USA, 8-12 January, 2017
- 44. P Kumar, N Raju, SS Arkatkar, GJ Joshi "Micro-Level Analysis on Traffic Flow Parameters at Work-Zone Road Section Using Vehicular Trajectory Data" Transportation Research Board 97th Annual MeetingTransportation Research Board.
- 45. N Raju, P Kumar, A Jain, SS Arkatkar, G Joshi "Application of Trajectory Data for Investigating Vehicle Behavior in Mixed Traffic Environment" Transportation Research Board 97th Annual Meeting Transportation Research Board.

- 46. "Operational Analysis and Schedule Development for Surat BRTS Phase I Stage II Corridor", 20 EURO Working Group on Transportation Meeting (EWGT2017), Budapest. Accepted for presentation
- 47. "Safety evaluation of un-signalized intersection using surrogate safety measure under mixed traffic environment", 20 EURO Working Group on Transportation Meeting (EWGT2017), Budapest. Accepted for presentation.
- Vinayaraj V.S, Vasudevan N, Sanskruti Joshi, Shriniwas Arkatkar and Gaurang Joshi, Operational Analysis and Schedule Development of Surat BRTS Phase I Stage II Corridor, 23rd International Conference of Hong Kong Society for Transportation Studies (HKSTS), Hong Kong, 2018.
- 49. Zope, V. N., S Arkatkar, G. Joshi, "Application of system dynamic model for transport mode behaviour analysis of Urban Transport system: A case-study of Indian metro cities", 15thWorld Conference on Transport Research 2019 at IIT BombayMay 26-31 2019
- 50. A. Chaudari, N Gore ,S. Arkatkar, G. Joshi, M. Parida, "Choice crossing behaviour model for safety margin of pedestrian at mid-blocks in India" 15thWorld Conference on Transport Research 2019 at IIT Bombay, May 26-31 2019
- 51. M. Jain, A. Mane, S. Arkatkar, G. Joshi, "Capacity estimation on two lane hilly roads under heterogeneous traffic condition in India", 15thWorld Conference on Transport Research 2019 at IIT Bombay, May 26-31 2019.
- 52. A. Chepuri, L. Melville, S. Arkatkar, G. Joshi, S. Pulugurtha UNCC, USA, "Assessing the user perception & quality of bus service in Navi Mumbai- Application of SEM technique"15thWorld Conference on Transport Research 2019 at IIT Bombay, May 26-31 2019.
- 53. V.S. Vinayaraj,S. Arkatkar,G. Joshi,M. Parida, "Examining pedestrian critical gap analysis at un-signalised midblock crosswalk sections in India", 15thWorld Conference on Transport Research 2019 at IIT Bombay, May 26-31 2019.
- 54. Raju, Narayana, Arkatkar Shriniwas S, Joshi Gaurang, "Developing methodology for calibrating vehicle-following models on intercity expressways using vehicular trajectories", 15thWorld Conference on Transport Research 2019 at IIT Bombay, May 26-31 2019.
- 55. Chepuri, Akhilesh, Arkatkar, Shriniwas S, Joshi Gaurang, Pulugurtha, Srinivas S, "Assessing satisfaction levels of bus users and monetizing their travel timeTransportation Research Board 98thAnnual Meeting, 2019 Washington DC USA", January 13-17 2019.
- 56. Raju, Narayana, Jain, Aayush, Arkatkar, Shriniwas S, Joshi, Gaurang, "Experimental Design for Measuring Operational Performance of Truck Parking Terminal Using Simulation Technique", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019.
- 57. Raju, Narayana, Arkatkar, Shriniwas S, Joshi, Gaurang, "Experiences of Supervised Machine Learning to Replicate Driving Behavior Under Traffic Environment", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019.

- 58. Chepuri, Akhilesh, Melvill, Learie, Arkatkar, Shriniwas S, Joshi Gaurang, Pulugurtha, Srinivas S, "Examining Perceived Quality of Bus Service Using Structural Equation Modeling Technique", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019.
- 59. Chepuri, Akhilesh,Kenny, Raunak V, Arkatkar, Shriniwas S, Joshi Gaurang, Pulugurtha, Srinivas S, "Assessing Travel Time Reliability of a Bus Rapid Transit Route in Surat City, India", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019.
- 60. Gore, Ninad, Arkatkar, Shriniwas, Joshi, Gaurang, Bhaskar, Ashish, "A Novel Methodology to Derive Vehicle Occupancy Using Wi-Fi Sensors Under Heterogeneous Traffic Conditions", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019.
- 61. Chaudhari, Avinash, Gore, Ninad, Arkatkar, Shriniwas, Joshi, Gaurang, Pulugurtha, Srinivas S, "Developing Pedestrian Warrants for Urban Mid-Block Crossings Under Mixed Traffic Environment", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019.
- 62. Chaudhari, Avinash, Gore, Ninad, Arkatkar, Shriniwas, Joshi, Gaurang, Pulugurtha, Srinivas, "Gap Acceptance Based Safety Evaluation of Urban Midblock Crossings Under Mixed Traffic Environment", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019.
- 63. Chaudhari, Avinash R, Shah, Jiten H, Arkatkar, Shriniwas S, Joshi, Gaurang J,Parida, Manoranjan, "Proactive Approach for Pedestrian Safety Evaluation Using Choice Model for Unprotected Mid-Block Crossings under Mixed Traffic Conditions", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019
- 64. Chepuri, Akhilesh, Kenny, Raunak, Mishra, Dewal, Arkatkar, Shriniwas S, Joshi, Gaurang, "Study on Bus Travel Time Reliability Using GPS-Based Bus Trajectory Data Under Mixed Traffic Conditions", Transportation Research Board 98th Annual Meeting, 2019 Washington DC USA, January 13-17 2019.
- 65. N Raju, S Arkatkar, G Joshi. "Replicating Driving Behavior Under Heterogeneous Non-Lane-Based Traffic Environment: A Supervised Machine Learning Based Methodology". Presented in 13th International Conference of Eastern Asia Society of Transport (EASTS), Sri-Lanka, Colombo.
- 66. N Vasudevan, N Gore, R Zope, S Arkatkar, G Joshi. "Re-orientation of Para-Transit When Confronted by Mass Transit System: An approach through user's and operator's perception". Presented in 13th International Conference of Eastern Asia Society of Transport (EASTS), Sri-Lanka, Colombo.
- 67. V Singh, N Gore, AChepuri, S Arkatkar, G Joshi, S Pulugurtha. "Examining Travel Time Variability and Reliability on an Urban Arterial Road Using Wi-Fi Detections- A Case Study. Presented in 13th International Conference of Eastern Asia Society of Transport (EASTS), Sri-Lanka, Colombo.

- 68. N Vasudevan, N Gore, R Zope, Shriniwas Arkatkar, GJ Joshi "Investigating habit in travel mode preferences for heterogeneous travelers". Presented at 5thConference of Transportation Research Group (TRG), 18th-21st December, 2019, Bhopal, India. (Received award for best paper)
- 69. V Singh, N Gore, S Arkatkar, GJ Joshi, A Bhaskar "Estimating vehicle occupancy using Wi-Fi sensors-A Study on Mahatma Gandhi Expressway". Presented at 5th Conference of Transportation Research Group (TRG), 18th-21st December, 2019, Bhopal, India.
- 70. N Raju, S Arkatkar, GJ Joshi "A Methodological framework for mdoelling mixed traffic with different car following models". Presented at 5th Conference of Transportation Research Group (TRG), 18th-21st December, 2019, Bhopal, India.
- 71. N Raju, S Araktkar, GJ Joshi "Assessment of Supervised Machine Learning Models for modelling mixed traffic driving behaviour". Presented at 5th Conference of Transportation Research Group (TRG), 18th-21st December, 2019, Bhopal, India.
- 72. N Raju, A Jain, S Arkatkar, GJ Joshi "Framework for identifying potential rear end collisions using trajectory data under heterogeneous traffic conditions". Presented at 5th Conference of Transportation Research Group (TRG), 18th-21st December, 2019, Bhopal, India.
- 73. S Sharma, S Arkatkar, GJ Joshi "Designing signal control for closely spaced complex urban intersections: A case study of Surat City". Presented at 5th Conference of Transportation Research Group (TRG), 18th-21st December, 2019, Bhopal, India.
- 74. A Chaudhari, N Gore, S Arkatkar, GJ Joshi, S Pulugurtha "Deriving Pedestrian Risk Index by Vehicle Type and Road Geometry at midblock crosswalks under heterogeneous traffic conditions". Presented at 5th Conference of Transportation Research Group (TRG), 18th-21st December, 2019, Bhopal, India.
- 75. A Chaudhari, N Gore, S Arkatkar, GJ Joshi "Analyzing Pedestrian Dilemma at urban midblock crossings under mixed traffic environment". Presented at 5th Conference of Transportation Research Group (TRG), 18th-21st December, 2019, Bhopal, India.
- 76. Sachin Shah, ChintanAdvani, Ajinkya Mane, Shriniwas Arkatkar, Gaurang Joshi "Modeling Perceived Level of Service of Intercity Expressway". Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary 2020, Washington D.C., USA.
- 77. Ninad A. Gore, Srinivas S. Pulugurtha, Shriniwas Arkatkar, Gaurang Joshi "Congestion Index: A New Performance Measure to Characterize Congestion and Level-of-Service on Freeways", Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary, 2020, Washington D.C., USA.

- 78. Vikram Singh, Ninad Gore, Shriniwas Arkatkar, Gaurang Joshi, Ashish Bhaskar "Validating Travel Time Reliability As a Function of Congestion Using Wi-Fi Sensor Derived Travel Time Data", Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary, 2020, Washington D.C., USA.
- 79. Narayana Raju, Shriniwas Arkatkar, Said M Easa, Gaurang Joshi "Developing Extended Trajectory Database for Heterogeneous Traffic like NGSIM Database".Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary 2020, Washington D.C., USA.
- 80. Narayana Raju, Shriniwas Arkatkar, Gaurang Joshi: "A Machine Learning Approach for Predicting Positions of Vehicles Operating with Weak Lane Discipline using Newly Developed Extended Trajectory Data", Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary 2020, Washington D.C., USA.
- 81. Narayana Raju, Shriniwas Arkatkar, Said M Easa, Gaurang Joshi: "Empirical Approach for Identifying Potential Rear-End Collisions Using Trajectory Data", Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary 2020, Washington D.C., USA.
- 82. Narayana Raju, Aayush Jain, Shriniwas Arkatkar, Gaurang Joshi: "Investigating Performance of a Novel Safety Measure for Assessing Potential Rear End Collisions: An Insight Representing a Scenario in Developing Nation", Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary, 2020, Washington D.C., USA.
- 83. N. Vasudevan, Ninad Gore, RupaliZope, Shriniwas Arkatkar, Gaurang Joshi "Understanding Habit of Travel by Personal Modes in Context of Transit Usage", Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary, 2020, Washington D.C., USA.
- 84. Narayana Raju, Shriniwas Arkatkar, Said M Easa, Gaurang Joshi: "Performance Analysis of Truck Parking Terminal Using Simulation", Accepted for Presentation the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary 2020, Washington D.C., USA.
- 85. Nandan H. Dawda, HardikGajera, Gaurang Joshi, Shriniwas Arkatkar, Sanjay Kumar M Dave: "Efficiency based evaluation of public transport and paratransit systems: Lessons learnt towards a scenario for integrated transportation perspective", Accepted for Presentation at the 99th Annual Meeting Transportation Research Board, 12th-16thJanuary, 2020, Washington D.C., USA.

National Conferences / Seminars (After 2010)

1. Rasik B., Chetan R Patel, Gaurang Joshi, "Characterisation of Bus Transit Operation and Mode Shift Analysis: A Case Study of Surat", 3rd Annual Conference & Exhibition Urban Mobility India (UMI) 2010, Ministry of Urban Development, Government of India, Hotel Grand, New Delhi, 3-5, Dec., 2010.

- BhushanBrahmecha, G J Joshi, "Study on Travellers Characteristics and Reactions for Bus Rapid Transit Systems: Case Studies of Delhi and Pune", 3rd Annual Conference & Exhibition Urban Mobility India (UMI) 2010, Ministry of Urban Development, Government of India, Hotel Grand, New Delhi, 3-5, Dec., 2010.
- Parin Gandhi, G J Joshi, "Transit Oriented Land Use Transport Planning for Surat – Navsari Twin City Metro – regional Corridor", 3rd Annual Conference & Exhibition Urban Mobility India (UMI) 2010, Ministry of Urban Development, Government of India, Hotel Grand, New Delhi, 3-5, Dec., 2010.
- Debashishbasak, G J Joshi, "Sustainable Urban Development Perspective", National Conference: Sustainable Urban & Transportation Planning: Issues & Management Strategies (SUTRIMS 11), Civil Engg. Department, SVNIT, 8-10, July, 2011
- Nipa Desai, Gaurang Joshi, "Developments in Discrete Choice Modelling Techniques for Travel Mode Choice Analysis: An Overview", National Conference: Sustainable Urban & Transportation Planning: Issues & Management Strategies (SUTRIMS 11), Civil Engg. Department, SVNIT, 8-10, July, 2011
- Nipa Desai, Gaurang Joshi, "Urban public Bus Transportation Scenario and Observed Modal Shift in Last Three Decades Using Revealed Preference Data: A Case Study of Vadodara City in Gujarat", National Conference: Sustainable Urban & Transportation Planning: Issues & Management Strategies (SUTRIMS 11), Civil Engg. Department, SVNIT, 8-10, July, 2011
- G.J. Joshi, SakshiSurve, Ajaz Ahmed B. Raj"Regional Rail Passenger Traffic Forecasting Under Bimodal Environment For Southern Gujarat Industrial Corridor(47-51)", National Conference & Workshop: Recent Advances in Traffic Engineering (RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June, 2012
- HemangChaudhari, Gaurang Joshi"Empirical Study on Vehicles Equivalent Factors in Mixed Traffic Environment For Metropolitan Cities in India (61-66)", National Conference & Workshop: Recent Advances in Traffic Engineering (RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June,2012
- Patel Rinkal T., C.R. Patel, G.J. JoshiMix Traffic Characteristics of Urban Collector Road in Indian Context (80-86)", National Conference & Workshop: Recent Advances in Traffic Engineering (RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June, 2012
- Joshi Gaurang, ShahirHasaun, Nashikkar Ravi"Characterization of Mix Traffic Flow Parameters for an Undivided Metropolitan CBD Corridor (87-92)", National Conference & Workshop: Recent Advances in Traffic Engineering

(RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June, 2012

- Vagadia Dinesh, Joshi Gaurang"Critical Review on the Relevance of the Static Passenger Car Unit For Mix Traffic (93-102)", National Conference &Workshop: Recent Advances in Traffic Engineering (RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June, 2012
- Gaurang joshi, Dinesh Vagadiya, SunnydeolG."Estimation of Traffic Diversion Pattern Due to Proposed Cable stayed Bridge in Surat (103-110)", National Conference & Workshop: Recent Advances in Traffic Engineering (RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June, 2012
- Gaurang Joshi, Chetan Patel, Jiten Shah "Effect of Uncontrolled Access and Road side Activity on Multilane Metropolitan Arterial Under Mix Traffic Environment (129-134)", National Conference & Workshop: Recent Advances in Traffic Engineering (RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June, 2012
- MaulikBagadiya, Gaurang Joshi, Chetan Patel "Mixed Traffic Lane Choice and Headway Characteristics on Multilane Urban Arterials (143-149)", National Conference & Workshop: Recent Advances in Traffic Engineering (RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June, 2012
- 15. Maulik Vyas, Gaurang Joshi, Chetan Patel"Empirical Observation based Dynamic Characterisation of Mixed traffic Characteristics on Selected Collector Streets of Metropolitan Cities (159-166)", National Conference & Workshop: Recent Advances in Traffic Engineering (RATE 12), P.G. Section in Transportation Engg& Planning, SVNIT, Surat, 7-9, June, 2012
- 16. Dinesh Vagadiya, G.J.Joshi"A Methodology for Dynamic Characterisation of Mixed Traffic on Arterial Roads in India", Twenty-Eighth National Convention of Civil Engineers and National Seminar on Role of Infrastructure for Sustainable Development (RInforSD 2012), The IE (India), IIT Roorkee, 12-14, October, 2012
- Parin Gandhi, G. J.Joshi"Commuter Preference Based Transit Oriented Land Use Planning For Fast Growing Surat-Navsari Metro Region Corridor", 61st National Town and Country Planning Congress: Indian Cities in Transition, Ahmedabad, Proc. Part II page:517-524, 8–10 Feb., 2013
- 18. Jiten Shah, G.J.Joshi, Purnima Parida "Behavioral Characteristics of Pedestrian Flow on Stairway at Railway Station", 2nd Conference of Transport Research Group of India, Agra, 10-13, Dec., 2013
- 19. Gaurang Joshi, Dinesh Vagadiya"Dynamic Vehicle Equivalent Factors for Mixed Traffic Conditions for Multilane Metropolitan Arterials in India", 74th Annual Session of Indian Roads Congress, Guwahati, 18-21, Jan., 2014
- 20. Gaurang Joshi, AshuKedia, MadhuErrampalli, Sultan Ahmad Azizi "Evaluation Of Public Transport Policy For Surat City: A Comparative Study Through MNL And FRBS", Transportation Young Researchers' Symposium (TYRES 2014), NIT Warangal, 27-29, March, 2014

- 21. AshwinChilappagari, Dr. K Ravinder, Dr. S Velmurugan, Dr. G J Joshi "Estimation of Roadway Capacity of Urban Expressways", Transportation Young Researchers' Symposium (TYRES 2014), NIT Warangal, 27-29, March, 2014
- 22. Jabeena, M, Joshi, G. J., Arkatkar, S., Ravinder, K. "Study On Traffic Characteristics On Expressway - A Case Study Of Mahatma Gandhi Expressway" Colloquium on Transportation Systems Engineering and Management CTR, CED, NIT Calicut, India, 2014.
- 23. AmolWagh, Joshi, G. J., "Study On Travel Time Reliability Indices For An Arterial Road In Surat City" Colloquium on Transportation Systems Engineering and Management CTR, CED, NIT Calicut, India, 2014.
- 24. Vasudevan, N., Arkatkar, S., Joshi G. J., "Influence of Variation In Travel Expenditure For Non-Voluntary Trips By Heterogeneous Travelers In A Transit Deficient Metropolitan City" Colloquium on Transportation Systems Engineering and Management CTR, CED, NIT Calicut, India, 2014.
- 25. Jiten Shah, Joshi G. J., Purnima Parida and S S Arkatkar, "Pedestrian Flow Behavior Analysis for Stairway At Busy Suburban Rail Transit Station In India" Colloquium on Transportation Systems Engineering and Management CTR, CED, NIT Calicut, India, 2014.
- 26. Manish Jain, S S Arkatkar and Joshi G. J., "Effect of road gradient on truck acceleration characteristic using mechanistic approach" Colloquium on Transportation Systems Engineering and Management CTR, CED, NIT Calicut, India, 2014.
- 27. AmolWagh, Shriniwas Arkatkar, Gaurang Joshi, "Relation between Travel Time Reliability and Space Mean Speed under Mixed Traffic Conditions - A Case Study of Urban Arterial in Surat", Colloquium on Transportation Systems Engineering and Management, NIT Calicut, 12-13, May2014.
- ZopeRupali, Arkatkar S., Joshi G. J., "Smart and Sustainable Mobility Solution in Urban Areas: A comparative study and proposed research framework", National Conference of Sustainable and Smart Cities (SSC-15), SVNIT, Surat, P 51-59, 2015
- ShirkeChaitrali, G. J. Joshi, Vijaya Lakshmi Kandala, Shriniwas Arkatkar, Raghu Naik " Overview of smart city concept and its implementation in India" National Conference on Sustainable & Smart Cities -2015 (SSC-15), CED, NIT Surat, India, 2015.
- 30. Chetan R. Patel, G.J.Joshi, "Effect of non-motorized traffic on stream speed of urban arterial road in Indian context", National Conference and Workshop on Recent Advances in Traffic Engineering (RATE 15), SVNIT, Surat, 3-4 July 2015.
- 31. Krishnanunni M., Agnivesh P, Pallav Kumar, Gaurang J. Joshi, Shriniwas S. Arkatkar, "Mixed Traffic Flow Characteristics at Diverging Section on Delhi-Gurgaon Expressway", RATE15 at SVNIT, Surat, 2015.

- 32. Mathew Sonu, Ashish Dhamaniya, Shriniwas Arkatkar, Gaurang Joshi, "Time Occupancy as Measure of PCU for Roundabouts", RATE15 at SVNIT, Surat, 2015.
- 33. ChaitraliShirke, Shriniwas Arkatkar, Gaurang Joshi, "Study of Lane Choice Behavior of Different Vehicle Classes on Delhi-Gurgaon Expressway", RATE15 at SVNIT, Surat, 2015.
- 34. Aathira K Das, Vinayaraj V S, NiveditaKhoker, Sriniwas S. Arkatkar and G.J. Joshi, "Operational analysis of Surat BRTS Phase- I, Stage-II corridor", RACE-16 at SVNIT, Surat, 2016.
- 35. Chaudhary P M, Harsh Shah, Joshi G J and Arkatkar S S (2016), "Rural Road Pavement subgrade & sub base Improvement with the Use of lime, lime & fly ash and Geosynthetics in South Gujarat region", National Conference on Fifteen Years of PMGSY, 6-7 August 2016 at IIT Roorkee.
- 36. Pravin M. Chaudhary, Mahesh Athani, Ashish Dhamania, Gaurang Joshi"Prioritization of maintenance of PMGSY roads using HDM-IV: Case study of Surat district", National Conference on Fifteen Years of PMGSY, IIT Roorkee, 6-7 August 2016.
- 37. Chaudhary P M, Harsh Shah, Joshi G J and Arkatkar S S (2016), "Use Of Lime And Fly-Ash For Sub-Grade And Sub-Base Layers Of Flexible Pavements Of Rural Roads: Few Case Studies Of South Gujarat Region", International Conference on Sustainable Asphalt Pavement for Developing Countries (CONSAP), 11-12th March 2016 at CSIR-CRRI.
- 38. Rakesh Kulakarni, AkhileshChepuri, Shriniwas Arkatkar, Gaurang Joshi, (2016). "Estimation of Saturation Flow at Signalised Intersections under Heterogeneous Traffic Conditions", In Proceedings of 3rd Conference of Transportation Systems Engineering and Management (CTSEM), Bangalore, India, 24th Nov 2016 to 25th Nov 2016.
- 39. Vinayaraj VS, Vasudevan N, Chaudhari A, Shriniwas Arkatkar and Gaurang Joshi (2016), "Modelling of pedestrians Gap acceptance behaviour at midblock Crosswalks sections in Indian Metropolitans Cities", In Proceedings of 3rd Conference of Transportation Systems Engineering and Management (CTSEM), Bangalore, India, 24th Nov 2016 to 25th Nov 2016.
- 40. Vasudevan N., Shriniwas S. Arkatkar, Gaurang Joshi (2016), "Travel Demand Elasticity Analysis for Work Purpose Trips by Heterogeneous Travellers in Indian Metropolitan City, Surat", in Proceedings of 3rd Conference on Transportation Systems Engineering and Management (CTSEM), Bangalore, India, 24th Nov 2016 to 25th Nov 2016.
- 41. Srinivasula Reddy, AkhileshChepuri, Narayana Raju, Shriniwas S. Arkatkar, Gaurang Joshi, (2016), "Safety Evaluation for Un-Signalized Intersections In Heterogeneous Traffic Conditions Using Simulation", in Proceedings of 3rd Conference of Transportation Systems Engineering and Management (CTSEM), Bangalore, India, 24th Nov 2016 to 25th Nov 2016.

- 42. AkhileshChepuri, Jairam R, Shriniwas S. Arkatkar, Gaurang Joshi (2016), "Travel Time Reliability-Based Performance Indicators Assessment for Bus Routes Using GPS-Based Bus Trajectory under Mixed Traffic Conditions", in Proceedings of 3rd Conference of Transportation Systems Engineering and Management (CTSEM), Bangalore, India, 24th Nov 2016 to 25th Nov 2016.
- 43. Pallav Kumar, Shriniwas S. Arkatkar, Gaurang Joshi, "Area Occupancy Based Optimized PCU values for multilane urban roads in India", accepted for presentation in 3rd CTSEM, Bangalore, 24th Nov 2016 to 25th Nov 2016.
- 44. Narayana Raju, Pallav Kumar, Chakradhar Reddy, Shriniwas S. Arkatkar, Gaurang Joshi, "Methodology of Developing Vehicular Trajectories under Heterogeneous Traffic Conditions", accepted for presentation in 3rd CTSEM Conference held in Bangalore from 24th Nov 2016 to 25th Nov 2016.
- 45. Ninad Gore, NishantPawar, Shriniwas Arkatkar, Gaurang Joshi and Ashish Bhaskar, Exploring Credentials of Wi-Fi Based Sensors under Mixed Traffic Conditions, Recent Advances in Traffic Engineering, SVNIT Surat, 2018.
- 46. Narayana Raju, Geetashree Paul, Shriniwas Arkatkar and Gaurang Joshi, A Machine Learning Based Patterning Driving Behavior with Extended Trajectory Data Under Heterogeneous Traffic Conditions, Recent Advances in Traffic Engineering, SVNIT Surat, 2018.
- 47. AvinashChaudhari, Ninad Gore, Shriniwas Arkatkar, Gaurang Joshi and ManoranjanParida, Developing Pedestrian Warrants for Urban Mid-Block Crossings under Mixed Traffic Conditions, Recent Advances in Traffic Engineering, SVNIT Surat, 2018.
- 48. RushikeshAmrutsamanvar, Gaurang Joshi, Shriniwas Arkatkar and ChalumuriRavisekhar, Empirical Travel Time Reliability Assessment of Indian Urban Roads, Recent Advances in Traffic Engineering, SVNIT Surat, 2018.
- 49. Krishna Saw, Bhimaji Katti and Gaurang Joshi, Fuzzy Rule Based Travel Time Estimation Modelling: A Case Study of Surat City Traffic Corridor, Recent Advances in Traffic Engineering, SVNIT Surat, 2018.
- 50. Samir Patel, Bhasker Bhatt, Chetan Patel, Gaurang Joshi and Rajesh Pandya, An Approach Towards Sustainable Transportation: A Case Study Of Public Bike Sharing System Planning Along With BRTS Corridor In Surat City, 6th National Colloquium on Transportation System Engineering and Management, SVNIT Surat, 2019.
- 51. HardikGajera, NandanDawda, Sanjay Dave, Gaurang Joshi, Shriniwas Arkatkar, Evaluating Operational Performance of City Bus Transit Service Using TCQSM Guidelines: A Case Study of Surat City, 6th National Colloquium on Transportation System Engineering and Management, SVNIT Surat, 2019.
- 52. Narayana Raju, Shriniwas Arkatkar, Gaurang Joshi, Procedural Approach for Modelling Mixed Traffic with Calibrated Car Following Models, 6th National Colloquium on Transportation System Engineering and Management, SVNIT Surat, 2019.

- 53. Vikram Singh, Ninad Gore, Shriniwas Arkatkar, Gaurang Joshi, Examining Travel Time Variability using Wifi Detection, 6th National Colloquium on Transportation System Engineering and Management, SVNIT Surat, 2019.
- 54. Vikram Singh, N Gore, S Arkatkar G Joshi "Analyzing Travel time variability using Wi-Fi detections". Presented at 12thUrban Mobility Conference and Expo, 15-17thNovember, 2019, Lucknow, India. (Received Award for best paper presented).
- 55. N Vasudevan, N Gore, S Arkatkar, GJ Joshi "Is Habit of Travel resistive to use public transport? An assessment of acquaintance behaviour of travelers in a transit deficient metropolitan city". Presented at 12thUrban Mobility Conference and Expo, 15-17thNovember 2019, Lucknow, India.
- 56. N Dawada, H Gajera, S Arkatkar, GJ Joshi "Modelling Dwell Time Variation for City bus transport system of Surat City". Presented at 12th Urban Mobility Conference and Expo, 15-17thNovember, 2019, Lucknow, India.

CONFERENCES / WORKSHOPS/ SEMINARS ETC. ATTENDED: 61 TRAINING PROGRAMMES ATTENDED: 12

WORKSHOPS / SEMINARS / CONFERENCES ORGANISED:

- 1. Member, Organizing Committee for National Seminar on Ensuring Faculty Accountability, 28 29, January, 1997 at SVRCET, Surat.
- Organizing Secretary, One Day Workshop on "Man & its Environment Analysis of Energy Fields", 18th April, 1998, organized jointly by Civil Engineering Department, SVRCET & ICEA, Surat.
- 3. Member, Organizing Committee, "Faculty Development Program on Entrepreneurship, E.D. Cell, SVRCET, Surat, 23 28 July, 2001.
- 4. Member, Organizing Committee, for Entrepreneurship Awareness Camp on "How to Start a New Enterprise", E.D.Cell, SVRCET, Surat, 31 January - 2 February 2002.
- 5. Organizing Secretary, National Conference on "Urban Air Pollution : Issues and Management", (UAPIM 03), 11-13 December, 2003, Civil Engineering Department, SVNIT, Surat.
- Organizing Secretary, National Conference on "Urban Housing: Issues and Development Strategies", (UHIDES-04),26 – 27 March, 2004, Civil Engineering Department, SVNIT, Surat.
- Coordinator, National Workshop on Transportation Engineering & Planning: Present & Future Academic Needs, 28 – 29 March, 2007, Civil Engineering Department, SVNIT, Surat.
- 8. Convener, National Conference on "Sustainable Urban Transportation: Issues and Management Strategies", (SUTRIMS07), 28-29,December, 2007, Civil Engineering Department, SVNIT, Surat.

- 9. Workshop on Approach and Methodology for Urban Traffic Behaviour (AMrUT 2010) ,19-20, February, 2010
- 10. Convener, National Conference on "Sustainable Urban & Transportation Planning: Issues and Management Strategies", (SUTRIMS11), 8-10, July, 2011, Civil Engineering Department, SVNIT, Surat.
- 11. Coordinator, Curriculum Revision Workshop
- 12. p for M Tech Transportation engg& Planning programme , 13-14, April,2012, Institute Guest House, SVNIT, Surat.
- 13. Training programme: Highway Design by MX Roads (HDM 12) (Self Finance basis), 26-31, March, 2012.
- 14. National Workshop" Methodology for Indo- Highway Capacity Manual (MIHCAM)", for SINP Indo-HCM, Funded by Planning Commission of India, under joint collaboration with CSIR-CRRI, New Delhi on 18-19, January, 2013.
- 15. National Seminar "Recycling of Bituminous Pavements", CSIR-CRRI, 6-7, January,2013. (Member, Organising Committee) Dr.P.K. Jain ,Co-chairman & Mr. MN Nagabhushana, Organising Secretary.
- 16. SINP-Dev of Indo HCM: One-day workshop on "Macroscopic Pedestrian Flow Modeling", 28-6-2015.
- 17. 2nd National Conference & Workshop " Recent Advances in Traffic Engineering (RATE 2015)", 3-4, July,2015, SVNIT, Surat.
- One Day Seminar on Public Transport in Surat: Status and Challenges, 1st August, 2015, IUTI SVNIT Regional Chapter, SVNIT, Surat.
- 19. Workshop on Smart Transportation Mobility & Walkability, Surat Municipal Corporation, 17 October,2015, Sardar Vallabhbhai Patel Bhavan, SVNIT, Surat
- 20. 4th Conference of Transportation Research Group of India (CTRG-2017) coorganized with IIT Bombay, 17-21 December, 2017, IIT Bombay.
- 21. 3rd National Conference & Workshop" Recent Advances in Traffic Engineering (RATE 2015)", 11-12, August, 2018, SVNIT, Surat.
- 22. 6thColloquium on Transportation Systems Engineering and Management (CTSEM-2019), 13-14 June, 2019, SVNIT, Surat.

TRAINING PROGRAMMES ORGANISED:

- 1. AICTE Short Term Training programme on "Approaches & Practices in Urban Transportation Planning", 5-9 January, 2009
- 2. AICTE Short Term Training programme on "Recent Tends in Urban Transportation Planning", 5-9 October, 2009
- 3. *Self Financed* Training Programme on "Highway Design by MX Road",26-31, March, 2012.
- 4. TEQIP Proficiency Course on "Design & Evaluation of Flexible Pavements", 10-11 May, 2013.
- 5. TEQIP Short Term Training Programme on "Comprehensive Transportation Planning Practices", 13-17 May, 2013.

- IUTI, Ministry of Urban Development, Government of India: 10th Capacity Building Programme on Sustainable Urban Transport, (Funded by World Bank & GEF) 10-13, February, 2014, Mahatma Gandhi State Institute of Public Administration, Chandigarh
- 7. TEQIP Two Weeks Short Term Training Programme on "Recent Advances in Studies of Traffic Engineering (RASTE 2014)", 30, June-11 July, 2014.
- 8. *Self Financed* Training Programme "VISSIM : Traffic Simulation Software", 23-27, March, 2015.
- 9. *Self Financed* Training Programme" MXROAD And AutoCAD Civil 3D Software",6-10 May,2016.
- 10. TEQIP two weeks Short Term Training programme on "Comprehensive Transportation Planning Practices", 16-27 May, 2016.
- 11. AITD Training Programme on "Road Safety Engineering Measures",16-20, April,2018.(Sponsored by MoRTH, Government of India)
- 12. AITD Training Programme on "Road Safety Engineering Measures", 16-20, July, 2018. (Sponsored by MoRTH, Government of India)
- 13. AITD Training Programme on "Road Safety Engineering Measures",24-28, September,2018.(Sponsored by MoRTH, Government of India)
- 14. AITD Training Programme on "Road Safety Audit",22-26, October,2018.(Sponsored by MoRTH, Government of India)
- AIIB Workshop on Road Safety Audit and Engineering Measures. 02-04, August, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 16. AIIB Workshop on Road Safety Audit and Engineering Measures. 30th August-1st September, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- AIIB Workshop on Road Safety Audit and Engineering Measures. 20-22, September, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- AIIB Workshop on Road Safety Audit and Engineering Measures. 27-29, September 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 19. AIIB Workshop on Road Safety Audit and Engineering Measures. 13th-15th, December 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).

PROCEEDINGS PUBLISHED

1. Editor, Proceedings of National Conference on Urban Air Pollution: Issues and Management (UAPIM – 03), 11 – 13 Dec., 2003, Civil Engineering Department, SVNIT, Surat.

- Editor, Proceedings of National Symposium on Urban Housing: Issues and Development Strategies (UHIDES – 04), 26 – 27 March, 2004, Civil Engineering Department, SVNIT, Surat.
- 3. Editor, Proceedings of National Conference on Sustainable Urban Transportation: Issues and Management Strategies", (SUTRIMS07), 28-29 December, 2007, Civil Engineering Department, SVNIT, Surat.
- 4. Editor, Proceedings of National Conference on Sustainable Urban & Transportation Planning: Issues and Management Strategies", (SUTRIMS11), 8-10, July, 2011, Civil Engineering Department, SVNIT, Surat.
- 5. Editor, Proceedings of National Conference & Workshop on Recent Advances in Traffic Engineering (RATE 12), 7-9 June,2012. ISBN: 978-93-82062-33-2, Excel India Publishers, New Delhi.
- 6. Editor, Abstract Proceedings of National Conference & Workshop on Recent Advances in Traffic Engineering (RATE 15), 3-4 July,2015. **ISBN: 978-93-84869-65-6, Excel India Publishers, New Delhi.**

BOOKS / RESEARCH MONOGRAPH

- Urban Growth & Travel Demand Forecasting by Fuzzy- Neuro Simulation, Lap Lambart Publishing House, Germany, February, 2013 ISBN:978-3-8465-3840-1
- Transportation Planning: Principles, Practices and Policies, Prentice Hall of India, New Delhi, November 2014 (1st edition), July 2017 (2nd edition).
- 3. Lecture Notes in Civil Engineering, Transportation Research, Proceedings of CTRG 2017, Springer.

REVISION OF IRC CODES

- IRC:98-2011, Guidelines On Accommodation Of Utility Services On Roads In Urban Areas
- 2. IRC:103-2012, Guidelines for Pedestrian Facilities
- 3. IRC:SP:50-2013, Guidelines on Urban Drainage
- 4. IRC:SP:12-2015, Guidelines for Parking facilities in Urban Areas.

EXPERT LECTURES DELIVERED

1. "Augmentation of Water Resources" at Workshop on Watershed Management, NSS Unit, SVRCET, Surat, 22-23rdMarch, 1996.

- "Quality Management & quality Assurance Model for Technical Education", one day workshop on Total Quality Management and ISO – 9000 in Technical Education, ISTE, SVRCET, Surat Chapter, 30th September, 1996.
- 3. "IPR in Technical Education" at Faculty Development program on Entrepreneurship, E.D. Cell, SVRCET, Surat, 23rd to 28th July 2001.
- "Fuzzy Composite Programming: Basics and an Application for Urban Environmental Planning", Short Term Training Workshop on Fuzzy Set Theory and Fuzzy Logic Application in Civil and Environmental Engineering, Department of Civil Engineering, SVNIT, Surat, 8 – 13 January, 2007.
- 5. "Transportation Planning: ANN Applications", TEQIP Short Term Training Programme, L.D. College of Engineering, Ahmedabad, 28 30 May, 2007.
- "Artificial Neural Network: A Tool for Modeling in Transportation Planning & Traffic Engineering", TEQIP Short Term Training Programme, L.D. College of Engineering, Ahmedabad, 8 – 12 September, 2008.
- 7. "Mixed Traffic Characterisation and Flow Modeling", QIP/CEP Short Term Course on "Innovations in Traffic Flow Modeling" 05-09 July 2010, Indian Institute of Technology, Bombay, 6-7-2010.
- 8. "Urban Transportation in India: Issues and Challenges", Nirman2010 Symposium, Organised by Gujarat Institute of Civil Engineers and Architects (GCEA) at Ahmedabad, 19-9-2010
- "Land use Change Estimation for a Metropolitan City Through Integrated Household Growth Travel Demand Modeling in Fuzzy Environment", 9thInternational Workshop on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2010), 15-12-2011.
- "Traffic Characteristics and Flow behavior on Indian Urban Roads", National Workshop on Indo-HCM, CSIR-Central Road Research Institute, New Delhi,24-25, November,2011.
- 11. "Urban Transportation: Demand management & challenges", STTP on Recent Tends in Urban Transportation, SVIT, Vasad, 22-November, 2011.
- "Non-motorised Transport: Status-Issues-Way Forward" Workshop on Issues & Strategies for Non Motorised Transport Modes, CSIR-CRRI, New Delhi,23-1-2012

- 13. "Urban Transportation Planning: Issues & Challenges", STTP on Recent Tends in Transportation Engineering, LDCE, Ahmadabad, organized by GTU & LDCE during 30-4-12 to 5-5-12.(4-5-2012)
- 14. " Urban Travel Demand Forecasting", Civil Engineering Department, Shree Swami AtmanandSarswati Institute of Technology, Surat (13-9-2012)
- "Capacity Estimation for Urban arterial, Sub-arterial and collector Roads", National Workshop on methodology for Indian Highway Capacity manual (MIHCAM), SVNIT, Surat, 18-19 January, 2013.
- 16. "Career Opportunities in Transportation Engineering", Civil Engineering Department, Nirma University, Ahmedabad, 21-2-2013.
- 17. "Estimation Of Urban Growth Potential By Fuzzy Composite Procedure", STTP on Mathematical statistics for Researchers, Engineers & Scientists, Applied Mathematics & Humanities Department, SVNIT, Surat (5-3-2013)
- "Estimation of Urban Growth through Fuzzy Composite Procedure", STTP (ISTE-SRM University) on Application of Mathematics in Real World Problems, 21-3-2013.
- "Travel Demand Assessment", Training Programme for City Officials (27-31, May, 2013), Under Sustainable Urban Transport Project (UNDP-GEF Funded), IUTI, MoUD, Govt. of India, Himachal Pradesh Institute of Public Administration (HIPA), Shimla, 28-5-2013.
- 20. "Linear Programming Application in Urban Planning & Transportation Planning", STTP on Optimization Techniques for Scientists & Engineers, Department of Applied mathematics, SVNIT, Surat, 21-6-2013
- 21. "Fuzzy Logic: Philosophy & Basic Ideas", TEQIP II STTP on CFD for Scientists & Engineers, AMHD, SVNIT (09-07-2013)
- 22. "Urban Transport System Planning: Issues-Challenges-Methodologies", Civil Engineering Department, SASIT, Surat (2-9-2013).
- 23. "Demand Assessment", Sixth Capacity Building Programme on Sustainable Urban Transport, Institute of Urban Transport India, MoUD, Government of India, YashwantraoChawan Academy of Development Administration (YASHDA), Pune, (23-10-2013).

- 24. "Fuzzy Logic Applications in Urban Transport System Planning", STTP on Mathematical statistics for Researchers, Engineers & Scientists, Applied Mathematics & Humanities Department, SVNIT, Surat (5-9-2013)
- 25. "Lime-Soil stabilization: Recent Experiences in Gujarat", Workshop on Non-Conventional Materials & Technologies, National Rural Roads Development Agency, Central Road Research Institute, New Delhi (7-12-2013)
- "Demand Assessment Planning", Eighth Capacity Building Programme on Sustainable Urban Transport, Institute of Urban Transport India, MoUD, Government of India, Indian Institute of Entrepreneurship, Guwahati (29-01-2014)
- 27. "Travel Demand Assessment", Tenth Capacity Building Programme on Sustainable Urban Transport, Institute of Urban Transport India, MoUD, Government of India, Mahatma Gandhi State Institute of Public Administration, Chandigarh (10-02-2014)
- 28. "Urban Transit: Status & Policy", National Conference, NCEVT, Parul Institute of Engineering & Technology, Vadodara (04-4-2014)
- 29. "Traffic Forecasting Fundamentals", One week TEQIP sponsored FDP on Recent Advances in Traffic Engineering & transport Planning, Malnad College of Engineering, Hassan, Bangalore (9-10-2014)
- 30. "Four Step Traditional Urban Transportation Planning Process", One week TEQIP sponsored FDP on Recent Advances in Traffic Engineering & transport Planning, Malnad College of Engineering, Hassan, Bangalore (9-10-2014)
- 31. "Traffic Forecast: Case Studies", One week TEQIP sponsored FDP on Recent Advances in Traffic Engineering & transport Planning, Malnad College of Engineering, Hassan, Bangalore (9-10-2014)
- 32. "Urban Transport Planning", Thirteenth Capacity Building Programme on Sustainable Urban Transport, Institute of Urban Transport India, MoUD, Government of India, Sardar Patel Institute of Public Administration, Ahmedabad (15-12-2014)
- "Urban Transport Planning", Thirteenth Capacity Building Programme on Sustainable Urban Transport, Institute of Urban Transport India, MoUD, Government of India, Sardar Patel Institute of Public Administration, Ahmedabad (15-12-2014)

- 34. "Travel Demand Assessment" Thirteenth Capacity Building Programme on Sustainable Urban Transport, Institute of Urban Transport India, MoUD, Government of India, Sardar Patel Institute of Public Administration, Ahmedabad (15-12-2014)
- 35. "Urban Transportation Planning: Issues and Approaches", ISTE Sponsored Short Term Training Programme Recent Advances & Modern Practices In Transportation Engineering, Universal College of Engineering, Kaman, Mumbai. (16-12-2014)
- 36. "Urban transport Planning for Sustainable Development", QIP Short Term Training Program: Innovative Technologies in Transportation Engineering (ITTE-2015), Civil Engineering Department, Indian Institute of Technology, Guwahati.(23-2-2015)
- "Traffic Forecast: Concepts and A case Study", QIP Short Term Training Program: Innovative Technologies in Transportation Engineering (ITTE-2015), Civil Engineering Department, Indian Institute of Technology, Guwahati (24-2-2015).
- "Traffic Flow Scenario In India: Roadway and Vehicular Characteristics", Training Programme On VISSIM: Traffic Simulation Software, SVNIT, Surat, (23-03-2015)
- 39. "Traffic Flow Characteristics Under Indian conditions", Training Programme On VISSIM: Traffic Simulation Software, SVNIT, Surat, (23-03-2015)
- 40. RASTE: The Curtain Raiser, TEQIP II Short Term Training Programme Recent Advances in Studies of Traffic Engineering SVNIT, Surat (30-06-2014).
- 41. "Traffic Flow Characteristics for Different Roadway Elements" TEQIP II Short Term Training Programme Recent Advances in Studies of Traffic Engineering SVNIT, Surat (30-06-2014).
- 42. "Traffic Forecast Fundamentals", TEQIP II Short Term Training Programme Recent Advances in Studies of Traffic Engineering SVNIT, Surat (3-07-2014).
- 43. "Traffic Forecast: Case Studies", TEQIP II Short Term Training Programme Recent Advances in Studies of Traffic Engineering SVNIT, Surat (10-07-2014).
- 44. Fuzzy Logic Applications in Transportation Planning, TEQIP II STTP on "Mathematical & Optimization Modelling with Simulation by Scientific Tools for Researchers, Engineers and Scientist", AMHD, SVNIT, Surat (25-06-2015)

- 45. "On Diversity of Urban Traffic Flow Characteristics under Influence of Urbanisation", Second National Conference & Workshop Recent Advances in Traffic Engineering (RATE 15), SVNIT, Surat (03-07-2015).
- 46. "Sustainable Transportation: Challenges", One Day Seminar on Public Transport in Surat: Status and Challenges, 1st August, 2015, IUTI SVNIT Regional Chapter, SVNIT, Surat.
- 47. "Surat: Transport System & Travel Characteristics", One Day Seminar on Public Transport in Surat: Status and Challenges, 1st August, 2015, IUTI SVNIT Regional Chapter, SVNIT, Surat.
- 48. "Demand Assessment Planning", Sustainable Urban Transport Project, MoUD, Gol ,18th Capacity Building Programme for State / City Officials, 19th to 21st August, 2015, Chhattisgarh Academy of Administration, Naya Raipur.
- 49. "Sustainable Urban Transport: ITS in Public Transport", National Workshop: Fostering Sustainability in Infrastructure Development Projects, 21 September, 2015 Dr. DY Patil School of Engineering, Lohegaon, Pune.
- 50. "Planning for Sustainable Urban Transportation", One Day Seminar on Public Transport in Rajkot: Status and Challenges, 26-September, 2015, IUTI SVNIT Regional Chapter, Darshan Institute of Engineering & technology, Rajkot.
- 51. "Application of ANN Technique in Transportation", Workshop on Application of Soft Computing Techniques in Civil Engineering 15-16 October 2016, CED, SVNIT, Surat.
- 52. "Surat : Sustainable Mobility Challenges", Workshop on Smart Transportation Mobility & Walkability, Surat Municipal Corporation, 17 October, 2015, Sardar Vallabhbhai Patel Bhavan, SVNIT, Surat.
- 53. "Teacher's Role in Present Day Education System", 1st Self-financed Short-Term Training Program on Tools & Techniques for Effective Teaching & Research, October, 2015.
- 54. "Regional Economic Analysis for Transport Planning", Department of Civil Engineering, faculty of Technology, MS University of Baroda, Vadodara, 1st March, 2016.
- 55. "Public Transport", Department of Civil Engineering, Universal college of Engineering, Kaman, 22 March, 2016.

- 56. "Roadway Capacity Estimation for Inter-urban Expressways", National Conference NCEVT, Civil engineering Department, Parul University, Vadodara, 9 April, 2016.
- 57. "Highway Project Planning & Surveys", Self Financed Training Programme" MXROAD And AutoCAD Civil 3D Software", 6 May, 2016, SVNIT Surat.
- 58. "Efforts towards Development of Indian Highway Capacity Manual (Indo-HCM)", Self-Financed STTP on "Road Planning, Design, Construction, Evaluation and Rehabilitation", 10 May,2016, SVNIT Surat.
- 59. "Transport & Economy", TEQIP two weeks Short Term Training programme on "Comprehensive Transportation Planning Practices", 16 May, 2016, SVNIT, Surat.
- 60. "Urbanisation & Urban Transportation", TEQIP two weeks Short Term Training programme on "Comprehensive Transportation Planning Practices", 16 May, 2016, SVNIT, Surat.
- 61. "Comprehensive Transportation Planning Process", TEQIP two weeks Short Term Training programme on "Comprehensive Transportation Planning Practices", 17 May, 2016, SVNIT, Surat.
- 62. "Four Stage Sequential Modelling II: Trip Distribution", TEQIP two weeks Short Term Training programme on "Comprehensive Transportation Planning Practices", 18 May, 2016, SVNIT, Surat.
- 63. "Four Stage Sequential Modelling III: Mode Choice", TEQIP two weeks Short Term Training programme on "Comprehensive Transportation Planning Practices", 19 May, 2016, SVNIT, Surat.
- 64. "Regional Transportation Planning", TEQIP two weeks Short Term Training programme on "Comprehensive Transportation Planning Practices", 25 May, 2016, SVNIT, Surat.
- 65. "Transit Oriented Development And Its Impact On Road Traffic And Metro: Case Study of Mumbai Metro Line –I (VAG) Corridor", Fourth National Conference on Innovative and Emerging Technologies, Smt. S. R. Patel Engineering College, Unjha, Mehsana, 2 June, 2016.
- 66. "Sustainable Urban Transportation: Issues & Challenges", FDP at BhagwanMahavir College, Surat, 7-10-2016

- 67. "Teacher's Role in Present Day Education System', 2nd Self-financed Short-Term Training Program on Tools & Techniques for Effective Teaching & Research, 13-17 February,2017.
- "Urban Transport Planning"Sustainable Urban Transport Project, MoUD, Gol ,24th Capacity Building Programme for State / City Officials, 15th to 17thMarch, 2017, Mumbai.
- 69. "Quality Management System", NRRDA sponsored Training programme for PMGSY State Quality Monitors of Gujarat State, Staff Training College, Gandhinagar, 26-4-2017.
- 70. "Travel Demand Modelling in Fuzzy Environment", STTP on Soft Computing Techniques in Transportation Engineering, L.D. College of Engineering, Ahmedabad (3-5-2017)
- 71. "Heterogeneous Traffic Flow Analysis for Indian Expressways", Key Note Speech, 4th Conference of Transportation System Engineering & Management, College of Engineering, Guindy, Anna University, Chennai 12-13 May,2017.
- 72. "Quality Management System: Rural Roads", Refresher Training Programme for Gujarat State Quality Monitors under PMGSY, Staff Training College, Gandhinagar, NRRDA, 26 April, 2017.
- 73. "Urban Transport Planning", Sustainable Urban Transport Project, MoUD, Gol ,31st Capacity Building Programme for State / City Officials, 22nd to 24th August, 2017, Jaipur.
- 74. "Demand Assessment Planning"Sustainable Urban Transport Project, MoUD, GoI ,31st Capacity Building Programme for State / City Officials, 22nd to 24th August, 2017, Jaipur.
- 75. "Quality Control Testing Process: Rural Roads (Revised QAHB Vol. II)", Orientation Programme for State Quality Monitors, Jammu & Kashmir, Jammu, NRRDA, 03 October, 2017.
- 76. "Quality Control Testing Procedures", Regional Review Meeting (UP,MP,CG), NRRDA, Bhopal, 24 November, 2017.
- 77. "Urban Transport Planning", Sustainable Urban Transport Project, MoUD, Gol ,35th Capacity Building Programme for State / City Officials, 31st January to 2nd February, 2018, Mysuru.

- 78. "Integrated Infrastructure Planning", Sustainable Urban Transport Project, MoUD, GoI ,35th Capacity Building Programme for State / City Officials, 31st January to 2nd February, 2018, Mysuru.
- 79. "Artificial Neural networks:Model development and Applications in Transportation Engineering", TEQIP III sponsored STTP on Applications of Soft Computing Techniques in Civil Engineering, 12-3-2018.
- 80. "FuzzyLogic:Basic Concepts and Applications in Transportation Engineering", TEQIP III sponsored STTP on Applications of Soft Computing Techniques in Civil Engineering, 12-3-2018.
- "Urban Transport Planning", Sustainable Urban Transport Project, MoUD, Gol ,37th Capacity Building Programme for State / City Officials, 14-16, March, 2018, Ahmedabad.
- "Demand Assessment Planning" Sustainable Urban Transport Project, MoUD, Gol , 37th Capacity Building Programme for State / City Officials, 14-16, March, 2018, Ahmedabad.
- 83. "Global and Indian Overview of Road Safety, Policy and Initiatives, Regulations" First AITD Training Programme on Road Safety Engineering Measures, 16-4-2018 to 20-4-2018, SVNIT, SURAT.
- 84. "NMV Facilities and Wayside Amenities ~ Access Management " AITD Training Programme on Road Safety Engineering Measures, 16-4-2018 to 20-4-2018, SVNIT, SURAT
- 85. "Notions of Traffic Flow and Level of Service "AITD Training Programme on Road Safety Engineering Measures, 16-4-2018 to 20-4-2018, SVNIT, SURAT.
- 86. "Traffic Calming Measures "AITD Training Programme on Road Safety Engineering Measures, 16-4-2018 to 20-4-2018, SVNIT, SURAT.
- 87. "Road Safety Audit: Concept & Process " AITD Training Programme on Road Safety Engineering Measures, 16-4-2018 to 20-4-2018, SVNIT, SURAT.
- 88. "Feasibility Analysis for a Major Urban Intersection Improvement Project", Short Term Training Programme on Advances in Infrastructure Engineering & Management, L.D. College of Engineering, Ahmedabad,29-05-2018.

- 89. "Global and Indian Overview of Road Safety, Policy and Initiatives, Regulations" Second AITD Training Programme on Road Safety Engineering Measures, 16-7-2018 to 20-7-2018, SVNIT, SURAT.
- 90. "Notions of Traffic Flow and Level of Service "Second AITD Training Programme on Road Safety Engineering Measures, 16-7-2018 to 20-7-2018, SVNIT, SURAT.
- 91. "Traffic Calming Measures "Second AITD Training Programme on Road Safety Engineering Measures, 16-7-2018 to 20-7-2018, SVNIT, SURAT.
- 92. "Road Safety Audit: Concept & Process "Second AITD Training Programme on Road Safety Engineering Measures, 16-7-2018 to 20-7-2018, SVNIT, SURAT.
- 93. "Traffic Calming Measures", National Workshop on Road Safety through Traffic Calming Measures, AITD and Indian Roads Congress, The Capitol Hotel, Bangaluru, 8-9-2018.
- 94. "Comparative Overview of Global and Indian Road Safety Scenario" Third AITD Training Programme on Road Safety Engineering Measures, 24-9-2018 to 28-9-2018, SVNIT, SURAT.
- 95. "Road Safety Audit: Concept & Process "Third AITD Training Programme on Road Safety Engineering Measures, 24-9-2018 to 28-9-2018, SVNIT, SURAT.
- 96. "Non-Engineering Measures for Road Safety" Third AITD Training Programme on Road Safety Engineering Measures, 24-9-2018 to 28-9-2018, SVNIT, SURAT.
- 97. "Principles of Safe Roads" First AITD Training Programme on Road Safety Audit, 22-10-2018 to 26-10-2018, SVNIT, SURAT.
- 98. "Use of Checklists: Manual on Road Safety Audit; IRC SP 88 2010 " First AITD Training Programme on Road Safety Audit,22-10-2018 to 26-10-2018, SVNIT,SURAT.
- 99. "Quality Assurance Handbooks and Quality Control Testing Procedures", 3-Day Orientation programme for Provisionally Empanelled NQMs at Indian Academy of Highway Engineers, NOIDA, 15-11-2018 to 16-11-2018.
- Principles of Safe Roads. AIIB Workshop on Road Safety Audit and Engineering Measures. 02-04, August 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).

- 101. Road Safety Audit: Concept and Processes. AIIB Workshop on Road Safety Audit and Engineering Measures. 02-04, August 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 102. Principles of Safe Roads. AIIB Workshop on Road Safety Audit and Engineering Measures. 02-04, August 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 103. Road Safety Audit: Concept and Processes. AIIB Workshop on Road Safety Audit and Engineering Measures. 02-04, August 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 104. Principles of Safe Roads. AIIB Workshop on Road Safety Audit and Engineering Measures. 30thAugust-1stSeptember, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- Elements of Geometric design of rural roads. AIIB Workshop on Road Safety Audit and Engineering Measures. 30thAugust-1stSeptember, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- Road Safety Audit: Concept and Processes. AIIB Workshop on Road Safety Audit and Engineering Measures. 30thAugust-1stSeptember, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 107. Principles of Safe Roads. AIIB Workshop on Road Safety Audit and Engineering Measures. 20-22th September 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- Elements of Geometric design of rural roads. AIIB Workshop on Road Safety Audit and Engineering Measures. 20-22September 2019, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 109. Road Safety Audit: Concept and Processes. AIIB Workshop on Road Safety Audit and Engineering Measures. 20-22September 2019, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 110. Principles of Safe Roads. AIIB Workshop on Road Safety Audit and Engineering Measures. 27-29September 2019, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).

- Elements of Geometric design of rural roads. AIIB Workshop on Road Safety Audit and Engineering Measures. 27-29September 2019, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 112. Road Safety Audit: Concept and Processes. AIIB Workshop on Road Safety Audit and Engineering Measures. 27-29September 2019, 2019. (Sponsored by Asian Infrastructure Investment Bank, MukhyaMantri Gram SadakYojana).
- 113. Road Safety Audit. Expert Talk at Civil Engineering Department, Dr. S & S Gandhy Government Engineering College, Surat .15-10-2019.
- 114. Inferential Statistics and its Application. Expert Talk at Civil Engineering Department, C.K. Pithawala College of Engineering, Surat. 3rd-4th December 2019.

CONSULTANCY ASSIGNMENTS (AFTER 2001):

- 1. Scrutinizing Proposals for Rural Roads Construction under PMGSY, State Technical Agency, Gujarat, May, 2001- 2003
- 2. State Quality Monitor, Gujarat for PMGSY (2004-2006)
- 3. Consultancy services for designing pavements, roads and vehicle operation floor area of shed in the reclaimed area near KRIBHCO jetty, M/s. Yojaka (India) Pvt. Ltd., June-July 2010.
- 4. Road Safety Audit for NH-8 passing through Surat district, Road safety Week, January2011.
- 5. Utilisation of Fine Copper Slag of Hindalco Industries For Roads & Land Filling Activities from M/s. Birla Copper, Dahej, Bharuch, July,2010,-May 2011.
- 6. Third Party Inspections (PWD, Daman & Diu UT), April-2013 onwards
 - a. Widening of existing road into Four lane road from NagoaJuction to Vanakbara in Diu District-S.H.spray Grout and constriction of road divider.(30/04/2013)
 - b. Widening of existing road into Four lane road from NagoaJuction to Vanakbara in Diu District-S.H.:- up to W.B.M.Stage (30/04/2013)
 - c. Construction of Additional New Bridge with approaches at Tad Creek in Diu District.(2015)
- 7. Third Party Inspections, Road Works, R&B,SMC, SUDA, April 2013 onwards
 - a. Four Laning of Surat-Sachin Navsari Road Km.13/4 to 30/360.
 - b. Four Laning of BillimoraChikhli Road Km.4/4 to 9/0.
 - c. Four Laning of Chikhli-Vasda-Vaghai-Saputara Road Km.23/0 to 41/2.

- d. Consultancy services for technical audit and quality assurance for road works under Tapi (R & B) Division Vyara
- e. Constructing a Major Bridge on Various road in Navsari and Jalalpor Taluka, Dist. NavsariUnder B. L. P. Normal 2014-15 Package-1.
- 8. Mix Design for Constructing a Box Culvert abs slab dain on Various road in Jallalpor Taluka Dist. Navsari Under 86-3054-S.R.Years 2015-16 Package-1 (2Box Culvert, slab Drain).
- 9. Field and Laboratory Investigations: Beawar-Pali-Pindwara Toll-Way Ltd.(2015)
- 10. Traffic Survey for Dream City Area, Surat (2015)
- 11. Performance Evaluations for New Technology Projects (21)of Rural roads under PMGSY for the State of Gujarat (August, 2014 onwards)
- 12. Design of roadway connecting GGS in Gandhar, ONGC (Jan-Feb, 2015).
- 13. Design of pavement for 4-laning of Surat Olpad State Highway (April-May,2015)
- 14. Study & Evaluation of Roadway connecting Bhata Valve station, ONGC, Hazira (Jan-March, 2016)
- 15. Technical Evaluation for the construction of Border Road, Fence and Border Flood Light of 1.00 Km as Pilot Project from BP-1049 to BP-1050 at Indo-Pak Border Project at Rann of Kutch, Gujarat(2016)
- 16. Prepare Mix Design for BC and DBM for the work of Four Laning of BillimoraChikhli Road Km.4/4 to 9/0.Widening & Strengthening AmalsadGandevi Road Km 0/0 to 5/2
- 17. Prepare Mix Design for DBM and SDBC for the work of SR3 Gandevi, Desar/Alipor Road Km. 0/0 to 7/2
- 18. Feasibility Study for setting up of Truck parking Terminal at Kandla (Aug-Sept, 2016), WAPCOS, Pune.
- 19. Providing advisory services including preparing detailed manual / guideline for roadworks in Surat (Complete Street Design Guidelines) (Aug-Sept, 2016)
- 20. Consultancy Services for Road Safety Audit , R & B Div. Navsari (2016-17)
- 21. Consultancy Services for Road Safety Audit , R &B Div.Vyara (2016-17)
- 22. Providing engineering design for rigid and flexible pavements on both side of existing canal, R.C.C conduit for existing canal section etc. and allied works from Pal R.T.O junction to Amroli Sayan road (up to ring road) via park in West zone of Surat city (Oct,2016-Mar,2017)
- 23. Providing engineering design for rigid and flexible pavements on either side of existing canal, storm water drainage network etc. and allied works from AnuvratDwar to Surat- Dumas road via G.D. Geonkaschool& FROM Sachin-Magdhalla road (Mangalam Heights) to Jamanaba Park in Surat city.
- 24. Providing consultancy for comprehensive planning & Engineering design for rigid and flexible pavements on either side of existing canal, storm water drainage network etc. and allied works from BRTS Panas- Breadliner circle-Soham circle up to Bhimrad village (January-2017)

25. Providing consultancy services for survey and design of road intersections within Surat Municipal Corporation Area (June, 2018 onwards).

M.TECH.DISSERTATIONS SUPERVISED

- 1. Metropolitan Travel Behaviour Analysis: A Case Study of Surat City (Ravin Tailor, MTRP 2002).
- 2. Mode Choice Behaviour in Metropolitan Context : A Case Study of Surat City (MayurSangani, MTRP 2003).
- 3. Artificial Neural Network Based Disaggregate Trip Generation Model for Surat City (Harshad Sutaria, MTRP 2004).
- 4. Demographic and Rail Passenger Travel Demand Analysis with Reference to South Gujarat Region (Parul Mehta, MTRP 2004).
- 5. Modal Shift Behaviour Study With Stated Preference Data for Bus Choice in Surat (RasikBawadia, MTRP 2006)
- 6. Development of Discharge and Delay Models for Signalised Urban Intersection in Indian Context (Chetan R. Patel, MTRP 2008)
- 7. A Study on Trip Rates and Trip Predictions of Households in Newly Extended Area of Surat City (SiddharthSiddhpuria, MTRP 2008)
- 8. Review of Operation and Performance of Bus Transit System in Surat City (MukundrayKothiya, MTRP 2008)
- 9. Heterogeneous Traffic Characterisation and Flow Behaviour Study for Urban Arterials (Jignesh H Patel, TEP 2009)
- 10. Study on Mixed Traffic Speed and Headway Distribution on a Multilane Metropolitan Arterial (Amish S. Patel, TEP 2009)
- Study on Development of Transit Oriented Landuse Planning for Surat Navsari Twin City Metro region Corridor (Parin D. Gandhi, MTech Planning, 2010)
- 12. Bus Transit Shift Modeling Through Disaggregate Approach: A Metropolitan Case Study, (Sultan A. Azizi, TEP, 2010)
- 13. Traffic Flow Behaviour Study for Four Lane Undivided Road in a Metropolitan CBD under Mixed Traffic Conditions (HassaunShahir, TEP,2010)
- 14. Study of Mixed Traffic Characterisation for Multilane Arterials in Indian Metropolitan Context (HemangChoudhary, TEP, 2010)
- 15. Disaggregate Mode Shift Behaviour Study with Respect to Bus Rapid Transit System: A Case Study of Patna (DevendraMokal, TEP, 2010)
- 16. Study of Operation and Performance Characteristics of Bus Rapid Transit Systems in Indian Context (BhushanBramhecha, TEP 2010)
- 17. Assessment of use of copper slag in non-bituminous layers of pavement, Anish H Shah, TEP, 2011)
- 18. Study on usage of FCS: A waste from copper industries in bituminous layers of flexible pavement (Sunil Mangatani, TEP 2011)

- 19. Study on Multi-regime Mixed Traffic Flow and Level of Service for a metropolitan arterial (Sachin Patel, TEP, 2011)
- 20. Modeling intra-urban trip interchange through disaggregate gravity approach: A Case study of Surat (Patel Varshketu , TEP 2011)
- 21. Mixed traffic characterisation and flow behaviour study on collector streets in India (Maulik Vyas, TEP 2011)
- 22. Disaggregate mixed traffic flow characteristics and headway distribution study for multilane metropolitan arterials (MaulikBagadiya, TEP 2011)
- 23. Transit based transportation planning for CBD: A case study of Surat. (DewangChoudhari, MTech Planning 2011)
- 24. Development of dynamic vehicle equivalent factors (DVEF) under mix traffic condition in context of multilane metropolitan arterials in India.(Vagadiya Dinesh H., TEP, 2012)
- 25. Laboratory Investigation & Performance Evaluation of SMA using Warm Mix Additive (Abhishek Patidar, TEP, 2012)
- 26. Mechanistic Evaluation of Bituminous Concrete containing Composite of Fly ash and Plastic waste (Bilwal Hemant R., TEP, 2012)
- 27. Mechanistic Evaluation of Stone Matrix Asphalt containing Composite of Fly ash and Modified Bitumen (Patel Mehul B., TEP,, 2012)
- 28. Development of models for consistency Limit and Indices for fine grained soils using slump test (Patel Rakesh B., TEP, 2012)
- 29. Speed characteristic study in free flow regime on urban arterial road in Indian context (ParmarNirav D., TEP, 2012)
- 30. Heterogeneous traffic speed and flow behavior study for selected 2-lane & 3lane Arterial road (Kapadia Mihir, TEP, 2012)
- 31. A Study on Mixed traffic Speed- Flow Density Relationship Under Varying Roadway and Traffic Conditions for Undivided Collector Streets. (Rinkal T. Patel, TEP, 2012)
- 32. Dynamic Assessment of Impact of Urban Growth on the Qualities of Srvice Corridor: A Case Study of West Zone of Surat City.(PrafulShinker, TEP, 2012)
- 33. Developing Trip Generation and Distribution Models for the city of Surat using TransCAD (ParthDoshi, TEP, 2012)
- 34. Study on Effect of Regional Economic Growth on Traffic on National Highways in Surat District (YashHivarker, TEP, 2013)
- 35. Evaluation of Travel Time Reliability (Rushikesh B, TEP, 2013)
- 36. Development of Dynamic Vehicle Equivalent factors for Mixed Traffic Condition on Undivided Collector Roads in India (Rupang Shah, TEP 2013)
- 37. Study on Moisture Susceptibility in Bituminous Concrete Using Moisture Induced Sensitivity Test (R.Ghosh, P12 TP 001)
- 38. Determination of Fatigue Endurance Limit of Dense Bituminous Mixes (Praveen NVSS, P12 TP 013)
- 39. Study on Role of Para Transit in Context of Strengthening of Mass Transit System: A Case Study of Surat City (Vaibhav G, P12TP018)

- 40. Mixed Traffic Gap Acceptance Behaviour at Four Legged Rotary Intersection (Asir Khan, P12TP021)
- 41. Study on Mixed Traffic Flow Behaviour on Intercity Expressway: A Case Study of Mahatma Gandhi Expressway (Jabeena, M,P12TP015)
- 42. Study of Travel Mode Preference Behaviour for Heterogenous Travelers in a fast Growing Metropolitan City in India (Vasudevan, P12TP005)
- 43. Estimation of Roadway Capacity of Urban Expressways on Straight and Curved Sections (Ashwin C., P12TP004)
- 44. Comparing Methods of Calculating Critical Gap for Three Armed Unsignalised Intersections in Delhi (Cheti Sai Abhishek, P12TP007)
- 45. Transit Oriented Development and its Impact on Road Traffic and Metro: A Case Study of Mumbai Metro Line I along Versova Andheri –Ghatkopar Corridor (ChaitraliShirke (P13TP005)
- 46. Development of Framework for Evaluation Sustainable Index of Urban Transportation System: A Case Study Of Surat, India (Binal Patel), P13TP019)
- 47. Study on Mixed Traffic Flow Characteristics at Merging and Diverging Sections (Krishnanunni M,P13TP013)
- 48. Qualitative Assessment Of Sidewalk Facilities From Users Perception (Prashant N., P14TP014)
- 49. Air Travel demand Modeling for Surat Airport (Abhijeet B., P14TP015)
- 50. Assessment of Travel Behaviour on Climate Change Parameters: A case study of Surat (Nimitt P., P15TP020)
- 51. Study on Trip Chaining Behaviour for people of fast growing metropolitan city (Omkar B., P15TP001)
- 52. Study Of Travel Time Reliability On Bus Routes In Surat And Indore Cities (Raunak K., P15TP006)
- 53. Evaluating the high temperature performance of neat and modified binder using multiple stress creep and recovery test. (VivekWagh,
- 54. Disaggregate Traffic Forecasting and diversion analysis for inter regional traffic corridor using econometric approach. (Rahul Deshwal).
- 55. Study on Bus rapid transit demand modelling for metropolitan city: A case study of Surat. (PurvibenKaranjiya).
- 56. Performance assessment of para-transit system through user perception in a transit deficient metropolitan city: A case study of Surat. (GrishmaKharole).
- 57. Performance evaluation of bus transit systems in Surat city. (HardikGajera).

M.TECH. TRANSPORTATION PROJECTS SUPERVISED:

- 1. Study on traffic and travel characteristics of Navsari City (2008-09)
- 2. Parking study and analysis at Sahara Darwaja Intersection, Ring Road, Surat(2009-10).
- 3. Study on pedestrian traffic behaviour at IchchhanathIntersection,SVNIT, Surat.(2009-10)

- 4. Traffic operation planning and management strategies as immediate measure at Rajmarg of Surat (2010-11)
- 5. Traffic & transportation planning strategies to relieve high level traffic: A case study of Chowk Delhi Gate corridor, Surat.(2010-11)
- 6. Traffic status analysis & traffic forecasting for Rajmarg, Surat.(2010-11)
- 7. Impact on Traffic Pattern Due to Construction of Cable Stayed Bridge in Surat City. (2011-12)
- 8. Study of Traffic Flow Characteristics and LoS for Hierarchical Roads in Pune City (2011-12)
- Traffic Management Plan for Civil Cross Roads on J.P. Ring Road, Surat.(2012-13)
- 10. Appraisal of Public Transport System in Surat (2012-13)
- 11. Analysis of PMGSY Road Proposals (2013-14)
- 12. Study of Following and Non-Following Behaviour of Test Car of NH-8 : Kamrej – Ankaleshwar Section (2014-15)
- 13. Development of maintenance Strategy for PMGSY Roads in Surat District (2015-16)
- 14. Planning and Design of Truck Terminal for Kandla Port (2016-17)
- 15. Traffic study for junction improvement scheme for Sahara Darwaja Junction, Surat (2017-18).
- 16. Survey and design of road intersections within Surat Municipal Corporation Area. (2018-19).

DOCTORAL WORK SUPERVISION

- Study on Dispute Occurrence BehaviourUnder Influence of Multiple Claim-Causes in Indian Highway Projects in India, Mr. Dhaval Parikh, SAI Consulting Pvt. Ltd.(PEC)(2007)(Degree Awarded, July, 2014)
- Development of Urban Quality of Life Index in Indian Context, Mr. DebashishBasak, Town Planner, Surat Municipal Corporation, Surat.(PEC)(2008)(Completed, October 2017)
- Study on Mixed Traffic Flow Behaviour in Indian Metropolitan Context: Mr.C.R.Patel, Asstt. Professor, CED, SVNIT, Surat.(PIS)(2009))(Degree awarded, March,2016)
- 4. Study of Mode Shift Behaviour with respect to Transit in Metropolitan Context, Ms. Nipa Desai, Babaria Institute of Technology, Vadodara.(PEC)(2010)(*Degree Awarded,October2017*)
- Study of Pedestrian Flow Behaviouron Stairways atRailTransit Stations, Mr. Jiten H. Shah (FIR)(2011) (Co-supervisor: Dr Purnima Parida, CSIR-CRRI) (Degree awarded, March 2016)

- Travel Time Estimation, Variability and Reliability Consistency Modeling in Case of Urban Corridors under Mix-Traffic Conditions using Fuzzy-Possibility Approach, Mr. Krishna Saw (PEC) (2013) (Degree Awarded, March 2019) (Co-Supervisor:Dr.B.K.Katti, Ex. Professor Emeritus, SVNIT)
- Study on Effect of Driving Cycle on Pollution levels at Signalised Urban Intersections, Ms. BoskiChouhan(PEC) (2013)(Co-supervisor: Dr. Purnima Parida, CSIR-CRRI)(*Revised Thesis submitted*)
- 8. Study on Parking Demand with Respect to Land use and Travel Demand Characteristics, Mr. S.M. Dave (PEC) (2013).(Co-supervisor: Dr.K. Ravinder, CSIR-CRRI)(*Thesis Submitted*)
- Behavioral Study on Pedestrian Vehicular Interactions for Deriving Pedestrian Risk Indices at Selected Urban Mid-Block Unsignalised Cross Walks, Mr. AvinashChoudhary (PEC)(2015)(Thesis submitted, April2019)(Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT) (Defended on 11th December 2019)
- Study on Operational Characteristics of Mixed Traffic Flow on Urban Uninterrupted Roadway Facility, Mr. Pallavkumar (FIR) (2014) (Degree awarded, October 2018) (Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT)
- 11. Development of framework for evaluation of sustainable transport systems for metropolitan cities, Ms. RupaliZope (FIR (2014))(Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT)
- Study on Travel Time Variability for Public Transport Systems. Mr. AkhileshChepuri (FIR) (Degree Awarded, 2019) (2015) (Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT)
- Understanding habit of travel by personal modes in context with public transportation systems.Vasudevan N. (FIR) (Dec 2015) (Co-supervisor: Dr.S.Arkatkar, Asso. Professor,SVNIT). *Thesis Submitted*.
- 14. Trajectory based study of mixed traffic flow. SSVVN Surya Narayana Raju (FIR)(Dec 2016) (Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT). *Thesis Submitted*.
- 15. Evaluation of Integrated Multimodal Transport System. NandanDawda (FIR)(Dec 2017) (Co-supervisor: Dr.S.Arkatkar, Asstt. Professor,SVNIT).
- 16. Application of Wi-Fi Technology for Capturing Road traffic Patterns .Ninad Gore (FIR)(Dec 2017) (Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT).
- 17. Land-use transport interaction. SnehalChaudhari. (PEC) (June 2018). Cosupervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT).
- Proactive Safety Evaluation of Un-signalized intersections. Aninda Paul. (FIR) (June 2019). (Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT).

- 19. Geometric Consistency and Safety Assessment. JaydipGoyani (FIR)(Jan 2020). (Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT)
- 20. Effect of Work Zone on performance of traffic flow. OmkarBidkar (FIR) (Jan 2020). (Co-supervisor: Dr.S.Arkatkar, Asso. Professor, SVNIT)

PROFESSIONAL RECOGNITIONS:

- Coordinator, State Technical Agency, PMGSY-Gujarat, Government of India (wef April, 2015)
- Member, General Body, National Rural Roads Development Agency, Ministry of Rural Development, Government of India (_{WEF} August, 2015).
- State Quality Monitor, PMGSY, Gujarat State(2004-2006).
- Chairman, Technical Session 2, First Indo US Symposium on Mass Transit and Travel Behaviour Research (MTTBR08), Civil Engineering Department, Indian Institute of Technology, Guwahati, 12 – 15, February, 2008
- Member Secretary, Technical Committee on Urban Roads, Streets and Transport (H-8), Indian Roads Congress (2008-2011, 2011-14).
- Regional Coordinator (North West Region) & Member, Supra Institutional Network Project (SINP) Development of Indo- Highway capacity Manual (HCM), CSIR- Central Road Research Institute, New Delhi with funding from Planning Commission of India under 12th Five Year Plan
- Member, Pilot Projects Committee, Indian Roads Congress, New Delhi.
- Member, Technical Committee for seminar on "Recent Trends in Highway Development" organized by Indian Roads Congress, 10-11, October, India Habitat Centre, New Delhi.
- Member, Performance Evaluation Committee, National Rural Road Development Agency, Ministry of Rural Development, Government of India.
- Co-chairman, Technical Session on Transport Infrastructure System-1, National Seminar on Role of Infrastructure for Sustainable Development, IIT-Roorkee, 12-14, October, 2012.
- Executive Board Member, Transport Research Group of India, Banglore.
- Session Chair, Session:13F2S02: Analysis & Modeling of Traffic Streams-I, 2nd CTRG, Agra, 12-15, December, 2013.
- Expert Member, M Tech & PhD Evaluations, Gujarat Technological University, Ahmedabad.
- Domain expert, Urban Travel Demand Assessment, World Bank-GEF Supported Capacity Building programme for Sustainable Urban transport Project, Institute of Urban Transport India, Ministry of Urban Development, Govt. of India

- Member, Expert Advisory Group, CSIR-CRRI 12th Five Year Plan Project: Development and Applications of Technologies for Sustainable Transportation (SUSTRANS)(ESC-0106)
- Chairman, IUTI-SVNIT Regional Chapter, SVNIT, Surat (Since October, 2014)
- Member, General Body, National Rural Road Development Agency, Ministry of Rural Development, Government of India.
- Session Chair: 11th International Conference of Eastern Asia Society for Transport Studies, 11-14, September, 2015, Cebu, Philippines.
- Session Chair, 3rd Conference of Transportation Research Group of India, 17-20,December,2015, Kolkata.
- Session Chair: 8th Urban Mobility India, Research Symposium, 24-27, November, 2015, Institute of Urban Transport (India), New Delhi.
- Session Chair: 9th Urban Mobility India, Research Symposium,8-12, November,2016, Institute of Urban Transport (India), Gandhinagar.
- Session Chair, QIP Sponsored & ISTE Approved International Conference on "Research and Innovations in Science, Engineering & Technology" ICRISET 17 -19 February, 2017
- Chair, 4th Conference of Transportation Research Group of India, 17-20, December, 2017, IITB-Mumbai.
- Member, Technical Committee H-8 (Urban roads, streets and transport), Indian roads Congress, New Delhi.
- Member, Technical Committee H-5 (Rural roads), Indian roads Congress, New Delhi.(2017 onwards)
- Member, Technical Committee H-7 (Road safety and design), Indian roads Congress, New Delhi.
- Expert member , M.E. (Civil- Transportation Engg) Curriculum Workshop, Ganapat University, Ahmedabad. (19-6-2018)
- Invitee, Round Table on Regulating Innovation in Urban Mobility- Taxi operations Rules of Maharashtra, CUTS International, Mumbai (22-6-2018).
- Expert Invitee, Review of ABD Proposals for Mangluru under Smart City Mission, MSCL (5-12-2018).
- Session Chair (F4-OS2: Public Transportation Integration with Active Travel), 15th World Conference of TransportationResearch (WCTR2019), 26-30, May, 2019, Indian Institute of Technology Bombay, Mumbai.
- Visiting Expert, Road Network Development, Indian Institute of Technology Jammu (March, 2019 onwards)
- Independent Director, Urban Ring Development Company (Joint Venture of Surat Municipal Corporation and Surat Urban Development Authority), Surat (2018 onwards)

- Invited Expert, Symposium on Infrastructure Design and Management for Future Cities, RCG School of Infrastructure Design and Management, IIT Kharagpur, The Park, Kolkata (17-18, April, 2019)
- Invited Expert, Workshop on Centre of Excellence on Road Safety, Asian Institute of Transport Development (AITD), New Delhi (23-04-2019).

ABROAD VISIT

- **US** for presentation of research paper at ASCE 9th International Conference on Applications of Advances Technology in Transportation (AATT -06), August 2006
- The Fourteenth International Conference Of The Hong Kong Society For Transportation Studies, **Hong Kong**., December, 2009
- 9th EASTS Conference "Green Growth & Transport", **Jeu,S.Korea**, June, 2011.
- 9th APTE Conference on transport and Environment, Colombo, **SriLanka**, August, 2014.
- **US** for presentation of research paper at 94th Annual Meeting of Transportation Research Board, Washington DC, January 2015.
- **Philippines** for presentation of research paper at 11th International Conference of Eastern Asia Society for Transport Studies, 11-14, September, 2015.
- **China** for presentation of research paper at 14th World Conference on Transport Research (WCTR) at Tongji University, 1014 July, 2016.
- **US** for presentation of research paper at 96th Annual Meeting of Transportation Research Board, Washington DC, January 2017.
- SriLanka for presentation of research paper at 13th International Conference of Eastern Asia Society for Transport Studies, 9-12, September, 2019.

DEPARTMENTAL LEVEL CO-CURRICULAR & ADMINISTRATIVE ACTIVITIES A. Departmental Level

- 1. Faculty Member -in-charge, Engineering Geology Laboratory, (1996 98)
- 2. Faculty Member-in-charge, Water Resources Engineering Laboratory, (1998-2002)
- 3. Faculty Member-in-charge, Computer Laboratory, (Since June, 2002)
- 4. Coordinator for Seminars & Electives (1998 2000).
- 5. Worked as Member, Curriculum Development Committee, Laboratory Development Committee and Website Development Committee.
- Coordinator, MODROB Scheme for Up gradation & Enhancement of Existing Facilities in Water Resources Engineering Laboratory, (2000 – 2002), Grant :Rs. 7.00 lacs.
- 7. Member, State Technical Agency, Gujarat state, Pradhan Mantri Gram SadakYojana (PMGSY)(2001-2013)
- Member, Thrust Area Project on "A Study on Mass Housing Schemes with Respect to Urban Poor in Metropolitan Cities", MHRD, New Delhi : Rs. 8.0 lacs (2002 – 2004).
- 9. Member, Departmental Research Committee
- 10. Member, Departmental Committee for P.G. Programme in Transportation Engineering
- 11. P.G. in- charge (Transportation Engg. & Planning) , since 2007 till March-2013.
- 12. In-charge Transportation CAD Lab
- 13. Section Head (Transportation Engg& Planning), (March 2013-July2017)
- 14. Examination Coordinator (2017-2019)

B. Institute Level Activities

- 1. Member, Admission Committee (1993 98)
- 2. Member, Social & Cultural Activities Committee (1992 1997)
- 3. Member, Course Proposal Committee for U.G. Course on "Naval Architecture and Marine Engineering" (1997).
- 4. Member, Literary & Debating Committee (1992 1998, 2002).
- 5. Member, Center for Humanity Resource Development
- 6. Co-Chairman, Gymkhana Committee (2002 2004).
- 7. Examination Duties
- Invitee, Building Works & Stores Purchase Committee, SVRCET, Surat(2001 2002).
- 9. Member, Research Progress Committees
- 10. Professor in charge (Estate Civil works) July, 1998 to June-2002
- 11. Hostel Warden, October 2003 to December 2005
- 12. Chief Hostel Warden, December 2005 to December 2008
- 13. Dean (Students Welfare), December 2008 October 2011.

- 14. Chief Warden, Raman Bhawan(Oct, 2011 July 2012) / Sardar Bhawan (July 2012-June2013)
- 15. Member, Academic Rules & Regulation Committee (March-April 2013)
- 16.Dean (Academic), 3 June, 2014 to 27 Nov., 2015, *(Ex-officio)* Head; Applied Physics Department & Head, Applied Chemistry Department, 3 June, 2014 to 27 Nov., 2015
- 17. Dean (Planning & Development), Since 16 May 2018