

Mukti Advani: CV for Website

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| Name and Photograph: | Mukti Advani | | | |
| Designation and complete address including email id | Scientist Room no – 117, Transportation Planning Division, CSIR-Central Road Research Institute, New Delhi – 110025 Email: mukti7@gmail.com | | | |
| Areas of Interest | <ul style="list-style-type: none"> • Transportation Planning • Traffic Engineering | | | |
| Educational Qualification | <ul style="list-style-type: none"> • Ph.D. from Indian Institute of Technology Delhi (Year 2010) • M.E. (Transportation Engineering) from Gujarat University • B.E. (Civil Engineering) from Bhavnagar University | | | |
| Professional Experience: | <ul style="list-style-type: none"> • Scientist at Central Road Research Institute (since 2010) • Scientist-B at Central Road Research Institute since (2007-2010) | | | |
| Membership to Professional Bodies | <ul style="list-style-type: none"> • Life Member, Transportation Research Group of India • Life Member, Institute of Urban Transport • Life Member, Institute of Engineers • Member, Indian Road Congress | | | |
| Achievements | | | | |
| a. Honours and Awards | <ul style="list-style-type: none"> • Best Article of The Year Award (2006) for research paper published in Indian Journal of Transport Management • Best Paper Award to the student guided, for the paper presented at Urban Mobility 2015 | | | |
| Research Projects | | | | |
| Sl. No | Title of Project | Project Category | Participating Agencies | Your Role as defined |
| 1 | Development and Application of Technologies for Sustainable Transportation (SUSTRANS) | Supra Institutional Network Project (SINP) (ESC-0106) (12th Five Year Plan) | CSIR-CRRI, CSIR-CLRI, CSIR-CSIO, CSIR-CEERI and CSIR-CMMACS | Work Package Leader (WP 5: Development of sustainable Non-Motorized Transport System) |
| 2 | Indian Highway Capacity Manual (<i>Indo - HCM</i>) | SINP (ESC-0304) (12th Five Year Plan) | CSIR-CRRI with IITs and NITs | Work Package Leader - WP 6: Capacity Estimation of Unsignalised Intersection |
| 3 | Indian Highway Capacity Manual (<i>Indo - HCM</i>) | SINP (ESC-0304) (12th Five Year Plan) | CSIR-CRRI with IITs and NITs | Member - WP 7: Capacity Estimation of |

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| | | | | Pedestrian Facilities |
| 4 | Development of Multimodal Level of service (MMLoS) measure for urban roads of India | EMPOWER project | CSIR Hq. | Principal Investigator (PI) |
| 5 | Estimating the carbon footprint of commuting in urban areas | EMPOWER project | CSIR Hq. | Co-PI |
| 6 | Accessibility and Mobility impact on neighbourhoods around high speed corridor | In-house Project of CRRI (OLP-492) | CSIR-CRRI | Project Leader |
| 7 | Gender Appraisal of Mobility Patterns of Working Population in Delhi | In-house Project of CRRI (OLP-534) | CSIR-CRRI & SPA | Member |
| 8 | Effect of Bypass Road on Traffic and Habitants along Highway | In-house Project of CRRI (OLP-512) | CSIR-CRRI | Member |
| 9 | Development of GIS based National Highways Information System | SSP-4444 | Ministry of Road Transport and Highways (MoRTH) | Member |

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| b. Research Publications | <p><i>Book & Course Material:</i></p> <ol style="list-style-type: none"> 1. A chapter written in a book: Mukti Advani and Geetam Tiwari (2007), ‘Understanding the Metro rail demand’, Technology in Rail Transport Management, The ICFAI University Press, Hyderabad, India. 2. Lead Writer for IRT-IGNOU’s MBA course material writing for the subject of Transport Management. (Year 2012) <p><i>International Journals:</i> <u>Published</u></p> <ol style="list-style-type: none"> 3. Bhandari, K., Advani, M., Parida, P. and S. Gangopadhyay (2014) Consideration of access and egress trips in carbon footprint estimation of public transport trips: case of Delhi, paper accepted for publication in Journal of cleaner production, volume 85, pp. 234-240. DOI:10.1016/j.jclepro.2014.05.013 (Impact factor: 3.587) 4. Mihir Prajapati, Mukti Advani, Purnima Parida, Pankaj Prajapati, “Identifying Suitable Methodology for Crossing Infrastructure for Pedestrians”, (Comments received, Revised paper Submitted to Transportation Letters. 5. Cheeti Sai Abhishek, Mukti Advani, Pradeepkumar P.V., Velmurugan S., Joshi G.J. (2014), An assessment of the Gap Measurement Phenomenon at Typical Three Armed Intersections |
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on Indian Inter-Urban Roads', International Research Journal of sustainable Science and Engineering, ISSN:2322-0015.

(published on 28th February 2014,

<http://www.irjse.com/IssuesPublished.aspx?paperid=43,39,40,41,42&topic=%27IssuePublished%27>)

6. Neelam J Gupta, Mukti Advani, B. Kanaga Durai, S. Velmurugan (2014), 'Bypass Impact Analysis – A Case Study' International Research Journal of sustainable Science and Engineering, ISSN:2322-0015. (published on 28th February 2014, <http://www.irjse.com/IssuesPublished.aspx?paperid=43,39,40,41,42&topic=%27IssuePublished%27>)

Accepted

7. **Mukti Advani** and Purnima Parida (2016), "Methodology for Evaluating Walking Facilities Based Types of Obstructions Observed on Footpath of Indian Roads", 14th World Conference on Transportation Research (WCTR), Accepted under category "B" i.e. accepted for Journal Consideration.

Indian Journals:

8. Mukti Advani and Geetam Tiwari (2006), "Review of Capacity Improvement Strategies for Bus transit service" Journal of Transport Management, issue of December-2006. (Awarded as the best paper of the year – 2006).
9. गीतम तिवारी और मुक्ति अडवाणी (२००९) 'भारतीय शहरों में मेट्रो प्रणाली कि मांग' जिज्ञासा, अंक २३, भारतीय प्रौद्योगिकी संस्थान दिल्ली, भारत.
10. Mukti Advani, B.Kanagadurai and Kamini Gupta (2010), 'Evaluation of pedestrian crossing facilities: a case study of Delhi' Urban Transport Journal, Institute of Urban Transport (India), Volume 9, issue 2, pp. 79-90.
11. Mukti Advani and Nisha G. (2012), 'Behavioural analysis of Pedestrians for walking on footpath and on carriageway in 'space-sharing' traffic scenario', Indian Highways, July issue, pp. 41-47. Indian Road Congress, New Delhi. ISSN: 0376-7256.
12. Mukti Advani (2012), 'Factors affecting the pedestrians' level of service (LOS) and model development for mixed traffic scenario', Indian Journal of Transport Management, July-September, pp. 174-185.
13. Mukti Advani and Kirti Bhandari (2012), 'Trip characteristics and users' perception towards available public transport modes in Delhi', Indian Journal of Transport Management, October – December, pp. 1-11.
14. Mukti Advani and Geetam Tiwari (2013), 'A Methodology to Develop Traffic Analysis Zones (TAZ) based on Transit stop/station Locations'. Indian Journal of Transport Management. April – June 2013 issue, pp. 1-9.
15. Mukti Advani and Purnima Parida (2013), 'Behavioural analysis of Pedestrians in 'space-sharing' traffic scenario', Urban

Mobility, Institute of Urban Transport, New Delhi, India. 3-5 December 2013.

16. Mukti Advani and Purnima Parida (2014), 'Non-motorised transport trips in India: past, present and future', Indian Journal of Transport Management, ISSN 0972-5695, October – December 2013 issue, pp. 281-291.
17. Neelam J Gupta, Mukti Advani, B. Kanagadurai and S Velmurugan (2014), Safety Impacts on Traffic and Habitants – A Case Study of Khatauli Bypass, Indian Journal of Transport Management ISSN 0972-5695, Issue of January – March 2013, pp. 312-324.
18. Rahul Bhasin, Mukti Advani and S.Velmurugan (2014), Review of the Gap Phenomena at Unsignalized Intersections under Homogeneous and Heterogeneous Traffic Flow Conditions, Indian Journal of Transport Management, Pune, India. July – September 2014 issue, pp.144-155.
19. Chhaya Brhambhatt, L.B.Zala, Mukti Advani (2015), "Measurement of pedestrian flow parameters – case study of Dakor Gujarat". International Research Journal of Engineering and Technology (IRJET), volume 2, issue 2, May 2015. ISSN:2395-0056, <https://www.irjet.net/irjet-v2i296>
20. Purnima Parida, Mukti Advani, M.Parida (2015), "Safety and Security Based Evaluation of Pedestrian Facilities around Public Spaces", Shelter, HUDCO publication, October 2015, volume 16, issue 2, ISSN: 2347-4912.
21. Sobhana Patnaik Mukti Advani, and Purnima Parida, "Title : Why and when pedestrians walk on carriageway in presence of footpath? – a behavioural analysis in mixed traffic scenario of India" IUT urban mobility, November 2015. (**Awarded as the Best Research Paper of UMI 2015**)
21. Mukti Advani, Neelam J. Gupta and Purnima Parida (2016) "Analysis of Interrelationship between Transport System, Safety and City Sizes Distribution – a case study of India", Institute of Town Planners, New Delhi, Volume 12, issue 4, pp. 51-64.
22. Mukti Advani, Purnima Parida and Sobhana Patnaik (2015), "Developing Methodology to Assess Walking facilities on Indian Roads", Indian Journal of Transport Management, Pune, India. Vol-39, issue 3, pp. 144-153.

International and National Conferences:

Published

23. Mukti Advani and Geetam Tiwari (2005), "Evaluation Of Public Transport Systems: Case Study Of Delhi Metro", START Conference Proceeding, pp. 575-583, IIT – Kharagpur, India
24. Mukti Advani and S.K.Pathan(2005), "Improvement in Transit Service Using GIS – Case Study of Bhavnagar State Transport Depot", ESRI conference held in Delhi DEC-2005, Noida, India.
25. Mukti Advani and Geetam Tiwari (2006), "Bicycle – As a feeder mode for bus service", VELO Mondial poster Presented at Cape Town, SA.

26. Mukti Advani and Geetam Tiwari (2006), "Does high capacity means high demand?" Future Urban Transport – Volvo Conference, Sweden.
27. डॉ. नीलम जे. गुप्ता, मुक्ति आडवाणी, डॉ. बी कनक दूरई, डॉ. प्रमोद कुमार कंचन (2010), ग्रामीण सड़क का निर्माण – भू आधारित तकनीक, केन्द्रीय सड़क अनुसंधान संस्थान, नई दिल्ली
28. Mukti Advani, B.Kanagadurai, Kamini Gupta (2010), 'Road infrastructures and their impact on sustainability', CisTUP Conference, IISc Bangalore, India.
29. Mukti Advani, B. Kanagadurai and Neelam J. Gupta (2011), Role of pedestrian crossing facilities on the accessibility of villagers at two junctions of NH-8' International seminar on National Road Development Strategies and Road Safety on Improved Highways, School of Planning and Architecture, New Delhi. (March 2011)
30. Mukti Advani and B.Kanagadurai (2011), 'Developing a methodology to evaluate impact of road infrastructures on different modal trips – a scenario based study', Proceeding of International Transport Research Conference 2011, University Sains Malaysia. (April 2011)
31. Mukti Advani, B. Kanagadurai and S.Gangopadhyay (2011), 'Measuring Safety, Accessibility and Mobility of people living adjacent to a National Highway of India' 3rd International Conference on Road Safety and Simulation, Indianapolis, USA.
32. Mukti Advani (2011), 'Level of service for pedestrians – identification of affecting variables and model development for an intersection', Conference of Transportation Research Group of India at IISc Bangalore. (December, 2011)
33. Kirti Bhandari, Mukti Advani, Ridhi Saluja (2011), 'Methodology to estimate carbon footprint of commuting with focus on the role of non motorised transport', Conference of Transportation Research Group of India at IISc Bangalore. (December, 2011)
34. Mukti Advani and Purnima Parida (2012), 'Suitability of Road Infrastructures for Pedestrians' Workshop on Issues & Strategies for Non Motorized Transport Modes 23, January 2012, CRRI, New Delhi.
35. SSLN Sarma and Mukti Advani (2012), 'Methodology for public transport demand estimation', Capacity Building workshop for Low-Carbon Comprehensive Mobility Plans for Indian Cities. United Nations Environment Programme (UNEP), 11th to 13th April 2012.
36. Nisha G. and Mukti Advani (2012), 'Behavioural analysis of Pedestrians while crossing the road at intersection', National Conference on 'Urban Mobility - Challenges, Solutions And Prospects', IIT Madras, July 13-14, 2012.
37. Mukti Advani and Purnima Parida (2013), 'Non-motorised modes as sustainable mobility options', National conference on Sustainable Environment Development, R.H.Patel college,

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| | <p>Gandhinagar, Gujarat. (marchl 2013)</p> <p>38. Abhishek C.S., Mukti Advani, P.V.Pradeepkumar and S.Velmurugan (2014). ‘Determination Of Critical Gap On Unsignalised Three Armed Intersections - Case Study’, Transportation systems Engineering and Management colloquium. NIT-Calicut. 12th – 13th May 2014.</p> <p>39. Mihir Prajapati, Mukti Advani, Purnima Parida and Pankaj Prajapati (2015), “Parameters involved in making decision regarding selection of the most suitable road crossing infrastructure – a review”, National Conference on ‘Transportation and Water resource Engineering” (NCTWE – 2015) on 25th April 2015. , L.D.College of Engineering, Gujarat Technological University, Ahmedabad, Gujarat.</p> <p>40. Natasha Singh, Rajesh Gujar, Purnima Parida, Mukti Advani (2015), “Pedestrians’ Characteristics and Flow Analysis - In Indian Context”, National Conference on ‘Transportation and Water resource Engineering” (NCTWE – 2015) on 25th April 2015, L.D.College of Engineering, Gujarat Technological University</p> <p>41. Mukti Advani, S.Velmurugan, P.V.Pradeepkumar and E.Madhu, “Defining and analyzing forceful behavior at unsignalised intersections” RECENT ADVANCES IN TRAFFIC ENGINEERING, 3rd and 4th July 2015, SVNIT, Surat.</p> <p>42. Mihir Prajapati, Mukti Advani, Purnima Parida, Pankaj Prajapati, “Identifying Suitable Methodology for Crossing Infrastructure for Pedestrians”, RECENT ADVANCES IN TRAFFIC ENGINEERING, 3rd and 4th July 2015, SVNIT, Surat.</p> <p>43. Hemavathy M, Kalaanidhi Sivagnanasundaram, Dr. Gunasekaran Karupannan, Dr. Mukti Advani and Dr. Velmurugan Senathipathi, “Performance Evaluation of Uncontrolled Intersection using Microscopic Simulation”, 14th International Conference on Computers in Urban Planning and Urban Management – CUPUM-2015 , Boston.</p> <p>44. Mukti Advani and Purnima Parida (2015), Developing Methodology to Assess Walking and Road Crossing Facilities, International Symposium on Transportation Planning and Safety, 3rd to 5th December 2015 at TRIPP, IIT Delhi, New Delhi.</p> <p>45. Neelam J Gupta, Mukti Advani, B. K. Durai and S. Velmurugan, Khatauli Bypass Road – Crash Analysis and Prevention”, Road Safety and Simulation International Conference, Orlando, Florida, USA , October 6-8 , 2015</p> <p><u>Accepted</u></p> <p>46. Natasha Singh, Purnima Parida, Mukti Advani, Rajesh Gujar, (2016), “Human Ellipse of Indian pedestrians”, International symposium on highway capacity and freeway operations (ISEHP) in Berlin, Germany. (accepted)</p> <p>47. Rahul Bhasin, Mukti Advani, S.Velmurugan, P.V.Pradeep kumar (2016), “A model for Critical gap estimation based on deviation of accepted and rejected gap from critical gap values”, 14th World Conference on Transportation Research (WCTR) ,</p> |
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| | Shanghai, China (accepted) |
| c. Any Other information | <ul style="list-style-type: none"> • Member of Indian Road Congress Committee H1 • Course coordinator of “Public Transportation Systems ENG(CRRI)2-456” conducted at AcSIR. • Guided many M.E./M.Tech students for Dissertation work • Invited judge for the Science Exhibition (Transport Sector) held for 43 Kendriya Vidyalaya schools (North Region) • Core committee member of National Conference on ‘Transportation and Water resource engineering’ held at L.D.Engineering College, Ahmedabad. • Invited for the workshop on ‘User Satisfaction Survey of City Bus Services’ India Habitat Centre, New Delhi December 2014 organized by World Bank for discussion. • Invited <u>Expert Examiner</u> for reviewing Ph.D. and Master’s candidates by Gujarat Technology University (<u>GTU</u>) at Ahmedabad,, Gujarat. • Acted as <u>Paper reviewer</u> for journals and conferences of international and national levels i.e. Transportation Letters (SCI Journal), Indian Highways (IRC Journal), Road Safety and Simulation (Yearly Conference at USA), TPMDC (Yearly Conference at IIT-Bombay), CTRG (Yearly Conference at IISc Bengaluru), RATE (Conference at SVNIT-Surat). |